U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety Administration**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

The following Oil Spill Response Plan has been submitted to the Department of Transportation (DOT) Pipeline Hazardous Materials Safety Administration (PHMSA) in HyperText Markup Language (HTML) format, and has since been converted to Portable Document Format (PDF) form. Any hyperlink included in the PDF file is NOT functional, and materials referenced in the links have been attached as an addendum at the end of the document.


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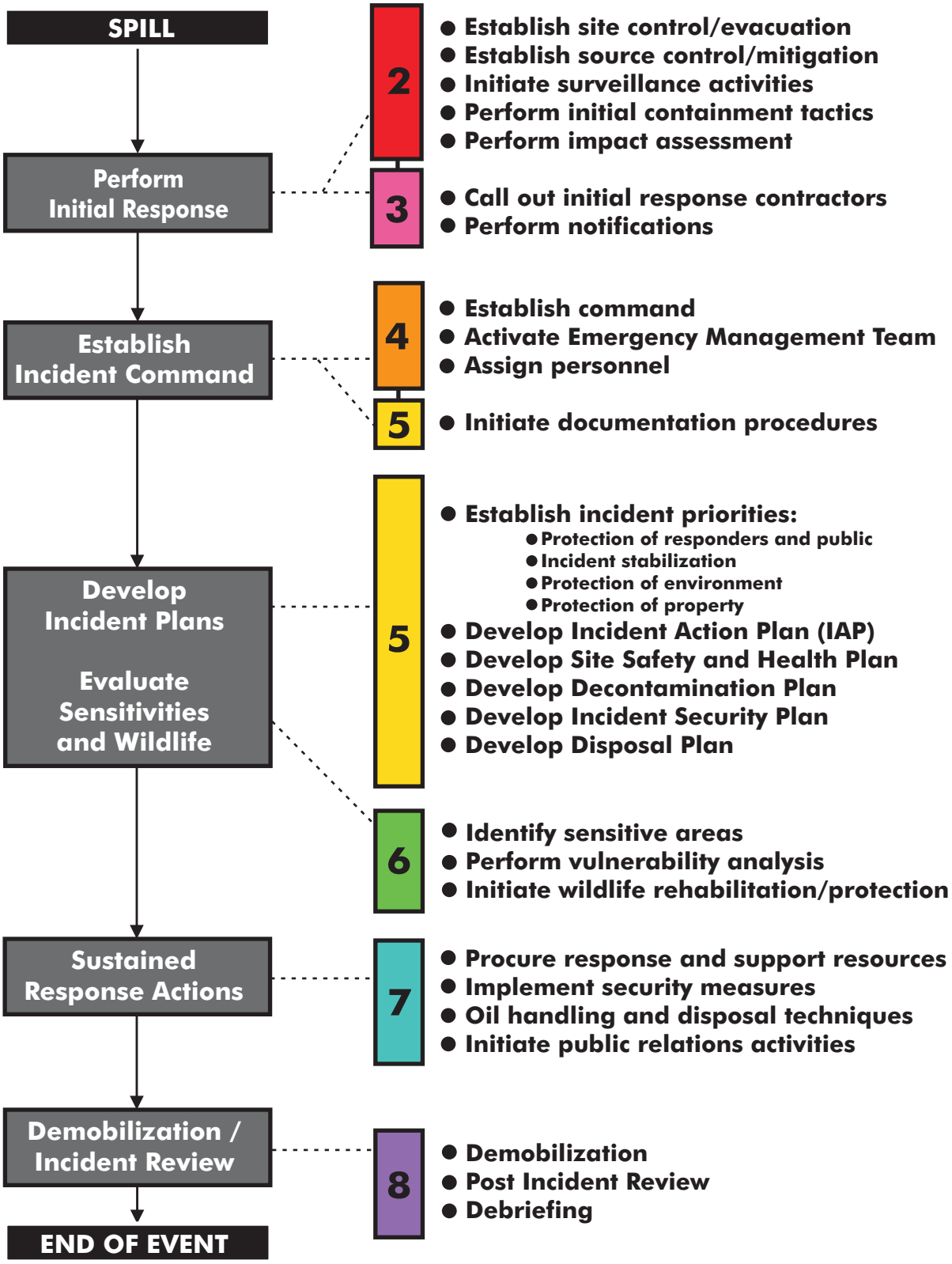
Oil Spill Response Plan

Developed by:

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Response Procedures Flow Chart



1. Introduction
2. Initial Response Actions
3. Notifications Phone Numbers
4. Response Team Organization
5. Incident Planning
6. Sensitive Areas Response Tactics
7. Sustained Response Actions
8. Demobilization Post Incident Review

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TABLE OF CONTENTS

SECTION 1 - INTRODUCTION	
Figure 1-1 - Distribution List	2
Figure 1-2 - Information Summary	3
Figure 1-3 - Overview Map	6
Figure 1-4 - Pipeline Facilities Overview	7
1.1 Purpose / Scope of Plan	
1.2 Plan Review and Update Procedures	
1.3 Certification of Adequate Resources	
1.4 Agency Submittal / Approval Letters	
SECTION 2 - INITIAL RESPONSE ACTIONS	
2.1 Spill / Release Response	3
2.1.1 Incident Detection	3
2.1.2 Emergency Classifications	3
2.1.3 Assessment	4
2.1.4 Spill / Release Emergency Response	5
Figure 2.1-1 - Spill / Release Response Action Checklist	5
2.1.5 Spill Mitigation Procedures	7
Figure 2.1-2 - Spill Mitigation Procedures	8
2.1.6 Spill Surveillance Guidelines	9
Figure 2.1-3 - Spill Surveillance Checklist	10
2.1.7 Spill Volume Estimating	12
Figure 2.1-4 - Spill Estimation Factors on Water	12
Figure 2.1-5 - Leak Size Determination Table	13
2.1.8 Estimating Spill Trajectories	13
2.1.9 Containment	14

2.2 Evacuation	16
2.3 Lightning	17
2.4 Earthquakes	18
2.5 Tornado	19
2.6 Hurricane	20
2.7 Flood	21
2.8 Medical	22
2.9 Sabotage	23
2.10 Bomb Threat	24
2.11 Fire and/or Explosion	26
2.12 Release with a Flammable Vapor Cloud	28
SECTION 3 - NOTIFICATIONS / TELEPHONE NUMBERS	
3.1 Emergency Information and Notification Procedures	2
Figure 3.1-1 - Emergency Notification Flow Chart	4
Figure 3.1-2 - First Report of Incident Form	5

TABLE OF CONTENTS, CONTINUED

SECTION 3 - NOTIFICATIONS / TELEPHONE NUMBERS, CONTINUED	
Figure 3.1-3 - PHMSA Spill Report Form	8
Figure 3.1-4 - Internal Notifications and Telephone Numbers	9
Figure 3.1-5 - External Notifications and Telephone Numbers	14
Figure 3.1-6 - Oil Spill Response Contractor Resources and Telephone Numbers	18
Figure 3.1-7 - Additional Resources, Notifications, and Telephone Numbers	19
SECTION 4 - RESPONSE TEAM ORGANIZATION	
4.1 Description	2
4.2 Activation Procedures	2
4.3 Team Member Response Times	2
4.4 Incident Command System / Unified Command Structure	2
4.5 Qualified Individual (QI)	3
Figure 4.5-1 - Incident Management Team (IMT) Activation Procedure	4
Figure 4.5-2 - Incident Management Team (IMT) Organization Chart	5

4.6 Incident Management Team (IMT) Job Descriptions and Guidelines	6
SECTION 5 - INCIDENT PLANNING	
5.1 Documentation Procedures	3
5.2 Incident Action Plan (IAP) Process and Meetings	4
Figure 5.2-1 Operational Period Planning Cycle	4
5.2.1 Incident Occurs / Notifications	5
5.2.2 Initial Response and Assessment	5
5.2.3 Unified Command Objectives Meeting	5
5.2.4 Tactics Meeting	6
5.2.5 Planning Meeting	6
5.2.6 Incident Action Plan (IAP) Preparation and Approval	7
5.2.7 Operations Briefing	8
5.2.8 Assess Progress	8
5.2.9 Initial Unified Command Meeting	8
5.2.10 Command Staff Meeting	9
5.2.11 Command and General Staff Breakfast/Supper	9
5.2.12 Business Management Meeting	9
5.2.13 Agency Representative Meeting	9
5.2.14 News Briefing	9
5.3 ICS Forms	10
5.3.1 Incident Briefing ICS 201-OS	12
5.3.2 Incident Action Plan (IAP) Cover Sheet	16
5.3.3 Incident Objectives ICS 202-OS	17

TABLE OF CONTENTS, CONTINUED

SECTION 5 - INCIDENT PLANNING, CONTINUED

5.3.4 Organization Assignment List ICS 203-OS	18
5.3.5 Assignment List ICS 204-OS	19
5.3.6 Communications Plan ICS 205-OS	20
5.3.7 Medical Plan ICS 206-OS	21
5.3.8 Incident Status Summary ICS 209-OS	22
5.3.9 Unit Log ICS 214-OS	23
5.3.10 Individual Log ICS 214a-OS	25
5.4 Site Safety and Health Plan	26
5.4.1 Safety Introduction and Overview	26
5.4.2 Initial Site Safety and Health Plan	27
5.4.3 Site Safety and Health Plan	28
5.5 Decontamination Plan	35
5.6 Disposal Plan	41
5.7 Incident Security Plan	44
5.8 Demobilization Plan	45
SECTION 6 - SENSITIVE AREAS / RESPONSE TACTICS	
6.1 Area Description	2
6.2 Spill Containment / Recovery	2
Figure 6.2-1 - Response Tactics for Various Shorelines	5
6.3 Sensitive Area Protection	8
Figure 6.3-1 - Sensitive Area Protection Implement Sequence	9
Figure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques	10
6.4 Wildlife Protection and Rehabilitation	13
6.5 Endangered and Threatened Species By State	14
6.6 Sensitivity Maps	
6.7 Tactical Plan Index	
6.8 Tactical Maps	
6.9 Tactical Plans	
6.10 Areas of Concern	
SECTION 7 - SUSTAINED RESPONSE ACTIONS	
7.1 Response Resources	3

7.1.1 Response Equipment	2
Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time	
7.1.2 Response Equipment Inspection and Maintenance	
7.1.3 Contractors, Contractor Equipment, and Labor	
7.1.4 Command Post	

TABLE OF CONTENTS, CONTINUED

SECTION 7 - SUSTAINED RESPONSE ACTIONS, CONTINUED	
Figure 7.1-2 - Command Post Checklist	
7.1.5 Staging Area	
Figure 7.1-3 - Staging Area Checklist	
7.1.6 Communications Plan	
Figure 7.1-4 - Communications Checklist	
7.2 Public Affairs	
7.3 Site Security Measures	
Figure 7.3-1 - Site Security Checklist	
7.4 Waste Management	
Figure 7.4-1 - Waste Management Flow Chart	
Figure 7.4-2 - General Waste Containment and Disposal Checklist	
7.4.1 Waste Storage	
Figure 7.4-3 - Temporary Storage Methods	
7.4.2 Waste Transfer	
7.4.3 Waste Disposal	
Figure 7.4-4 - Facility Specific Disposal Vendors	
SECTION 8 - DEMOBILIZATION / POST-INCIDENT REVIEW	

8.1 Closure and Termination of the Response	2
8.2 Demobilization	3
Figure 8.2-1 - Demobilization Checklist	3
8.3 Post-Incident Review	4
8.3.1 Final Spill Cleanup Report	5
APPENDIX A - TRAINING / EXERCISES	
A.1 Exercise Requirements and Schedules	2
Figure A.1-1 - PREP Response Plan Core Components	3
Figure A.1-2 - Exercise Requirements	4
Figure A.1-3 - Qualified Individual Notification Exercise	5
Figure A.1-4 - Spill Management Team / Tabletop Exercise	6
Figure A.1-5 - Equipment Deployment Exercise	9
Figure A.1-6 - Incident Management Team Tabletop Exercise Log	11
Figure A.1-7 - Spill Response ICS Staffing Exercise	12
A.2 Training Program	13
Figure A.2-1 - Training Requirements	13
Figure A.2-2 - PREP Training Program Matrix	14
Figure A.2-3 - Personnel Response Training Log	16

TABLE OF CONTENTS, CONTINUED

APPENDIX B - COOPERATIVE AND CONTRACTOR DOCUMENTS	
B.1 Cooperatives and Contractors	2
B.1.1 OSRO Classification	2
Figure B.1-1 - Evidence of Contracts	
Figure B.1-2 - Equipment Lists	
Figure B.1-3 - Drill Deployment Exercises	
APPENDIX C - HAZARD EVALUATION AND RISK ANALYSIS	
C.1 Spill Detection	2

C.2 Worst Case Discharge (WCD) Scenario Discussion	4
C.3 Planning Volume Calculations	5
C.4 Spill Volume Calculations DOT	5
C.5 Pipeline - Abnormal Conditions	8
C.6 Product Characteristics and Hazards	8
Figure C.6-1 - Summary of Commodity Characteristics	8
APPENDIX D - CROSS-REFERENCES	
Figure D-1 - DOT / PHMSA Cross-Reference	2
Figure D-2 - OSHA Cross-Reference	6
Figure D-3 - EPA / RCRA Cross-Reference	7
APPENDIX E - ACRONYMS AND DEFINITIONS	
E.1 Acronyms	2
E.2 Definitions	5
APPENDIX F - ADDITIONAL INFORMATION	
F.1 Additional Information	2

RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated by the Business Unit Health, Safety, Security, and Environmental (HSS&E) Department in conjunction with the Area Supervisor/Manager of Operations.

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
9/7/2006	Section 6.8 and ERAP Section 7.0	
9/7/2006	Section 6.8 and ERAP Section 7.0	
9/7/2006	Section 6.8 and ERAP Section 7.0	
9/7/2006	Section 6.8 and ERAP Section 7.0	
9/7/2006	Section 6.8 and ERAP Section 7.0	
1/26/2007	Section 1 Figure 1-3	
1/30/2007	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	
1/30/2007	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	
1/30/2007	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	
1/30/2007	Section 7 Figure 7.1-1, Appendix B.1.1 and ERAP Figure 4-3	

1/30/2007	Section 3 Figure 3.1-3 and ERAP Figure 3-2	
1/30/2007	Section 3 Figure 3.1-3 and ERAP Figure 3-2	
1/30/2007	Section 3 Figure 3.1-3 and ERAP Figure 3-2	
3/9/2007	Appendix D.8 and Figure D.8-1	
3/9/2007	Appendix D.8 and Figure D.8-1	
7/13/2007	Section 3 Figure 3.1-5	
10/23/2007	Section 3.1	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/25/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	

7/28/2008	Section 3 Figure 3.1-5	
7/28/2008	Section 3 Figure 3.1-5	
7/29/2008	Section 3 Figure 3.1-5	
7/29/2008	Section 3 Figure 3.1-5	
7/29/2008	Section 3 Figure 3.1-5	
7/30/2008	Section 3 Figure 3.1-5	
7/30/2008	Section 3 Figure 3.1-5	
7/31/2008	Section 3 Figure 3.1-5	
7/31/2008	Section 3 Figure 3.1-5	
7/31/2008	Section 3 Figure 3.1-5	
7/31/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/1/2008	Section 3 Figure 3.1-5	
8/4/2008	Section 3 Figure 3.1-5	
8/7/2008	Section 3 Figure 3.1-5	
8/7/2008	Section 3 Figure 3.1-5	
8/7/2008	Section 3 Figure 3.1-5	
8/7/2008	Section 3 Figure 3.1-5	
8/7/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	

8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/11/2008	Section 3 Figure 3.1-5	
8/12/2008	Section 3 Figure 3.1-5	
8/12/2008	Section 3 Figure 3.1-5	
8/12/2008	Section 3 Figure 3.1-5	
8/12/2008	Section 3 Figure 3.1-5	
8/15/2008	Section 1 Figure 1-3	
8/15/2008	Section 1 Figure 1-3	
8/22/2008	Section 1 Figure 1-3	
9/15/2008	Section 3 Figure 3.1-4	
11/18/2008	Section 3 Figure 3.1-4, ERAP Figure 3-3	
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
12/31/2008	Section 6.9	
12/31/2008	Section 6.9	
5/19/2009	Section 3 Figure 3.1-6 and ERAP Figure 3-4	
5/20/2009	Section 3 Figure 3.1-6 and ERAP Figure 3-4	
5/20/2009	Section 3 Figure 3.1-6 and ERAP Figure 3-4	
5/21/2009	Section 3 Figure 3.1-6 and ERAP Figure 3-4	
6/15/2009	Section 3 Figure 3.1-4	
6/15/2009	Section 3 Figure 3.1-4	
6/15/2009	Section 3 Figure 3.1-4	
8/10/2009	Section 3 Figure 3.1-4. Add home address to Qualified Individual	
8/10/2009	Figure 14	
8/10/2009	Figure 14	
8/10/2009	Section 3 Figure 3.1-4	
9/8/2009	Figure 14	
9/14/2009	Section 3 Figure 3.1-4	
11/24/2009	Section 3 Figure 3.1-5 and ERAP Figure 3-4	
2/22/2010	Section 3 Figure 3.1-4 / Insert Brian Stull	
2/23/2010	Appendix D.10 and Figure D.10-1	
3/15/2010	Section 3 Figure 3.1-4	
5/5/2010	Section 3 Figure 3.1-4	
7/21/2010	Figure 3.1-6, Section 7 Figure 7.1-1, Appendix B.1.1, ERAP Figure 3-5 and ERAP Figure 4-3	
8/18/2010	Figure 14	
8/21/2010	Figure 3.1-6, Section 7 Figure 7.1-1, Appendix B.1.1, ERAP Figure 3-5 and ERAP Figure 4-3	
9/3/2010	Section 3 Figure 3.1-4 Changed Brian Stull from in training to a 1-7 hour response time	
9/28/2010	Section 3 Figure 3.1-4 Removed Doug Losee	
9/29/2010	Section 1.4 Added the PHMSA approval letter from 2/28/08	
11/11/2010	Appendix F Added Bay West's 2010 Drill Info	
11/11/2010	Appendix F Added the KPL Public Affairs Guide	
11/23/2010	Section 3 Figure 3.1-7 and ERAP Figure 3-6 Added nearby railroad emergency contact numbers	
11/30/2010	Section 3 Figure 3.1-4 Added Mark Brown a mechanic in Little Falls	

11/30/2010	Section 3 Figure 3.1-4 Updated Rick Schlegel's training status	
11/30/2010	Section 3 Figure 3.1-4	
11/30/2010	Section 3 Figure 3.1-4	
12/8/2010	Section 3 Figure 3.1-4 Added Miley Mundwiler as QI	
12/10/2010	Figure 3.1-6, Section 7 Figure 7.1-1, Appendix B.1.1, ERAP Figure 3-5 and ERAP Figure 4-3 Moved Clean Harbors to a Non-Classified OSRO	
12/14/2010	Section 3 Figure 3.1-4 Updated Craig Naasz out of "in-training"	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
2/24/2011	Section 7.1.1 and ERAP Figure 4-2	
3/23/2011	Section 3.1	
4/6/2011	Section 3 Figure 3.1-4	
4/6/2011	Section 3 Figure 3.1-4	
4/6/2011	Figure 14	
5/9/2011	Section 3 Figure 3.1-4 Removed Sam France from the plan	
6/17/2011	Section 6.6 and ERAP Secton 10.0	
6/28/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3	
6/30/2011	Figure B.1-1, Figure B.1-2, and Figure B.1-3	
6/30/2011	Figure B.1-1, Figure B.1-2, and Figure B.1-3	
6/30/2011	Figure B.1-1, Figure B.1-2, and Figure B.1-3	
7/6/2011	Figure 3.1-6, Section 7 Figure 7.1-1, Appendix B.1.1, ERAP Figure 3-5 and ERAP Figure 4-3; Changed Clean Harbors from Non OSRO to OSRO status.	
7/7/2011	Figure B.1-1, Figure B.1-2, and Figure B.1-3	
7/7/2011	Section 1 Figure 1-4	
7/7/2011	Section 1 Figure 1-4	
7/7/2011	Section 1 Figure 1-4	
7/8/2011	Section 1 Figure 1-4	
7/8/2011	Section 1 Figure 1-4	
7/8/2011	Section 1 Figure 1-4	
8/23/2011	Figure 14	
8/23/2011	Figure 14	
10/27/2011	Section 3 Figure 3.1-4	

10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
10/27/2011	Section 3 Figure 3.1-4	
12/12/2011	Section 3 Figure 3.1-4 WO Title Change J. Johnson (CRO)	
12/14/2011	Section 3 Figure 3.1-7 and ERAP Figure 3-6	
12/29/2011	Section 3 Figure 3.1-4 Added Mike Hendricks, Kevin Prosser and Miley Mundwiler; removed Scott Neujhar as QIs PHMSA Significant Change	
1/24/2012	Section 3 Figure 3.1-4	
1/26/2012	Section 3 Figure 3.1-4 Removed Kevin Prosser as QI, as per Dave Stecher (CRO)	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
6/27/2012	Section 3 Figure 3.1-4, ERAP Figure 3-3; added Scott Bennett, In training new Pipeline Inspector.	
6/27/2012	Section 3 Figure 3.1-4 *, added Dave Kopke as QI	
7/3/2012	Section 3 Figure 3.1-4*, Removed Wade Parrott as QI.	
8/17/2012	Section 3 Figure 3.1-4, ERAP Figure 3-3	
8/17/2012	Section 3 Figure 3.1-4, ERAP Figure 3-3	
11/6/2012	Section 3 Figure 3.1-4	
11/6/2012	Section 3 Figure 3.1-4	
11/6/2012	Section 3 Figure 3.1-4; Modified M. Hendricks (QI information).	
11/6/2012	Section 3 Figure 3.1-4; Modified Dave Kopke's QI response times.	
11/6/2012	Section 3 Figure 3.1-4; Added Ken Hillman as QI.	
11/9/2012	Section 3 Figure 3.1-4; Added Gary Johnson as QI.	
11/9/2012	Section 3 Figure 3.1-4; Added Steve Molmen as QI.	
11/10/2012	Section 3 Figure 3.1-4, Added Rick Schlegel as QI.	

11/12/2012	Section 1 Figure 1-4	
12/15/2012	Section 7 Figure 7.4-4	
1/22/2013	Section 1 Figure 1-2	
1/23/2013	Section 3 Figure 3.1-4	
1/23/2013	Section 3 Figure 3.1-4	
1/23/2013	Section 3 Figure 3.1-4	
1/23/2013	Section 3 Figure 3.1-4	
1/23/2013	Section 3 Figure 3.1-4	
1/23/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	

1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3 Figure 3.1-4	
1/24/2013	Section 3.1	
1/24/2013	Section 3.1	
1/24/2013	Section 3.1	
1/26/2013	Section 3.1	
1/28/2013	Section 3 Figure 3.1-4	
1/30/2013	Appendix D.8 and Figure D.8-1	
1/30/2013	Appendix D.8 and Figure D.8-1	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-4	
2/5/2013	Section 3 Figure 3.1-4	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/5/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/7/2013	Section 3 Figure 3.1-4; removed Miley Mundwiler as QI from the Minnesota Zone.	
2/11/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/11/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/11/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/11/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/13/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/13/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	

RECORD OF CHANGES, CONTINUED

DATE OF CHANGE	DESCRIPTION OF CHANGE	PAGE NUMBER
2/13/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/15/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/15/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	
2/15/2013	Section 3 Figure 3.1-5 and ERAP Figure 3-5	

2/22/2013	Completion of the full plan review for the 5-Yr PHMSA Review and Revisions, Work-order PL269695	

SECTION 1 Last revised: February 22, 2013

INTRODUCTION

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Figure 1-1 - Distribution List

Figure 1-2 - **Minnesota Zone** Information Summary

Figure 1-3 - **Minnesota Zone** Overview Map

Figure 1-4 - **Minnesota Zone** Pipeline Facilities Overview

1.1 Purpose / Scope of Plan

1.2 Plan Review and Update Procedures

1.3 Certification of Adequate Resources

1.4 Agency Submittal / Approval Letters

Minnesota Zone 1 - 2

FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES		DISTRIBUTION DATE
		PAPER	ELECTRONIC	
Response Plans Officer - Pipeline and Hazardous Material Safety - U.S. Department of Transportation	1200 New Jersey Ave., Room E22-210 Washington , DC 20590	0	2	12/28/2006
Minnesota Office of Pipeline Safety	4444 Cedar Street, Suite 147 St. Paul, MN 55101	0	0	7/13/12
KPL Employee (Intranet/ On-line)	KPL's Emergency Response Web Page ,	0	0	

Minnesota Zone 1 - 3

FIGURE 1-2 - MINNESOTA ZONE INFORMATION SUMMARY

Owner/Operator:	Koch Pipeline Company, L.P. 4111 East 37th Street Wichita, KS 67220
Owner Telephone:	(b) (6)
Zone Name:	Minnesota Zone
Zone Address:	P.O. Box 64596 St. Paul, MN 55164
Zone Telephone/Fax:	(651) 480-3822 / (651)480-3827
Zone PHMSA #:	620

Minnesota Zone 1 - 4

FIGURE 1-2 - MINNESOTA ZONE INFORMATION SUMMARY, CONTINUED

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.1-3 for QI Training Records)	**Facility**		
	Name and Contact Information	**Work Address**	**Home Address**
	Mike Kostelecky NOG - Operations Manager		

	On-scene Incident Commander EOC Liaison (City Representation) Crisis Manager (651) 458-4857 (Office) (b) (6) (Home) *(Mobile) (651) 233-8651(Blackberry) (Pager)	P.O. Box 67 Cottage Grove, MN 55016	(b) (6)
	David Kopke Operations Supervisor MPL On-scene Incident Commander, Operations Section Chief, EOC Liaison (City Representation), Crisis Manager (218) 776-3313 (Office) (b) (6) *(Mobile)	6438 85th Street Cottage Grove, Minnesota 55016	
	Steven Molmen Operations Supervisor On-scene Incident Commander Operations Section Chief Operations: Division / Group Supervisor, Branch Director (651) 458-4856 (Office) (b) (6) (Home) *(Mobile)	6483 85th Street South Cottage Grove, MN 55016	
	Michael Hendricks Operations Supervisor On-scene Incident Commander Operations Section Chief EOC Liaison (City Representation) (218) 776-3313 X27 (Office) (b) (6) (Home) (612) 619-8518 (Work) *(Mobile), (b) (6) (Personal) *(Mobile)	46729 179th Ave Clearbrook, MN 56634	
	Gary R. Johnson Operations Supervisor First Responder, On-scene Incident Commander, Operations Section Chief, Branch Director, EOC Liaison (City Representation) (320) 632-5567 (Office) (b) (6) (Home)	18034 TWIN LAKES ROAD Little Falls, MN 56345	

	(b) (6) *(Mobile) (personal cell) (Pager)		(b) (6)
	Charles (Chuck) Wenz Mechanical Technician - Senior Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director (320) 632-1659 (Office) (b) (6) (Home) *(Mobile)	18034 Twin Lake Road Little Falls, , MN 56345	
	Kenneth Hillman Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director Command: On-scene Incident Commander Operations Section Chief, UCS Operations: Division / Group Supervisor, Branch Director (651) 458-4841 (Office) (b) (6) (Home) *(Mobile)	6483 85TH ST COTTAGE GROVE,, MN 55016	
	Richard (Rick) Schlegel SITE ASST SUPR/SR DAMAGE PREV COORD Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director (651) 458-4848 (Office) (b) (6) (personal *(Mobile)	6483 85th Street Cottage Grove, MN 55016	

FIGURE 1-2 - MINNESOTA ZONE INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product	SECTION	MILEAGE	DIAMETER	PRODUCTS
	Airport Pipeline			

Characteristic and Hazards, FIGURE C.6-1)	Rosemount, MN to Minneapolis Airport	13	10	Jet Fuel
	Junction City Pipeline / Pipeline Regulated under 49CFR 49.195.402			
	Rosemount, MN to Wisconsin State Line	16	6	Propane
	Minnesota Pipeline # 1			
	Clearbrook, MN to Rosemount MN	256.5	16	Crude Oil
	Minnesota Pipeline # 2			
	Clearbrook, MN to Cottage Grove, MN	249.9	16	Crude
	Minnesota Pipeline # 3			
	Clearbrook, MN to Rosemount, MN	165	16	Crude
	Minnesota Pipeline # 4			
	Clearbrook, MN to Rosemount, MN	304	24	Crude
	Wisconsin Pipeline			
	Rosemount, MN to Wisconsin State Line	16	12	Refined Products
	Wood River Pipeline			
	Iowa State Line to Cottage Grove, MN	104	18	Crude Oil

FIGURE 1-2 - MINNESOTA ZONE INFORMATION SUMMARY, CONTINUED

Description of Zone:	The pipelines carry petroleum products (including) in the areas shown in **FIGURE 1-3**
Response Zone Consists of the Following Counties:	Clearwater, Hubbard, Wadena, Todd, Morrison, Benton, Sherburne, Anoka, Washington, Dakota, Hennepin, Rice, Steele, Freeborn, Stearns, Meeker, Wright, Mcleod, Carver, Sibley, Scott, Dakota
Alignment Maps (Piping, Plan Profiles):	Maintained at: Available at KPL Discovery Net Webpage in the ?Gator-Web Page?. Note: ?MinnCan Pipeline Construction Alignment Sheets are available at KPL Discovery Net Webpage in the ?Gator-Web Page?
Worst Case Discharge (bbls) :	(b) (7)(F), (b) (3)
Statement of Significant and Substantial Harm:	The response zones in this system contain pipelines that are either greater than 6 5/8 inches and/or longer than 10 miles. At least one section of pipeline in each response zone crosses a major waterway or comes within five miles of a public drinking water intake. Therefore, in accordance with 49 CFR 194.103(c), each entire response zone described in this Plan will be treated as if expected to cause significant and substantial harm.
Spill Detection and	Refer to **SECTION 2.1.1** and **APPENDIX C.1**.

Mitigation Procedures:	
Date Prepared:	December 28, 2006

The information contained in this Plan is intended to be used as guidelines for the spill responder. Actual circumstances will vary and will dictate the procedures to be followed, some of which may not be included in this manual.

NOTE: For further information on the Qualified Individuals' training and qualifications, refer to **SECTION 4.5** and **APPENDIX A.2** in this Plan.

FIGURE 1-3 - OVERVIEW MAP

Click here to view the file

FIGURE 1-4 - PIPELINE FACILITIES OVERVIEW

Facility:	Clearbrook	**Address:**	46729 179th Avenue Clearbrook, MN Clearwater 56634
Phone:	218-776-3313	**Fax:**	218-776-3026
Latitude:	(b) (7)(F), (b) (3)	**Longitude:**	(b) (7)(F), (b) (3)
Agency Assigned Plan Number:	PHMSA 620		
Distance To Navigable Water:	0.5 mile east (Deep Lake)		

Description:

This pipeline pump station is the start of the Minesota Pipeline System. The pipeline system is made up of three 16" pipelines (second line to Cottage Grove, and third line partially looped), and a single 24" pipeline, referred to as ?Line 4.? (b) (7)(F), (b) (3) The materials handled at the station are limited to crude oil. Pipelines delivering crude oil enter the station from the north. Crude oil being delivered to the station by pipeline is transferred into the aboveground "breakout" tanks (listed below), prior to being pumped into the main pipeline. The station utilizes two boosters and five mainline pumps on (b) (7)(F), or the three mainline pumps for to pump the crude oil for delivery into (b) (7)(F), (b) (3) via three 16-inch pipelines on or a 24-inch pipeline via (b) (7) (F), (b) which all exit the station to the south. Four belowground sumps are also located within the terminal. The sump pumps are manually engaged to discharge back into the main pipeline system. The capacities of the sumps are approximately 60 barrels for the (b) mainline pumps, (b) (7)(F), for the (b) (7)(F), (b) (3), (b) (7)(F), for the lab sump (b) (3), (b) (7)(F)

Driving Directions:

Going north on Highway 92, turn right (east) on Pipeline Road (which is 1/2 mile south of Clearbrook) and go 1 mile. Terminal is on the south side of Pipeline Road.

Tank #:	Product	Capcity (bbls)	Secondary Containment Volume Type (bbls)
1	Crude Oil	(b) (7)(F), (b) (3)	
2	Crude Oil		
3	Crude Oil		
4	Crude Oil		
5	Crude Oil		
6	Crude Oil		
7	Crude Oil		
8	Crude Oil		
9	Crude Oil		
10	Crude Oil		
11	Crude Oil		

Minnesota Zone 1 - 9

Clearbrook

(b) (7)(F), (b) (3)



FIGURE 1-4 - PIPELINE FACILITIES OVERVIEW, CONTINUED

Facility:	Cottage Grove	**Address:**	6483 85TH ST Cottage Grove, MN Washington 55016
Phone:	651-458-4857	**Fax:**	651-459-2540
Latitude:	(b) (7)(F), (b) (3)	**Longitude:**	(b) (7)(F), (b) (3)
Agency Assigned Plan Number:	PHMSA 620		
Distance To Navigable Water:	1.5 miles west (Mississippi River)		

Description:

(b) (7)(F), (b) (3) . The material handled at the station is limited to crude oil. Delivery pipelines into the station consist of Minnesota Pipeline System (b) (7)(F), (b) (3) from the east and the Wood River system from the south. Any crude oil delivered to the station is transferred into the aboveground "break-out" tanks (Listed below), prior to being pumped into the main pipeline exiting the terminal to the west. (b) (7)(F), (b) (3) The (b) (3), (b) (7)(F)

Driving Directions:

From the south, take State Highway 61 north to the 80th Street exit. Turn left and go to the "T" intersection. Turn right onto 85th Street. Terminal is 100' down on the left.

Tank #:	Product	Capcity (bbls)	Secondary Containment Volume Type (bbls)
20	Crude Oil	(b) (7)(F), (b) (3)	
21	Crude Oil		
22	Crude Oil		

Cottage Grove, CONTINUED


(b) (7)(F), (b) (3)

Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes are accomplished by distribution of this plan to the respective agency.

This document includes procedures and forms that are applicable to different types and severities of emergency events. It is intended that the appropriate procedures and forms be used in each event, as detailed herein, but it is not specifically required that every form and/or procedure be used for every emergency event. It is also acceptable to use comparable forms versus those shown in this document, unless such substitution is specifically prohibited in this document or other regulatory documents.

1.2 PLAN REVIEW AND UPDATE PROCEDURES

In accordance with the regulations cited in **SECTION 1.1**, this plan will be reviewed and modified to address new or different operating conditions or information included in the Plan. In the event that the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary.

Upon review of the response plan for each five-year period, revisions will be submitted to PHMSA provided that changes to the current plan are needed, or a letter stating that the plan is still current will be submitted to PHMSA.

If new information or different operating conditions would substantially affect implementation of the Plan, the Company will modify the Plan to address such changes and, within 30 days of making such changes, submit the changes to PHMSA.

Examples of changes in operating conditions that would cause a significant change to the Plan include:

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	PHMSA	RCRA
Relocation or replacement of the transportation system in a way that substantially affects the information included in the Plan, such as a change to the Worst Case Discharge volume.	x	
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	x	
A change in key personnel (Qualified Individuals).	x	
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	x	
Any other changes that materially affect the implementation of the Plan.	x	
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.	x	
Applicable regulations are revised	x	x
The plan fails in an emergency;		x
The facility changes in its design, construction, operation, maintenance, or circumstances in a way that materially increases the		

potential fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;		
The list of emergency coordinates changes; or		x
The list of emergency equipment changes.		x

All requests for changes must be made through the Operations Manager and will be submitted to PHMSA by the DOT Compliance Coordinator or Designee.

In accordance with the state regulations cited in SECTION 1.1, this plan will also be reviewed and modified to address new or different operating conditions or information included in the Plan within the frequency required by these state regulations.

The most current version of the plan is always the electronic copy. Revisions to the site-specific information are made through the password protected maintenance interface. The date at the beginning of each Section indicates the last date that Section was revised. Any revisions made after that date need to be reprinted and inserted in to the paper copy of the plan.

1.3 CERTIFICATION OF ADEQUATE RESOURCES

CERTIFICATION
Pursuant to the Clean Water Act Section 311(j)(5)(F)
Koch Pipeline Company, L.P.

The Koch Pipeline Company, L.P., hereby certify to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that they have obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a Worst Case Discharge or a substantial threat of such a discharge.



David Stecher
VP of Operations

1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

Click here to view KPL PHMSA NOG Plan Submission 12-28-06.pdf

Click here to view PHMSA Minneosta,

Wisconsin, and Wood River Zone Approval Letter 2-26-08.PDF

Click here to view 2-22-13 PHMSA Submittal of PHMSA 5-YR Plan Review and Revisions.pdf

Click here to view 2-22-13 MNOPS Submittal of PHMSA 5-YR Plan Review and Revisions.pdf

SECTION 2 Last revised: February 2006

INITIAL RESPONSE ACTIONS

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2.1 Spill / Release Response

2.1.1 Incident Detection

2.1.2 Emergency Classifications

2.1.3 Assessment

2.1.4 Spill / Release Emergency Response

Figure 2.1-1 - Spill / Release Response Action Checklist

2.1.5 Spill Mitigation Procedures

Figure 2.1-2 - Spill Mitigation Procedures

2.1.6 Spill Surveillance Guidelines

Figure 2.1-3 - Spill Surveillance Checklist

2.1.7 Spill Volume Estimating

Figure 2.1-4 - Spill Estimation Factors on Water

Figure 2.1-5 - Leak Size Determination Table

2.1.8 Estimating Spill Trajectories

2.1.9 Containment

2.2 Evacuation

2.3 Lightning

2.4 Earthquakes

2.5 Tornado

2.6 Hurricane

2.7 Flood

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2.8 Medical

2.9 Sabotage

2.10 Bomb Threat

2.11 Fire and/or Explosion

2.12 Release with a Flammable Vapor Cloud

2.1 SPILL / RELEASE RESPONSE

“General Order of Response” for a Spill or Emergency Event can be as follows:

- Discovery (Detection), Classification and Assessment: This is where the discovery and classification occur and where the initial assessment of severity of the event occurs.
- Security: Ensure security of personnel and the site during the entire response. Allows the opportunity to engage different security needs depending on the nature of the incident.
- Response: Initial Notification, Response, and Mitigation of the event occur at this time. Longer-term, more complex responses which will likely require multiple operational periods will be considered a Sustained Response.
- Closure: Process to conclude an event that has been resolved to the satisfaction of the ICS/UCS (Responsible Party, Federal, State, and Local Agencies).
- Termination and follow-up: The response is terminated, but periodic follow-up or additional remediation activities may be required by the regulating Agencies.

This plan contains check-off sheets and procedures, based on the general order of response, intended to minimize the possibility of omitting critical actions when dealing with emergency events.

2.1.1 Incident Detection

Detection of an emergency event is the first step in an Emergency Incident or Spill / Release response. There are several methods by which an emergency situation may be detected, including the following:

- Detection during an aerial patrol (fly over).
- Detection on the pipeline leak detection system (PLDS) or SCADA systems.
- Reported by private citizens or by public officials.
- Reported by company personnel.
- Reported by contract personnel on site.

2.1.2 Emergency Classifications

There are two classes of emergency events, “reported” and “confirmed”.

A “reported” emergency is either an event reported by someone other than a company employee and which cannot be immediately confirmed or a pressure or flow rate change that is not confirmed by a second source.

A “confirmed” emergency is an event reported by a company employee or reported by someone other than a company employee and confirmed by a second source. Any event that threatens lives or public safety if immediate action is delayed, is to be considered a confirmed emergency.

Immediately upon receiving notification of an emergency event/incident, the company employee shall make appropriate internal notifications (**FIGURE 3.1-4**) ensuring the Qualified Individual (QI) and others such as the supervisor and Control Center are advised.

Possible Sources which can be utilized to confirm an emergency event include checking with the supervisory control monitors for signs of problems or confirming information through direct observations by dispatching the nearest available employee to the scene of the reported event.

2.1.3 Assessment

Once an emergency event or release is detected, the need for assessment of the situation is paramount for rapid, reliable, and effective response. In every case, we must collect accurate initial information (**FIGURE 3.1-2**). The information acquired is passed along to responsible company officials to ensure proper actions are taken.

As the situation dictates, additional assessment may be necessary to perform specific activities. For example, the repair team leader may further evaluate the incident for the safest and most effective means to control the release and to repair the source. The Qualified Individual or Incident Commander may perform their own assessment of the situation before taking control of the incident to get the most up-to-date information of the situation for further planning and actions.

During significant events, the incident assessment may be done in concert with Federal and State Agencies. It is the responsibilities of the FOCS to officially classify the size and type of the discharge and normally work within the Unified Command System (UCS) to determine the course of actions to be followed.

INCIDENT ASSESSMENT	
Person Assessing the Incident	
Approach any suspected emergency incident or suspected release cautiously.	☐
Take appropriate personal protective measures (Do not enter any areas without proper PPE).	☐
Eliminate possible sources of ignition in the vicinity of the spill (if applicable, use E-Stops).	☐
Initiate a general site assessment giving emphasis to the following:	
• Immediate danger to the general public	☐
• Immediate danger to the environment (e.g. waterways, wildlife)	☐
• Identify significant impact areas (e.g. drinking water intakes, commercial businesses)	☐
• Identify topographic features that could impact the migration of the spill	☐
• Identify any municipalities or public areas such as churches, parks, etc.	☐
• Identify what other requirements will be necessary when KPL is inside other facilities.	☐

Immediately notify Qualified Individual, Supervisory Personnel and, if necessary, Control Center with the results of your assessment.	☐
Make internal notifications as necessary (**FIGURE 3.1-4**).	☐
Initiate the Initial Incident Response Procedures.	☐

2.1.4 Spill / Release Emergency Response

This section provides a general guidance checklist to identify and mitigate damage due to a leak. This checklist is intended to provide a general approach to cover the emergency situation and does not constitute what actions need to be taken first.

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST

INITIAL RESPONSE ACTION	
First Responder (First Person to Respond to Spill)	
Assume role of Incident Commander, will not relinquish this position until formally passed on.	☐
Take appropriate personal protective measures (EH&S Work Permit).	☐
Eliminate possible sources of ignition in the vicinity of the spill (use E-Stops if applicable).	☐
Call 911 if appropriate.	☐
Immediately notify Qualified Individual (QI), Supervisory Personnel, and Control Center, if necessary, of the incident.	☐
Make internal notification, call for resources as needed (**FIGURE 3.1-4**).	☐
If necessary, evacuate or remove nonessential personnel and any general public within the response area.	☐
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.	☐
Call out spill response contractors (**FIGURE 3.1-6**).	☐
Incident Commander	
Confirm or conduct more extensive assessment of health and safety hazards (EH&S work permit). For multiple responders, geographic areas, or more complex responses, Site Safety plan may be needed.	☐
Provide or Confirm Security of area (as necessary). Have nonessential personnel or any general public evacuated. Consider local authorities (police and fire departments) to accomplish the site control recommended.	☐
Call out or confirm Oil Spill Response Contractors (OSRO) or Company-owned spill response resources (**FIGURE 3.1-6**).	☐
As necessary, establish ICS/UCS for Response. It may be necessary to call out members of the IMT. Ensure response objectives are established for emergency and that response activities are being activated.	☐
Make or ensure appropriate notifications have been made; may need to recruit	

personnel from IMT such as Government Liaison and assign within the ICS. • National Response Center (800) 424-8802 • External Regulatory notifications (**FIGURE 3.1-5**) • Make appropriate internal notifications (**FIGURE 3.1-4)**	☐
If safe to do so, direct responders to eliminate potential ignition sources in the vicinity of the spill including motors, electrical pumps, electrical power, etc. Keep drivers away from truck rack if spill occurs there.	☐
If safe to do so, direct responders to eliminate, control, and "isolate" the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.	☐
If safe to do so, direct responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.	☐

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

INITIAL RESPONSE ACTION	
Incident Commander, Continued	
Consider applying foam over the product, using water spray to reduce vapors, grounding equipment handling the oil, and using non-sparking tools.	☐
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.	☐
If safe to do so, deploy containment/recovery equipment (OSRO or Company-owned) based on release impact.	☐
Maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.	☐
Once deployment of response equipment has been commenced, initiate recovery of product.	☐
Notify Local Emergency Responders (as appropriate). Obtain the information necessary to complete the Oil Spill Report Form (**FIGURE 3.1-3**).	☐
Ensure drug/alcohol testing completed per DOT 199 if applicable (alcohol within 2 hours or max of 8 hours, drug within 32 hours). See DNet for a list of approved Lab Corp Collections Sites.	☐
Evaluate personnel requirements for the initial cleanup. Consider what the operational periods will be necessary and begin planning for the shift/crew replacement.	☐
Initiate spill tracking and surveillance operations. Determine extent of release. Estimate volume of spill utilizing information in **SECTION 2.1.3** or appropriate means.	☐

SITE-SPECIFIC ACTIONS

DOCUMENT ACTIONS TAKEN	
Once a response has been activated, initiate and direct participants to document the initial assessment and response activities.	☐
Upon establishing an ICS/UCS, ensure there is a unit or people (suggest Situation Unit or Scribe) responsible to require documentation from people engaged in the spill response.	☐
Through the ICS/UCS, ensure that planned and executed response activities are being captured through a general Incident Action Plan (IAP).	☐

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

PREPARING FOR SUSTAINED RESPONSE ACTION	
Incident Commander, Continued	
Activate Incident Management Team (IMT) (as necessary). Set up a Command Center and begin to utilize the ICS/UCS structure. Establish the site Safe Areas and provide the site with communications in order to coordinate the response effort.	☐
Evaluate and establish a communication plan as necessary. Generally communications will consist of mobile telephones. Other methods may be acquired based on the needs as established by the ICS/ICS.	☐
May consider multiple geographic or cleanup areas depending on size and areas of impact. Ensure equipment is evaluated to be sufficient for different areas if zoned off.	☐
Evaluate safety air monitoring devices and PPE supplies for response.	☐
Planning unit may be established to evaluate the proper containment and response equipment for changing conditions. Maintain vigilance on changing conditions and how will this equipment protect environmentally sensitive areas within the impact area or bordering the impact areas.	☐
Evaluate recovery methods on site; look for efficiency and minimal intrusion into the environment and change accordingly. Consider vacuum trucks skimmers and absorbent material.	☐
Initiate spill tracking and surveillance operations. Determine extent of release. Estimate volume of spill utilizing information in **SECTION 2.1.3** or appropriate means.	☐
Address storage of recovered materials (Disposal Plan).	☐
Establish “Cleanup Assessment Teams” which can determine cleanup progress.	☐
Establish “How clean is clean” parameters which the Cleanup Assessment Teams will utilize to approve the removal of cleanup equipment.	☐
Document response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to **SECTION 5** for documentation)	☐
SECONDARY RESPONSE ACTIONS (Refer to IMT job descriptions in **SECTION 4.6**).	

FACILITY SPECIFIC RESPONSE CONSIDERATIONS
(Refer to **SECTION 6** for maps, tactical plans, and sensitivity information.

2.1.5 Spill Mitigation Procedures

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, personnel safety must be assessed as the first priority. The potential for ignition and/or toxic exposure must be promptly evaluated. Spill mitigation procedures are listed in **FIGURE 2.1-2**. Discharge volume calculations are provided in **APPENDIX C.4**.

FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close valves (if appropriate). 3. Drain product into containment areas (if possible). 4. Eliminate sources of vapor cloud ignition.*
Tank Overfill/Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Eliminate source of vapor cloud ignition.* 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible.
Piping Rupture/Leak (under pressure and no pressure)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest valves on each side of the rupture (if appropriate). 3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards. 4. Eliminate source of vapor cloud ignition.* 5. If piping is leaking and under pressure, relieve pressure by draining into a containment area or to a tank (if possible). Consider additional measures for repair.
Piping Rupture/Leak (Highly Volatile Liquids / Vapor)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest valves on each side of the rupture (if appropriate). 3. Contact local Emergency Services (Fire, Police, etc) 4. Analyze vapor cloud migration utilizing wind direction; Establish perimeter and monitoring

	5. Eliminate sources of potential ignition* 6. Alert nearby personnel of potential safety hazards, consider evacuation or shelter in place as necessary. 7. If piping is leaking and under pressure, relieve pressure; if possible to existing pressure release method. Consider additional measures for repair.
Failure of Pipeline at Railway Facilities	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close valves (if appropriate). 3. Eliminate source of vapor cloud ignition.* 4. Respond to event in accordance with procedures listed in this Plan. 5. Contact the Railway Authorities to inform of the event, engage into Incident Command and Response as necessary.
Fire/Explosion	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments (if appropriate). 3. Attempt to extinguish fire if it is in incipient (early) stage and **if it can be done safely**. 4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely). Also refer to fire/explosion response procedures in **SECTION 2.11**.
Manifold Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations immediately. 3. Isolate the damaged area by closing valves on both sides of the leak/rupture. 4. Eliminate source of vapor cloud ignition.* 5. Drain fluids back into containment areas (if possible).

* Examples of ignition sources include: roads, houses, farm buildings, railroad tracks, electrical equipment, industrial or manufacturing facilities, office buildings or parking lots, irrigation pumps or water wells, any other source that may contain an open flame, electrical equipment or other ignition source.

2.1.6 Spill Surveillance Guidelines

- Surveillance of an oil spill should begin as soon as possible following discovery to enable response personnel to assess spill size, movement, and potential impact locations.
- Dispatch observers to crossings downstream or downgradient to determine the spill's maximum reach.
- Clouds, shadows, sediment, floating organic matter, submerged sand banks, or wind-induced patterns on the water may resemble an oil slick if viewed from a distance.
- Sorbent pads may be used to detect oil on water.

- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick.
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline.
- Spill surveillance may be accomplished through various methods: walking, driving, boats, helicopters, or small planes. The use of helicopters may be considered the preferred method due to their superior visibility and maneuverability.
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types.
- Observations should be documented. Consider using photographs, video, maps, and pre-determined ICS forms.
- Describe the approximate dimensions of the oil slick based on available reference points (i.e. vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time.
- Consider the use of boats in the event of reduced visibility, such as dense fog or cloud cower; however, this method may not be safe if the spill involves a highly flammable product.
- Consider visual assessment during spill response operations to gauge the effectiveness of response operations, to assist in placing skimmers, and to assess the spill's size, movement, and impact.

A Spill Surveillance Checklist is provided in **FIGURE 2.1-3**.

FIGURE 2.1-3 - SPILL SURVEILLANCE CHECKLIST

Record your observations of spilled oil either in a notebook or directly on a chart of the area under observation. This checklist is an aid for organizing your observations.

General Information	
Date:	Tidal or river stage (flood, ebb, slack, low water, dry):
Time:	On-scene weather (wind, sea state, visibility):
Incident name:	Method of observation (helicopter, fixed-wing aircraft, boat, shore):
Observer?s name:	Flight path/trackline:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
Oil Observations	

Spill location(s):	If on water, describe color and appearance (i.e. rainbow, dull or silver sheen, black or brown in color or mousse):
Spill dimensions:	Percent coverage:
Orientation of spill(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e. windrows, streamers, pancakes or patches):	

Considerations
• During surveillance, travel beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations • Clearly describe the locations where oil is observed and the areas where no oil has been seen

Other Observations

Response Operations
Equipment deployment (general locations where equipment is working and whether the work is done in the heaviest concentration of oil):
Boom deployment (general locations of boom, whether the boom contains oil, and whether the oil entrains under the boom):

FIGURE 2.1-3 - SPILL SURVEILLANCE CHECKLIST, CONTINUED

Record your observations of spilled oil either in a notebook or directly on a chart of the area under observation. This checklist is an aid for organizing your observations.

Environmental Observations
Locations of convergence lines, terrain, and sediment plumes:

Locations of debris and other features that could be mistaken for oil:
Wildlife present in area (locations and approximate numbers):
Spill Sketch

2.1.7 Spill Volume Estimating

Early in a spill response, estimation of spill volume is required in order to:

- Report to agencies
- Determine liquid recovery requirements
- Determine personnel and equipment requirements
- Estimate disposal and interim storage requirements

One tool available to assist in making this calculation is (b) (7)(F), (b) (3) Release Information

Estimating Procedures. There are other tools which can be used, some of which are discussed below:

- **Spill Estimating Spreadsheet**
    - Visual assessment of the surface area and thickness (**FIGURE 2.1-4**); the method may yield unreliable results because:
        - Interpretation of sheen color varies with different observers
        - Appearance of a slick varies depending upon amount of available sunlight, sea-state, and viewing angle
        - Different products may behave differently, depending upon their properties

FIGURE 2.1-4 - SPILL ESTIMATION FACTORS ON WATER

OIL THICKNESS ESTIMATIONS				
Standard Form	**Approx. Film Thickness**		**Approx. Quantity of Oil in Film**	
	inches	**mm**	**gallons/mile^2**	**liters/km^2**
Barely Visible	0.0000015	0.00004	25	44
Silvery	0.000003	0.00008	50	88
Slightly colored	0.000006	0.00015	100	179
Brightly colored	0.000012	0.0003	200	351
Dull	0.00004	0.001	666	1,167
Dark	0.00008	0.002	1,332	2,237
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

NOAA, 09/2000

FIGURE 2.1-5 - LEAK SIZE DETERMINATION TABLE

PIPE SIZE	WALL THICKNESS	BBLS/FOOT	BBLS/MILE
6"	.188	.0379342	200.293
8"	.188	.0661017	349.017
10"	.188	.1045450	551.998
12"	.219	.1472539	777.501
12"	.250	.1457746	769.690
16"	.250	.2333852	1232.274
18"	.281	.2952087	1558.702
20"	.281	.3670238	1937.885
24"	.281	.5336190	2817.508

2.1.8 Estimating Spill Trajectories

In some cases, oil spill trajectories should be estimated in order to predict direction and speed of the slick movement. Trajectory calculations provide an estimate of where oil slicks may impact shorelines and other sensitive areas, and also provide an estimate of the most effective location in which to mobilize spill response resources for protection, containment, and recovery.

Oil spill trajectories can be estimated using vector addition or with computer programs. Hand calculations typically utilize the following assumptions:

- Oil moves at approximately the same direction and speed as the water currents, unless the winds are strong
- Wind speed can be multiplied by 0.034 to determine the effect of winds on speed and direction of spill movement
- The combined effects of winds and currents can be added to estimate spill movement speed and direction

More sophisticated predictions can be obtained from computer programs. Oil spill trajectory services can be obtained from:

- National Oceanic and Atmospheric Administration (NOAA) through the Federal On-Scene Commander (FOSC)
- Private consulting firms
- High Consequence Area (HCA) over land spread calculations developed for the Integrity Management Plan

2.1.9 Containment

Containment actions should take into consideration inclement weather or unsafe conditions such as high winds, fast currents, or unstable terrain.

Containment Safety Considerations

More vapors are formed by the spilled liquid during hot weather. As the liquid spreads over a greater area, the vapors form along the leading edge of the liquid and are being exposed to more possible ignition sources. For this reason early containment is important.

- Eliminate ignition sources
- Avoid contact with the spilled product as much as possible
- Use respiratory protection (if applicable)
- Ensure that the area remains secure to applicable traffic (pedestrian, motor vehicles, air traffic)

Containment Goals

The following containment goals should give the responding personnel some guidance enabling them to prioritize the containment efforts.

1. To prevent liquid or vapors from reaching possible ignition sources:

- Roads
- Houses
- Farm buildings
- Railroad tracks
- Electrical equipment
- Industrial or manufacturing facilities
- Office buildings or parking lots
- Irrigation pumps or water wells
- Any other structure or facility that may contain an open flame, spark, or electrical equipment

Containment Goals, Continued

2. To prevent spilled liquid from reaching any environmentally sensitive area:

- Lakes
- Streams
- Rivers
- Wildlife areas
- Marsh environment
- Other environmentally sensitive area (**SECTION 6**)

3. To prevent spilled liquid or vapors from reaching areas containing livestock:

- Horses (stalls)
- Cattle (pens)
- Pigs
- Fowl

Containment Methods / Actions

Initial containment actions will focus on utilizing containment on site in the most effective manner to:

- Prevent the oil from impacting water, thereby reduce the surface area and the shoreline to be cleaned
- Concentrate the oil (when safe to do so), making physical recovery more efficient
- Limit the environmental impact to the immediate spill area

Selection of the appropriate location and method will depend upon:

- Length of time spill occurs before being noticed
- Amount of spill
- Area of coverage
- Environmental factors such as wind speed and direction
- Oil's characteristics

- Ability to collect and recover product

The following methods may be used in containment of a release. It may be necessary to use different methods during one release.

- Earthen dikes or dams
- Spill containment booms
- Absorbents such as hay, straw, dry dirt or sand, and commercial products (peat moss)
- Absorbents such as sorbent pads, socks, booms
- Collection and skimming: diverting and collection in low areas or diversionary structures and removing with skimming equipment such as vacuum trucks or pumps

Note: Understanding that each release is different and circumstances may be unique, some operational areas may have additional details to containment and response methods listed in **SECTION 6** Sensitive Areas / Response Tactics

2.2 EVACUATION

(b) (7)(F), (b) (3)

[redacted]

2.3 LIGHTNING

LIGHTNING CHECKLIST	
TASK	
Maintain equipment grounding systems to dissipate the effects of a lightning strike.	☐
Provide lightning arrestors on electrical equipment throughout the system.	☐
During thunderstorms, personnel are to avoid the following: • Storage Tanks • Pumping Equipment	

• Being in contact with or in close proximity to above ground piping or any non-insulated device attached to the pipeline • Trees and metal buildings • Open fields • Holding metallic objects	☐
During thunderstorms, personnel should be aware of the potential for lightning and remain alert for strikes that may affect the pipeline operation.	☐

Possibly the most frequent effect of lightning is the interruption of electric power or communications to one or more locations on the pipeline. These events are covered in "abnormal" operation procedures described in the Operations Manual.

The most devastating effect of lightning is the striking of a tank and resulting fire. The response to a fire or explosion event is outlined in the **SECTION 2.11**.

2.4 EARTHQUAKES

Earthquakes generally strike without warning, making them very difficult to prepare for. While the initial quake may be unpredictable, there is a certain amount of post-quake activity accompanying most quakes. These procedures should be followed in the aftermath of an earthquake:

The Pipeline Control center has registered with the USGS to receive earthquake notifications within the operational areas of the continental USA. Based on the magnitude and distance of the earthquake the following procedures should be followed in the aftermath:

EARTHQUAKES CHECKLIST	
Stations and Terminal	
If an earthquake is within a 50 mile radius of the asset, the following is completed based on the magnitude.	
2.0 to 2.9 - Pipeline Control Center will notify the station or terminal of the earthquake. Inspect the asset at the next scheduled station walkthrough.	☐
3.0 to 3.9 ? Pipeline Control Center will issue a "Priority 3" notification for a visual inspection of the station.	☐
4.0 to 4.9 ? Pipeline Control Center will issue a "Priority 2" notification for a visual Inspection of the station.	☐
If an earthquake is within a 100 mile radius of the asset, the following is completed based on the magnitude.	
5.0 to 5.9 ? Pipeline Control Center will issue a "Priority 2" notification for a visual Inspection of the station.	☐
> 6.0 ? Pipeline Control Center will issue a "Priority 0" notification to shut down the station until a visual inspection is completed.	☐
Underground Pipelines	
If an earthquake is within a 100-mile radius of the asset, the following is completed based on the magnitude.	
5.0 to 5.9 ? Pipeline Control Center will notify the PCC communicator scenario	

of the earthquake; plus reduce to 50% MOP and monitor for 12 hours. Operation Management will evaluate what other actions may be necessary on a case-by-case basis.	☐
> 6.0 ? Pipeline Control Center will notify the PCC communicator scenario of the earthquake and shut the pipeline until a visual inspection is completed; plus operate at 50% MOP for 12 hours once the pipeline is brought back on.	☐

Priority 3 = means within 24-hours of receiving notice of the earthquake occurrence and coupled with the control center is not registering any alarms.
Priority 2 = means as soon as feasible, safe, and practical; to coincide with the earliest available daylight to give the best viewing possible and coupled with the control center is not registering any alarms.
Priority 1 = registers a high sense of urgency; contact pipeline operator on call-out whatever the time of day or night it may be.
Priority 0 = registers the highest sense of urgency, Shut station down and contact pipeline operator on call-out whatever the time of day or night it may be.

2.5 TORNADO

TORNADO CHECKLIST	
TASK	
Monitor news media reports (**FIGURE 3.1-7**) • Tornado watch means conditions are favorable for tornadoes • Tornado warning means a tornado has been sighted	☐
When a tornado warning is issued, sound the local alarm	☐
Have location personnel report to the designated area	☐
Account for personnel on duty	☐
Take shelter: • Go to an interior room on the lowest floor or designated storm shelter • Get under a sturdy piece of furniture • Use your arms to protect head and neck	☐
If the facility is damaged by the tornado, notify Supervisory Personnel	☐
Go to the scene of the incident to evaluate the situation • Be aware of broken glass and downed power lines • Check for injuries • Use caution entering a damaged building	☐
Update Supervisory Personnel/Management	☐

Conduct post-emergency evaluation and report	☐

2.6 HURRICANE

Since hurricanes are very erratic in nature, Hurricane Preparedness Plan SOP (Standard Operating Procedures) will be implemented and followed when a storm path is predicted for a particular operational area. The SOP will provide procedures for a safe and orderly shutdown of operational assets within the predicted storm path. The procedures will also enact an organized tracking effort for hurricane preparedness activities which will allow for employees to handle company as well as their own domestic hurricane preparedness needs.

The Hurricane Preparedness Plan (SOP) is divided into two sections based on potential weather survey tracking forecasts and the timetables predicted for landfall within operating assets.

HURRICANE CHECKLIST	
TASK	
Tropical Storm / Hurricane forms and is being tracked by National Weather Surveys	
Hurricane Season begins, general coastal areas heighten awareness to storm reports.	☐
Tropical Storm/Hurricane forms or enters general area of operational assets.	☐
Hurricane Preparedness Standard Operating Procedures Implemented	
Tropical Storm/Hurricane is 48 - 36 hours away and path is predicted in the direction of the operational assets threshold parameter to implement the Hurricane Preparedness Plan (SOP).	☐
Hurricane Preparedness Plan (SOP) is implemented.	☐

2.7 FLOOD

FLOOD CHECKLIST	
TASK	
When conditions warrant, perform continuous monitoring of the situation by listening to radio and/or television reports (**FIGURE 3.1-7**) • Flash flood watch means flooding is possible • Flash flood warning means flooding is occurring or is imminent	☐
As appropriate, update Supervisory Personnel	☐
Establish an evacuation plan (**SECTION 2.2**)	☐
Take preliminary actions to secure the facility before flooding and mandatory evacuation	☐
Consider having sandbags brought to sites that could be affected by the flooding	☐

Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area	☐
Consider removing product from underground storage tanks, sumps, and separators (if applicable). Consider replacing with water to prevent them from floating out of the ground	☐
Keep at least a normal bottom in above ground tankage, more if possible	☐
Plug rack drains and facility drains connected to the sump	☐
Consider anchoring bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable)	☐
Notify Supervisory Personnel/Management that the facility will be closed	☐
Consider shutting off high voltage power and natural gas lines	☐
Close valves on product and additive storage tanks	☐
Before evacuation, know where employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur	☐
Conduct a post-emergency evacuation and report	☐
Maintain hazards awareness: • Structural damage • Downed power lines • Leaking natural gas, water, and sewer lines • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture • Avoid direct contact with flood water, mud, and animal carcasses	☐

2.8 MEDICAL

MEDICAL CHECKLIST	
TASK	
Summon Emergency Medical Services (EMS) to the scene (**FIGURE 3.1-5**)	☐
Do not move the patient unless a situation (such as a fire) threatens patient's life	☐
If trained, provide first aid until the EMS arrive at the scene	☐
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrive at the scene	☐
The rescuer's role includes: • Removing the patient from any situation threatening patient's life or the lives of rescuers • Correcting life-threatening problems and immobilizing injured parts	

before transporting the patient • Transporting the patient in a way that minimizes further damage to injured parts • Administering essential life support while the patient is being transported • Observing and protecting the patient until medical staff can take over • Administering care as indicated or instructed	☐

2.9 SABOTAGE

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



2.11 FIRE AND/OR EXPLOSION

Your first consideration is always the safety of people in the immediate area, including your own.

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST	
TASK	
At a manned facility	
Evaluate the situation; approach cautiously from upwind; do not rush in	☐
Notify the local police and fire departments (as appropriate)	☐
Notify Supervisory Personnel	☐
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and **if it can be done safely**	☐
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves	☐
Undertake basic site control:	

• Make an assessment of hazards • Isolate the area • Keep people away from the scene and outside the safety perimeter as per the evacuation plan (**SECTION 2.2**) • Establish safety zones and escape routes	☐
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary (**SECTION 4.4**)	☐
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency (**FIGURE 3.1-4**, **FIGURE 3.1-6**)	☐
Conduct a post-emergency evaluation (**SECTION 8.3**) and report	☐

2.11 FIRE AND/OR EXPLOSION, CONTINUED

Your first consideration is always the safety of people in the immediate area, including your own.

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST, CONTINUED	
TASK	
At an unmanned facility	
Handle the call	☐
Notify the local police and fire departments (as appropriate)	☐
Notify Supervisory Personnel	☐
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in	☐
Undertake basic site control: • Make an assessment of hazards • Evaluate the area for visitors or personnel in the area prior to the event • Isolate the area • Keep people away from the scene and outside the safety perimeter as per the evacuation plan (**SECTION 2.2**)	☐

• Establish safety zones and escape routes	
Update Supervisory Personnel/Management	☐
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves	☐
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary (**SECTION 4.4**)	☐
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency (**FIGURE 3.1-4**, **FIGURE 3.1-6**)	☐
Conduct a post-emergency evaluation (**SECTION 8.3**) and report	☐

2.12 RELEASE WITH A FLAMMABLE VAPOR CLOUD

Once a Flammable vapor cloud is detected, the need for assessment of the situation is paramount in implementing and sustaining an effective response. In every case, we must collect accurate initial information (**FIGURE 3.1-2**). The information acquired is passed along to responsible company officials to ensure proper actions are taken.

As the situation dictates, a thorough and accurate assessment is necessary to determine specific activities required to respond to the situation.

INCIDENT ASSESSMENT	
Person Assessing the Incident	
Approach any suspected emergency incident or suspected release cautiously.	☐
Take appropriate personal protective measures (Do not enter any areas without proper Personal Protective Equipment (PPE).	☐
Eliminate possible sources of ignition in the vicinity of the release (if applicable, use Emergency-Stops).	☐
Initiate a general site assessment giving emphasis to the following:	
• Immediate danger to the general public	☐
• Immediate danger to the environment (e.g. waterways, wildlife)	☐
• Identify significant impact areas (e.g. highways, railroads, or commercial businesses)	☐
• Identify topographic features that could impact the migration of the release	☐
• Identify any municipalities or public areas such as churches, parks, etc.	

	☐
• Identify other requirements that will be necessary when inside third party facilities.	☐
• Make notifications and call for resources as needed. (**SECTION 3.1**)	☐
INITIATE THE INITIAL INCIDENT RESPONSE AND SPILL MITIGATION PROCEDURES DESCRIBED IN THIS PLAN (FIGURE 2.1-1)	☐

2.12 RELEASE WITH A FLAMMABLE VAPOR CLOUD, CONTINUED

INCIDENT ASSESSMENT	
Flammable Vapor Cloud Release - General Response Guide	**Comments**
STAY UP WIND, UP HILL, AND UP STREAM OF THE VAPOR CLOUD AND THE SOURCE. Assess wind direction and vapor cloud movement. Be aware of possible weather changes that could affect cloud movement.	
Sound the Alarm; Alert personnel and affected public as soon as possible after discovering that a flammable or otherwise hazardous vapor cloud is present.	
Determine Extent and Coverage of the Vapor Cloud. A responder may use Audio, Visual and Olfactory (AVO) Methods along with wind direction and handheld monitors to determine the initial extent and coverage of a vapor cloud. (**Section 2.1.5 Spill Mitigation Procedures**).	
The Emergency Response Guidebook (ERG) - can also supply generic and specific hazard information regarding public safety for vapor clouds emanating from a flammable gas, HVL or other hazardous liquid release.	
Site Management and Control; If "Local Emergency Responders" such as fire or police are already on scene, ensure operations are coordinated and unified. If these resources are not on site; request emergency and medical support services as needed.	
Vacate the Hazard Area - Direct non-essential persons to move in a crosswind direction away from the release to the designated muster point for roll call and further instructions. Consider protective actions (such as evacuation) within the specified distance upwind of the release and any identified Vapor Cloud.	
Establish Exclusion Zone ? Command the physical layout of the incident by establishing a "Hot zone" which safely encompasses the Vapor Cloud area. The physical layout of this exclusion zone should be communicated to all personnel operating on the site	
Only qualified emergency service or rescue personnel should consider incident site entry as safety conditions and the On-scene Incident Commander allow.	
Determine the concentrations of toxic or flammable gases present using both fixed monitors (if available) and portable intrinsically safe instruments.	

Defensive Operations are always desirable over Offensive tactics if they accomplish the same objectives. Only the On-Scene Incident Commander can deem it necessary to enter a "Hot Zone" and when approved this should be done only by a trained and qualified Hazardous-Material Team with adequate resources.	
If a release is occurring, fixed water monitors, and/or sprinkler or deluge systems can be activated to dilute, disperse, and "scrub" the vapors and prevent their advancement to uncontrolled areas (This tactic is situation dependent and may not be the appropriate tactic for all situations, i.e. dealing with lighter than air gases or certain HVL?s).	
Manage water supply, and control runoff/drainage, care should be taken to activate only those water systems that can effectively mitigate vapors.	
Vapor Cloud Surveillance. Continuous surveillance and evaluation of the extent and coverage of Vapor Cloud may be accomplished through various methods. Audio, Visual and Olfactory (AVO) Methods along with handheld monitors may be used to further refine the determined extent and coverage of a vapor cloud. As resources and personnel arrive, additional portable and fixed positions monitors can be set up to continuously monitor, gauge and predict the extent and coverage of the vapor cloud. These may include, but not limited to four gas monitors with LEL capability and Area Monitors	
SECONDARY RESPONSE ACTIONS (Refer to IMT job descriptions in **SECTION 4.6**).	
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to **SECTION 6** for maps, tactical plans, and sensitivity information.	

SECTION 3 Last revised: February 15, 2013

NOTIFICATIONS / TELEPHONE NUMBERS

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3.1 Emergency Information and Notification Procedures

Figure 3.1-1 - Emergency Notification Flow Chart

Figure 3.1-2 - First Report of Incident Form

Figure 3.1-3 - PHMSA Spill Report Form

Figure 3.1-4 - Internal Notifications and Telephone Numbers

Figure 3.1-5 - External Notifications and Telephone Numbers

Figure 3.1-6 - Oil Spill Response Contractor Resources and Telephone Numbers

Figure 3.1-7 - Additional Resources, Notifications, and Telephone Numbers

Figure 3.1-8 - Adjoining Neighbors

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

There are two classes of emergency events, "reported" and "confirmed."

A "reported" emergency is either an event reported by someone other than a company employee and which cannot be immediately confirmed or a pressure or flow rate change that is not confirmed by a second source.

A "confirmed" emergency is an event reported by a company employee or reported by someone other than a company employee and "confirmed" by a second source. Any event that threatens lives or public safety if immediate action is delayed, is to be considered a confirmed emergency.

In either case, upon receiving notification about an emergency event, the company employee will take immediate actions (**SECTION 2**) and begin notification procedures based on the situation.

The general “Internal Incident Notification Sequence” is as follows:

- **First:** Isolate the source and then call emergency services
- **Second:** Dial: 1-316-828-5001:
  - Koch Security will answer:
  - ?Koch Security, what is your Emergency??
- **Third:** Reply with one of the following Incident Types:
  - Injury / Illness
  - Environmental Incident
  - Vehicle Accident
  - Pipeline Hit
  - Fire, Explosion, or Lightning Strike
  - Third Party Release on KPL Property
- **Fourth:** Security will ask:
  - Your name, location, date and time of incident, severity of the incident, if response resources are needed, and if emergency services are required
  - For an Environmental incident, the amount, product type, source, affected areas, and if response resources are needed
- **Fifth:** After activating the Communicator:
  - Expect a call-back from the Compliance on-call person within 15 minutes.
  - If the incident requires Oil Spill Response resources, contact your QI.
  - Important: Reactivate the Communicator and/or call your QI if you do not receive a call-back from the Compliance on-call person.

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES, CONTINUED

Should the person making notifications encounter problems with the notification process listed above, individual calls may be required to ensure appropriate notifications are made.

The priority of actions and response procedures will depend upon actual circumstances and will be determined by the Incident Commander.

Information required (in order below):

1 - Your name and phone number, type of incident reported and location

2 - Supervisor name.

3 - Time and Date

4 - Product released and estimated quantity

5 - Source of release

6 - Affected medium (Land or Water)

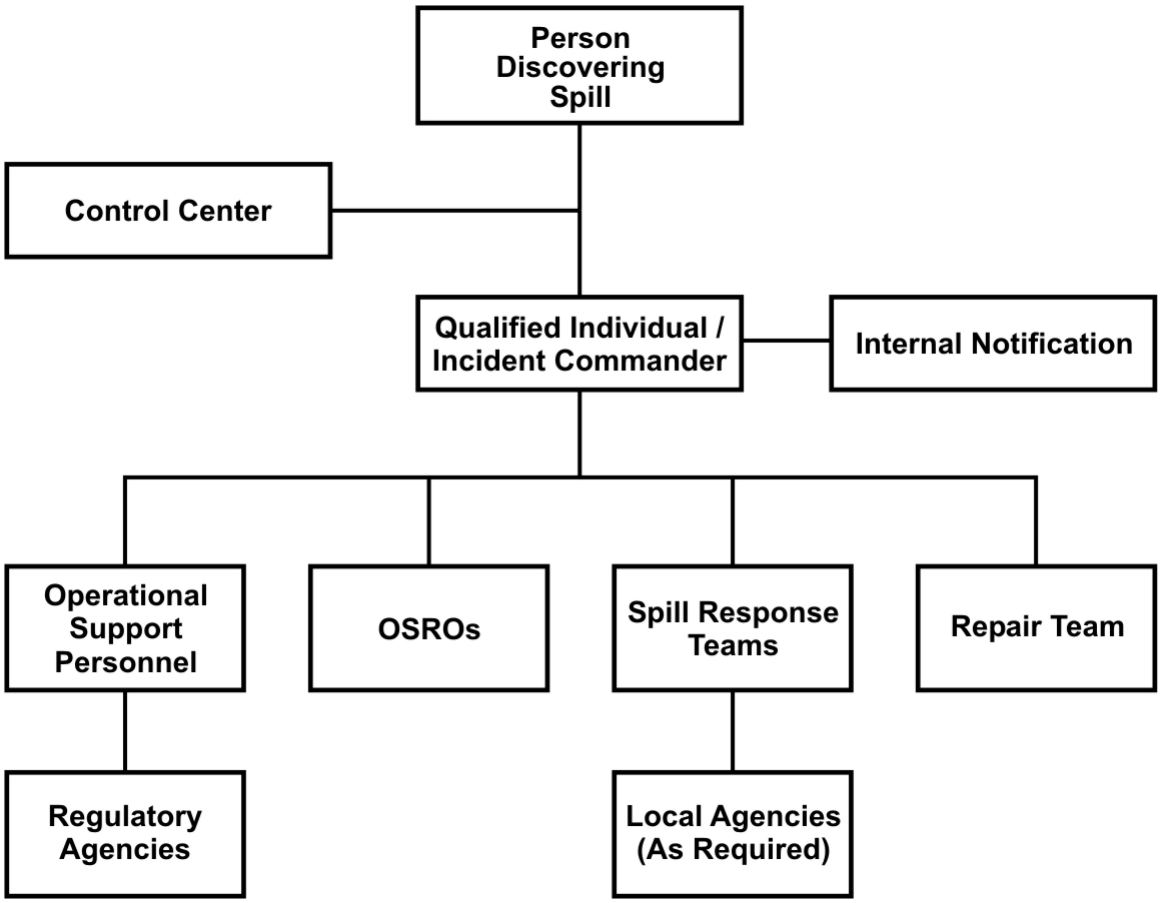
7 - Affected employee (if applicable)

8 - Has area been secured?

Note: Remember -

1) **Safety is our #1 concern**
2) **Report only the facts!**

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART



This section also contains the following:

- FIGURE 3.1-2 provides a First Report of Incident Form. This form is utilized for initial internal reporting.
- FIGURE 3.1-3 provides a PHMSA Spill Report Form. This form is utilized for initial PHMSA external reporting.
- FIGURE 3.1-4 provides internal notification summary and documentation form to assist in documenting notifications.

FIGURE 3.1-2 - FIRST REPORT OF INCIDENT FORM

***This is a sample form. Actual documentation should be submitted as a First Report of Incident into the Lynx Database as required by KPL G120.010.**

Short Description:	
Responsible Dept. / Unit:	
Supervisor:	
Select a Level of Consequence and Check all that Apply: **Level of Consequence:** ☐ Near Miss ☐ Incident	
General:	

☐ Economic Loss	☐ Injury
☐ Environmental	☐ Property Damage
☐ Fire / Explosion	☐ Quality
☐ Health / Illness	☐ Security

Where did the incident occur? Location:		
Specific Location:		
When did the incident occur?	**Date Occurred:** / /20_____	**Time:** ☐ AM ☐ PM
	Date Reported: / /20_____	**Time:** ☐ AM ☐ PM
Enter a full description of the Incident:		
Weather:	**PSM Incident:**	
Incident Flags: ☐ Key Risk	☐ Right of Way Encroachment	☐ Third Party

Equipment Involved	Critical	Comment

Witness Name:	Address:	Phone:

Contractor	Involvment Type

Enter any Injury / Illness Information:

Patient	Class	Body Part	Position

Enter any Release Information:

Chemical Agent	Medium	Amount	Unit

Actual Risk Rating:	**Potential Risk Rating:**

FIGURE 3.1-3 - PHMSA SPILL REPORT FORM
(This is guidance for information to be supplied to PHMSA)

1. NAME AND ADDRESS OF COMPANY:

2. NAME OF PIPELINE:

3. TIME OF DISCHARGE:

4. LOCATION OF DISCHARGE:

5. TYPE OF OIL (INCLUDING PETROLEUM PRODUCTS) INVOLVED:

6. REASON FOR DISCHARGE (e.g., material failure, excavation damage, corrosion):

7. ESTIMATED VOLUME OF OIL (INCLUDING PETROLEUM PRODUCTS) DISCHARGED:

8. WEATHER CONDITIONS ON SCENE:

9 ACTION TAKEN OR PLANNED BY PERSONS ON SCENE:

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
*KPL Incident Communicator System	1-316-828-5001 (Koch Security will answer) (Office)	NA	Internal Communication System			
Mike Kostelecky NOG - Operations Manager **Qualified Individual**	(651) 458-4857 (Office) (b) (6) (Home) (b) (6) *(Mobile) (651) 233-8651(Blackberry) (Pager)	1.0 - 7.0	On-scene Incident Commander EOC Liaison (City Representation) Crisis Manager	x	x	x
David Kopke Operations Supervisor MPL **Qualified Individual**	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	On-scene Incident Commander, Operations Section Chief, EOC Liaison (City Representation), Crisis Manager	x	x	x
Steven Molmen Operations Supervisor **Qualified Individual**	(651) 458-4856 (Office) (b) (6) (Home) (b) (6) *(Mobile)	1.0 - 7.0	On-scene Incident Commander Operations Section Chief Operations: Division / Group Supervisor, Branch Director	x	x	x
Michael Hendricks Operations Supervisor **Qualified Individual**	(218) 776-3313 X27 (Office) (b) (6) (Home) (612) 619-8518 (Work) *(Mobile), (b) (6) (Personal) *(Mobile)	1.0 - 7.0	On-scene Incident Commander Operations Section Chief EOC Liaison (City Representation)	x	x	x
Gary R. Johnson Operations Supervisor **Qualified Individual**	(320) 632-5567 (Office) (b) (6) (Home) (b) (6) *(Mobile) (b) (6) (personal cell)	1.0 -4.0	First Responder, On-scene Incident Commander, Operations Section Chief, Branch Director, EOC Liaison (City	x	x	x

	(Pager)		Representation)			
Charles (Chuck) Wenz Mechanical Technician - Senior **Qualified Individual**	(320) 632-1659 (Office) (b) (6) (Home) (b) (6) *(Mobile)	1.0 - 4.0	Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director	x	x	x
Kenneth Hillman Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director **Qualified Individual**	(651) 458-4841 (Office) (b) (6) (Home) (b) (6) *(Mobile)	1.0 - 7.0	Command: On-scene Incident Commander Operations Section Chief, UCS Operations: Division / Group Supervisor, Branch Director	x	x	x
Richard (Rick) Schlegel SITE ASST SUPR/SR DAMAGE PREV COORD **Qualified Individual**	(651) 458-4848 (Office) (b) (6) (personal cell) (Home) (b) (6) *(Mobile)	1.0 - 7.0	Operations Section Chief On-scene Incident Commander Operations: Division / Group Supervisor, Branch Director	x	x	x
Kevin Prosser Project Engineer	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Operations: Division / Group Supervisor; Branch Director Operations Section Chief On-scene Incident Commander	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Premm Badhwa Measurement Technician	(651) 458-4863 (Office) (b) (6) *(Mobile)	1.0 - 7 .0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Terry Bennett Electrical Technician - Senior	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Matthew Curlee Damage Prevention Coordinator	(651) 458-4860 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Safety Officer Assistant	x	x	
Troy Dicke Pipeline Inspector	(612) 759-3612 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Operations: Task Force Leader, Pipeline Repair First Responder Demobilization Unit Leaders	x	x	
Bruce Eklund Mechanical Technician	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Jeremiah Gerdes Electrical Technician	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Safety Officer Assistant	x	x	

Kimberly (Kim) Gerold Contractor Selection / Management Capability Leader	(651) 438-1775 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Logistics: Service Branch Planning: Situation Unit Leader Planning: Resource Unit Leader		x	
Michael (Mick) Hemenway DOT Compliance Coordinator	(651) 480-3861 (Office) (b) (6) *(Mobile) None (Pager)	1.0 - 7.0	Liaison Officer Planning: Technical Specialist - DOT Compliance EOC Manager	x	x	
Brandon Irving Mechanical Technician	(651) 458-4843 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Jeremy Johnson Corrosion Technician	(b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE	RESPONSE TRAINING TYPE[1]		

			ACTION	1	2	3
Gerald Kennedy Electrical Technician	(651) 458-4844 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Division / Group Supervisor, Branch Director	x	x	
Eric Larson Utility Operator	(218) 776-3313 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Ryan Newcomer EH&S Supervisor	(651) 438-1564 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning: Environmental Unit Leader Liaison Officer Operations: Disposal Group	x	x	
James (Jim) Rudack Corrosion Technician	(b) (6) *(Mobile)	1.0 - 4.0	First Responder Operations: Division / Group Supervisor; Branch Director Operations Section Chief	x	x	
Sarah Ryan Records Coordinator	(651) 438-1308 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning: Documentation Unit Leader		x	
Jennifer Sweney Damage Prevention Leader	(651) 480-3936 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Logistics: Service Branch Technical Specialist: ROW Liaison Officer	x	x	
Edward Traut Damage Prevention Coordinator	(320) 632-6123 (Office) (b) (6) *(Mobile)	1.0 - 4.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Andrew Verga NOG Safety Manager	(651) 438-1325 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Safety Officer	x	x	

Shawn Waidelich NOG Inspection/Engineering Leader	(651) 438-1558 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning Section Chief EOC Manager Crisis Manager	x	x	
Kimberly Woldengen Public Awareness Coordinator	(651) 438-1565 (Office) (b) (6) *(Mobile)	1.0 - 7.0	PIO Assistant: Local Emergency Responders Logistics: Service Branch Technical Specialist: ROW	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM

NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Brian Stull Utility Operator	(218) 776-3345 (Office)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Kyle Mader Project Engineer	(651) 438-1589 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Logistics: Support Branch Logistics: Service Branch Logistics Section Chief			
			Operations: Task			

Scott Bennett Pipeline Inspector	(b) (6) *(Mobile)	1.0 - 7.0	Force Leader, Pipeline Repair First Responder Demobilization Unit Leaders	x	x	
Nick Welling DAMAGE PREVENTION COORDINATOR	(b) (6) *(Mobile)	1.0 - 4.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager			
Michael Carter Damage Prevention Coordination	(651) 458-4842 (Office) (b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Travis Falk Electrical Technician	(320) 632-5549 (Office) (b) (6) *(Mobile)	1.0 - 4.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Amy Fischer Cost Analyst	(651) 438-1559 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Finance / Admin Section Chief Logistics: Section Chief Planning: Resource Unit Leader	x	x	
Jeff Lorentz Pipeline Inspector	(b) (6) *(Mobile)	1.0 - 7.0	Operations: Task Force Leader, Pipeline Repair First Responder Demobilization Unit Leaders	x	x	
Benjamin Machlitt Mechanical Technician	(b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Julie Maher Site Supervisor / ROW Agent	(651) 438-1563 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning: Technical Specialist - ROW Unit Leader	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]	
There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.	
TYPE[1]	**DESCRIPTION**
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
Dustin Olson Pipeline Inspector	(b) (6) *(Mobile)	1.0 - 7.0	Operations: Task Force Leader, Pipeline Repair First Responder Demobilization Unit Leaders	x	x	
Shelly Marshall Integrity Specialist	(651) 438-1277 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning: Situation Unit Leader Planning: Resource Unit Leader Planning: Documentation Unit Leader	x	x	
Samuel Richert Damage Prevention Coordinator	(b) (6) *(Mobile)	1.0 - 7.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Eben Spencer Inspection Supervisor / Project Engineer	(651) 437-0590 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Planning Section Chief Logistics Section Chief Operation: Repair	x	x	

			Group Supervisor			
Thomas Tangeman Project Engineer	(651) 438-7246 (Office) (b) (6) *(Mobile)	1.0 - 7.0	Logistics Section Chief Logistics: Support Branch Logistics: Service Branch	x	x	
Joshua Bothwell Mechanical Technician	715-878-4010 (Office) (b) (6) (Home) (b) (6) *(Mobile)	3.0 - 11.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Logistics: Security Manager	x	x	
Todd Adams Mechanical Technician	(715) 457-6404 (Office) (b) (6) *(Mobile)	4.0 - 11.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Safety Officer Assistant	x	x	
Sean Mantei Damage Prevention Coordinator	(715) 457-6404 X231 (Office) (b) (6) *(Mobile)	4.0 - 11.0	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	
Robert (Bob) Elsenheimer Corrosion Capability Leader - NOG	(715) 457-6404 (Office) (b) (6) *(Mobile)	4.0 - 11.0	First Responder Operations: Division / Group Supervisor; Branch Director Operations Section Chief	x	x	
Matthias (Luke) Graff Mechanical Technician	(651) 458-4846 (Office) (b) (6) *(Mobile)	In Training	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility

	Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
Joshua Boyd Automation / Electical Technician	(651) 458-4877 (Office) (b) (6) *(Mobile)	In Training	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager			
Anthony (Tony) Ford Pipeline Inspector	(b) (6) *(Mobile)	In Training	Operations: Task Force Leader, Pipeline Repair First Responder Demobilization Unit Leaders			
Matthew (Matt) Talarico MECHANICAL QUALITY CONTROLS TECHNICIAN	(651) 458-4876 (Office) (b) (6) *(Mobile)	In Training	First Responder Operations: Strike Team / Task Force Leader or Single Resource Boss Operations: Staging Area Manager	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center (NRC) c/o USCG 2100 2nd Street, Southwest Room 2111-B Washington, DC 20593-0001 For online reporting http://nrc.uscg.mil/	(800) 424-8802* (202) 267-2675* (202) 267-1322 (Fax) TDD: (202) 267-4477	
Recommended		
Federal Agencies		
Pipeline and Hazardous Materials Safety Adminstration (Office of Pipeline Safety) 901 Locust Street, Suite 462 Kansas City, MO 64106	(816) 329-3800	
U.S. Army Corps of Engineers 190 5th Street East Suite 401 St. Paul, MN 55101-1638	(651) 290-5405 (651) 290-5205	
U.S. Environmental Protection Agency (USEPA) Emergency Response Branch (24 Hour Number) 77 West Jackson Boulevard Chicago, IL 60604	(312) 353-2318 (312) 353-9176	
United State Coast Guard - Upper Mississippi Sector (Environmental Protection)(St. Louis) 1222 Spruce Street Suite 7.103 St. Louis . MO 63101	(314) 269-2332 (314) 269-2408 (fax)	
United States Coast Guard - Great Lakes Sector (Environmental Protection) 337 Water Street Sault Ste. Marie, MI 49783	(906) 635-3233* (906) 635-3238 (fax)	
US Fish and Wildlife Service-Region 3 1 Federal Drive Fort Snelling, MN 55111	(612) 713-5301 (612) 713-5284 (fax)	
State Agencies - Minnesota		
Minnesota DNR 500 Lafeyette Road St. Paul, MN 55155-4040	(651) 296-6157	
Minnesota Duty Office	(800) 422-0798	

1430 Maryland Avenue East St. Paul, MN 55106		
Minnesota Office of Pipeline Safety 444 Feeder Street Suite 1417 St. Paul, MN 55101	(651) 201-7230 (651) 201-7239	
Minnesota OSHA 443 Lafeyette Road St Paul, MN 55155	(651) 284-5050 (800) 321-OSHA	
Minnesota State Fire Marshal Division 444 Cedar Street Suite 145 St Paul, MN 55101-5145	(651) 201-7202 (651) 201-7209 Emergency Calls - State Duty Officer	
Minnesota State Patrol 1500 West County Road B-2 Room 320 Roseville, MN 55113	(651) 582-1511 911	
Minnesota State Patrol (Rochester) 2900 48th Street NW Rochester, MN 55901	(507) 285-7410 (507) 285-7406	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Anoka County		
Anoka - Champlin Fire Department 2301 3rd Avenue Anoka, MN 55303	(763)-421-2900 911	
Anoka Co. Sheriff Department 325 East Main Anoka, MN 55303	(763) 323-5000 (763) 427-1212 911	
Anoka County Emergency Management Gary Peterson, Program Coordinator 2100 3rd Avenue Anoka, MN 55303	(763) 323-5761 (b) (6) (cell) (763) 323-5682 (fax)	
Anoka County LEPC 325 East Main Anoka, MI 55303	(763) 427-1212 (763) 422-7504	
Benton County		

Benton Co. Sheriff Department 581 Highway 23 NorthEast Foley, MN 56329	(320) 968-7201	
Benton County LEPC 531 Dewey Street Foley, MN 56329	(320) 968-8105	
Emergency Management James McDermott 531 Dewey Street, P.O. Box 129 Foley, MN 56329	(320) 968-8105 (320) 968-5320 (fax)	
Sauk Rapids Fire Department (Volunteer) 408 Benton Drive N Sauk Rapids, MN 56379	(320) 255-9058	
Carver County		
Carver Co. Emergency Management Attn: Tim Walsh 600 E. 4th St. Chaska, MN 55318	(952) 361-1539	
Carver Co. Sheriff's Office Attn: Bud Olson, Sheriff 606 E. 4th St. Chaska, MN 55318	(952) 361-1212 (952) 361-1100 (fax)	
Chaska Police Dept. Attn: Scott Knight, Chief 2 City Hall Plaza Chaska, MN 55318	(952) 448-4200 (952) 448-2307 (fax)	
Hamburg Fire Dept. (Volunteer) Attn: Chief 181 Broadway Ave. Hamburg, MN 55339	(952) 467-3178	
Clearwater County		
Bagley Fire Department 213 Main Avenue North Department 101 Bagley, MN 56621	(218) 694-2865 911	
Clearwater Co. Sheriff Department 213 Main Avenue North, Dept. 102 Bagley, MN 56621	(218) 694-6226 (218) 694-6964 (fax) (218) 694-6255	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED

Recommended , Continued

County Agencies - Minnesota		
Clearwater County		
Clearwater County LEPC 213 Main Avenue North Bagley, MI 56621	(218) 694-6226 (218) 694-6964	
Emergency Management Larry Olson, Director Courthouse 1st Floor 213 Main Avenue North, Dept. 102 Bagley, MN 56621-8304	(218)-694-6226 (218) 694-6224 (fax)	
Hastings Police Dept. Attn: Paul Snell 150 E. 3rd St. Hastings, MN 55033	(651) 480-2306 (651) 437-1206 (fax)	
ITASCA Fire Department 213 Main Avenue North Bagley, MN 56621	(218) 694-6226 911	
Dakota County		
Apple Valley Fire Department Attn: Nealon Thompson, Chief 7100 147th Street West Apple Valley, MN 55124	(952) 953-2600 (952) 953-7515 (fax)	
Apple Valley Police Dept. Attn: Jon Rechtzigel 7100 147th St. W Apple Valley, MN 55124	(952) 953-2701 (952) 953-2733 (fax)	
Burnsville Em Mngt Attn: Don Stenger 100 Civic Center Parkway Burnsville, MN 55337	(952) 895-4638	
Burnsville Fire Dept. Attn: BJ Jungmann, Chief 100 Civic Center Parkway Burnsville, MN 55337	(952) 895-4570 (952) 895-4512 (fax)	
Burnsville Police Dept. Attn: ERic Geiseke, Chief 100 Civic Center Parkway Burnsville, MN 55337	(952) 895-4600 (952) 895-4640 (fax)	
Dakota Co. Sheriff Department 1580 Highway 55 Hastings, MN 55033	(952) 322-2323	
Dakota County Emergency Management 1580 Highway 55 Hastings, MN 55033	(651) 438-4710 (651) 438-8302 (fax)	
Dakota County LEPC LEC 1580 Highway 55	(651) 438-4710 (651) 438-8302 (fax)	

Hastings, MN 55033		
Dakota County Sheriffs Office Attn: Dave Bellows, Sheriff 1580 Hwy 55 Box 247 Hastings, MN 55033	(651) 438-4710 (651) 438-4709 (fax)	
Eagan Fire Dept. Attn: Mike Scott, Chief 3795 Pilot Knob Rd. Eagan, MN 55122	(651) 675-5900 (651) 675-5910 (fax) (651) 322-2323 (Emergency Dispatch)	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Dakota County		
Eagan Police Dept. Attn: Jeremy Klein 3795 Pilot Knob Rd. Eagan, MN 55122	(651) 675-5805 Jeremy Klein (651) 675-5707 (fax)	
Farmington Police Dept. Attn: Danny Siebenaler, Chief 19500 Municipal Dr. Farmington, MN 55024	(651) 280-6700 (651) 280-6799 (fax)	
Hastings Fire Department Attn: Mike Schutt, Chief 115 West 5th Street Hastings, MN 55033	(651) 480-6150 (651) 480-6170 (fax)	
Inver Grove Heights Fire Attn: Judy Thill (Admin. Dept.) 2059 Upper 55th St. E Inver Grove Heights, MN 55075	(651) 455-5082 (651) 451-0458 (fax)	
Inver Grove Heights Police Attn: Larry Stanger, Chief 8150 Barbara Ave. Inver Grove Heights, MN 55075	(651) 450-2525 (651) 450-2543 (fax)	
Lakeville Police Dept. Tom Vonhof, Chief 20110 Holyoke Av Lakeville, MN 55044	(952) 985-4801 (652) 985-4899 (fax)	
Mendota Heights Fire Dept. Attn: John Maczko	(651) 255-1371 (651) 452-8940 (fax)	

1101 Victoria Curve Mendota Heights, MN 55118		
Mendota Heights Police Dept. Attn: Mike Aschenbrener, Chief 1101 Victoria Curve Mendota Heights, MN 55118	(651) 452-1366 (651) 452-2995 (fax)	
Randolph/Hampton Fire Station 1 4365 292nd Street East Randolph, MN 55065	(507) 263-3797	
Rosemount Police Department Attn: Eric Werner, Chief 2875 145st West Rosemount, MN 55068	(651) 423-4491 (651) 423-4485 (fax) (651) 322-2323* (Dispatch)	
South St Paul Civil Defense Attn: Bill Messerich, Chief 125 3rd Ave. South S St Paul, MN 55075	(651) 554-3302	
South St. Paul Fire Dept. Attn: John Ehret, Chief 310 Marie Avenue S St Paul, MN 55075	(651) 554-3250 (651) 552-4176 (fax)	
West St. Paul Fire Department Attn: John Ehret, Chief 1616 Humboldt Ave West St Paul, MN 55118	(651) 552-4176 (651) 552-4196 (fax)	
West St. Paul Police Dept. Attn: Manila Shaver, Chief 1616 Humbolt Avenue West St Paul, MN 55118	(651) 552-4201 (651) 552-4199 (fax) (651) 552-4200	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Freeborn County		
Albert Lea Fire Department 221 East Clark Albert Lea, MN 56007	(507) 377-5200 Option 5 (507) 377-4340	

Conger Fire Department (Volunteer) Attn: Darrin Palmer 51 School St Conger, MN 56020	(507) 377-5215	
Freeborn Co. Sheriff Department 411 South Broadway Albert Lee, MN 56007	(507) 377-5205 (507) 377-5212 (507) 377-5210	
Freeborn County Emergency Management 411 South Broadway Albert Lea, Minnesota 56007	(507) 377-5221 (507) 377-5257 (fax)	
Freeborn County LEPC 411 South Broadway Albert Lea, MN 56007	(507) 377-5221 (507) 377-5200	
Hennepin County		
Eden Prairie Fire Department/Police Department 14800 Scenic Heights Road Eden Prairie, MN 55344	(952) 949-6200 (952) 949-8409 (fax)	
Hennepin Co. Sheriff Department Dispatch (Fire, Police) 350 5th Street South Minneapolis, MN 55415	(763) 525-6216	
Hennepin County Emergency Management Attn: Eric Wagee, Director 1600 Prairie Drive Medina, MN 55340	(612) 596-0252 (763) 478-4001 (fax) (763) 525-6228 (Hennepin Co. Communications) (612) 250-2614 (Assist. Dir.: Dan Bulvitz)	
Hennepin County LEPC Eric Wagee, Director 1600 Prairie Drive Medina, MN 55340	(612) 596-0250 (763) 525-6228 (Hennepin Co. Communication) (612 250-2614 (Asst. Dir: Dan Bulvitz)	
Minneapolis Fire Department 350 S. 5th Street Room 230 Minneapolis, MN 55415	(612) 673-2890 (612) 673-2828 (fax)	
Minnetonka Fire Department 14550 Minnetonka Blvd. Minnetonka, MN 55345	(952) 939-8598 (952) 939-8336 (fax)	
Hubbard County		
Hubbard Co. Sheriff Department 301 Court Avenue	(218) 732-3331	

Park Rapids, MN 56470		
Hubbard County Emergency Management Brian Halbasch, Deputy 301 Court Avenue Park Rapids, MN 56470	(218) 732-2588 (218) 732-2550 (fax)	
Hubbard County LEPC 201 Fair Avenue Park Rapids, MN 56470	(218) 732-3135	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

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*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Hubbard County		
Lake George Fire Department (Volunteer) HWY 71/200 Lake George, MN 56458	(218) 266-3323	
Nevis Fire Department (Volunteer) 100 Main Street Nevis, MN 56467	(218) 652-2323 (218) 652-4668 (fax)	
McLeod County		
Glencoe Police Dept. Attn: Jim Raiter, Chief 630 10th St. E Glencoe, MN 55366	(320) 864-5171 (320) 864-6868 (fax)	
Hutchinson Fire Dept. (Volunteer) Attn: Brad Emans, Chief 205 3rd Ave. SE Hutchinson, MN 55350	(320) 587-2506 (320) 234-4469 (fax)	
Hutchinson Police Dept. Attn: Dan Hatten, Chief 10 Franklin St. SW Hutchinson, MN 55350	(320) 587-2242 (320) 587-6427 (fax)	
Lester Prairie Fire Dept. (Volunteer) Attn: Jim Hoof, Chief 36 Redwood St. N Lester Prairie, MN 55354	(320) 224-1378 (320) 395-2607 (fax)	
Lester Prairie Police Dept. Attn: Bob Carlson, Chief	(320) 864-3134 (320) 395-2100 (fax)	

36 Juniper St. N Lester Prairie, MN 55354		
McLeod Co. Emergency Management Attn: Kevin Mathews, Director 801 E. 10th St. Glencoe, MN 55336	(320) 864-1339 (320) 864-5920 (fax) (b) (6) (cell)	
McLeod Co. Sheriff's Office Attn: Scott Rehmann, Sheriff 801 E. 10th St. Glencoe, MN 55336	(320) 864-1350 (320) 864-5920 (fax)	
Meeker County		
Cosmos Fire Department 206 Gemini Avenue E Cosmos, MN 56228	(320) 877-7645 (320) 877-7678 (fax)	
Dassel Fire Dept. (Volunteer) 426 2nd St. Dassel, MN 55325	(320) 275-3260 (320) 275-2539 (fax)	
Dassel Police Dept. 460 3rd St. Dassel, MN 55325	(320) 275-2827	
Eden Valley Fire Dept. Attn: Joe Thielen, Chief Box 67 Edenvalley, MN 55329-0067	(320) 453-5801 (320) 453-5871 (fax)	
Eden Valley Police Dept. Attn: Ernest Junker, Chief 171 Cossairt Ave. Box 25 Eden Valley, MN 55329	(320) 453-5452 (320) 453-5453 (fax)	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

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*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Meeker County		
Grove City Fire Department P.O. Box 207 Grove City, MN 56243	(320) 857-2154	
Litchfield Fire Department 227 N. Ramsey Avenue Litchfield, MN 55355	(320) 693-3111	
Litchfield Police Dept.	(320) 693-5425	

Attn: Patrick Fank, Chief 326 N. Ramsey Ave. N Litchfield, MN 55355	(320) 693-5424 (fax)	
Meeker County Emergency Management Attn: Karla Hyberger, Director 326 N. Ramsey Ave. N Litchfield, MN 55355	(320) 693-5420 (320) 693-5424 (fax)	
Meeker County Sheriff's Office Attn: Jeff Norlin, Sheriff 326 N. Ramsey Avenue Litchfield, MN 55355	(320) 693-5400 (320) 693-5424 (fax)	
Watkins Fire Dept. 140 Cedar Ave. S Box 406 Watkins, MN 55389	(320) 764-6400 (320) 764-6401 (fax)	
Watkins Police Dept. Attn: Jason Elmore, Chief 111 Central Ave. S Box 306 Watkins, MN 55389	(320) 764-6792 (320) 764-6401 (fax)	
Morrison County		
Little Falls Fire Department (volunteer) Attn: Mike Nieman, Chief 314 NE 1st St. Little Falls, MN 56345	(320) 616-5591	
Little Falls Police Dept. Attn: Greg Schirmers, Chief 207 First St. NE Little Falls, MN 56345	(320) 616-5570 (320) 616-5576 (fax)	
Morrison Co. Sheriff's Office Attn: Michel Wetzel, Sheriff 213 1st Ave. SE Box 320 Little Falls, MN 56345	(320) 632-9233 (320) 632-0179 (fax)	
Morrison County LEPC 213 1st Avenue Little Falls, MN Emergency Management Contact Jeff Jlinski	(320) 632- 9233	
Motley Fire Department (Volunteer) 316 HWY 10 S Motley, MN 56466	(218) 352-6200 (218) 352-6172 (fax)	
Randall Fire Department Attn: Pat Boone, Chief 105 Maplewood Dr. Randall, MN 56475	(320) 749-2230	
Randall Police Dept. Attn: Gary Dezurik, Chief 501 Pacific Ave. Box 229 Randall, MN 56475	(320) 632-9233 (320) 749-2605 (fax)	

Minnesota Zone 3 - 20

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Morrison County		
Royalton Fire Dept. (Volunteer) Attn:Tony Weinand, Chief 5 N. Cedar St. Royalton, MN 56373	(763) 427-2540	
Scandia Valley Fire Department 3518 320th Street Cushing, MN 56443	(218) 575-3111	
Swanville Fire Dept. Attn: Jerry Hollerman, Chief Box 252 Swanville, MN 56382	(320) 547-2179	
Rice County		
Faribault Fire Department 122 2nd St NW Faribault, MN 55021	(507) 334-4305	
Faribault Police Department 118 North West 3rd Street Faribault, MN 55021	(507) 334-4305	
Morristown Fire Department (Volunteer) 109 2nd Street SouthWest Morristown, MN 55052	911 (507) 838-7241 Fire Chief	
Rice Co. Sheriff Department 118 North West 3rd Street Faribault, MN 55021	(507) 334-4391	
Rice County Emergency Management Jennifer Hauer-Smitz 118 N.W. 3rd Streeet Fairbault, MN 55021	(507) 332-6119 (507) 332-6081 (fax)	
Rice County LEPC 118 North West 3rd Street PO Box 158 Faribault Faribault, MN 55021	(507) 334-4391	

Scott County		
Belle Plaine Fire Dept. Attn: Randy Koepp, Chief 700 East Main St. Belle Plaine, MN 56011	(952) 292-1849 (952) 873-5509 (fax)	
Belle Plaine Police Dept. Attn: Steve Rost, Chief 420 East Main St. PO Box 129 Belle Plaine, MN 56011	(952) 873-4307 (952) 873-3850 (fax)	
Elko New Market Fire Dept. Attn: Steve Mortinson, Chief PO Box 127 New Market, MN 55054	(952) 461-6068 911	
Elko New Market Fire Dept. Attn: Todd Friedges, Chief PO Box 127 New Market, MN 55054	(612) 290-0430 (952) 461-2782 (fax)	
Elko New Market Police Dept. Attn: Richard Jensen, Chief 601 Main Street P.O. Box 99 Elko New Market, MN 55054	(952) 461-2777 (952) 461-2782 (fax)	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Scott County		
Jordan Fire Department (Volunteer) 501 Varner Street N. Jordan, MN 55352	(952) 492-2100 (952) 492-3985 (fax)	
New Prague Police Dept. Mark Vosejpka, Chief 118 Central Avenue North New Prague, MN 56071	(952) 758-2791 (952) 758-1149 (fax)	
Savage Fire Department (Volunteer) 6000 McColl Drive Savage, MN 55378	(952) 882-2689 (952) 882-2656 (fax)	
Scott Co. Emergency Management Attn: Chris Weldon, Director 301 S. Fuller St. Shakopee, MN 55379-1220	(952) 496-8381 (952) 445-4622 (fax)	

Scott Co. Sheriff's Office Attn: Kevin Studnicka, Sheriff 301 Fuller St. S Shakopee, MN 55379	(952) 496-8318 (952) 496-8305 (fax)	
Scott County LEPC 301 Court Scott City, KS 67871	(620) 872-5805 (620) 872-3264 (fax)	
Sherburn County		
Big Lake Fire Department 20243 County Road 43 Big Lake, MN 55309	(763) 263-3456 (763) 263-7006 (fax)	
Clear Lake Fire Department 8670 First Avenue W. Clear Lake, Mn 55319	(320) 743-3111 (320) 743-4307 (fax)	
Elk River Fire and Ambulance Service 415 Jackson Avenue NW Elk River, MN 55330	(763) 635-1100 (763) 635-1116 (fax)	
Sherburne Co. Sheriff Department 13880 Business Center Drive Elk River, MN 55330	(763) 241-2500	
Sherburne County Emergency Management 13880 Business Center Drive Elk River, MN 55330-4609	(763) 765-3531 (763) 765-3602 (fax)	
Sherburne County LEPC 13880 Highway 10 Elk River, MN 55330	(763) 241- 2500	
Sibley County		
Green Isle Fire Dept. (Volunteer) 390 Parnel Street Green Isle, MN 55338	(507) 326-5941 (507) 326-5049 (fax)	
Sibley Co. Sheriff's Dept. Attn: Bruce Ponath, Sheriff 419 Harrison St. Box 102 Gaylord, MN 55334	(507) 237-4330 (507) 237-4334 (fax)	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Sibley County		

Sibley County Emergency Management 400 Court Avenue Gaylord, MN 55334	(507) 237-4109 (507) 223-4401 (fax)	
Stearns County		
Albany Police Dept. (Fire, Ambulance) Attn:Jason Falconer, Chief 400 Railroad Ave. Box 337 Albany, MN 56307	(320) 845-2200 (320) 845-2204 (fax)	
Eden Valley Police Dept. Attn: Ernest Junker, Chief 171 Cossairt Ave. Box 25 Eden Valley, MN 55329	(320) 453-5452 (320) 453-5453 (fax)	
Saint Cloud Fire Department 101 10th Avenue N. Saint Cloud, MN 56303	(320) 650-3500 (320) 650-3546 (fax)	
Stearns Co. Sheriff's Office Attn: John Sanner, Sheriff 807 Courthouse Square PO Box 217 St. Cloud, MN 56302	(320) 259-3700 (320) 259-3786 (fax)	
Stearns County Emergency Management 807 Courthouse Square PO Box 111 St. Cloud, MN 56302-0811	(320) 259-3940 (320) 259-3952 (fax)	
Stelle County		
Blooming Prairie Police Department 138 Highway Avenue Blooming Prairie, MN 55917	(507) 451-8232 911 (507) 451-5685	
Owatonna Fire Department 107 West Main Street Owatonna, MN 55060	(507) 444-2454 911	
Owatonna Police Department 204 East Pearl Street Owatonna, MN 55060	(507) 444-3800	
Steele Co. Sheriff Department 204 East Pearl Owatonna, MN 55060	(507) 451-8232 (507) 451-5685	
Steele County Emergency Management Mike Johnson 107 W. Main Street Owatonna, MN 55060	(507) 444-2454 (507) 444-2457	
Steele County LEPC 204 East Pearl Street Otana, MN 55060	(507) 451-8232 (507) 451-5685	
Todd County		
Bowerville Fire Department	(320) 594-8200	

Highway 71 N Bowerville, MN 56438		
Staples Fire Department 611 Iowa Avenue Northeast Staples, MN 56479	(320) 732-2157 911	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Todd County		
Todd Co. Sheriff Department 115 3rd Street South Bertha, MN 56437	(320) 732-2157	
Todd County Emergency Management Mike P. Wisniewski 212 2nd Avenue S Long Prairie, MN 56347	(320) 533-4697 (320) 732-4540 (fax)	
Todd County LEPC 115 3rd Street South Long Prairie , MN 56347	(320) 732-2157	
Wadena County		
Menahga Fire Department (Volunteer) 115 Second Street NE Menahga, MN 56464	(218) 564-4451 (218) 564-4612 (fax)	
Wadena Co. Sheriff Department 415 South Jefferson Street Wadena, MN 56482	(218) 631-7600 911 Emergency	
Wadena County Emergency Management Scott McKellep 415 Jefferson Street S. Wadena, MN 56482	(218) 631-7795 (218) 631-7763	
Wadena County LEPC 415 Jefferson Street S. Room 139 Wadena, MN 56482	(218) 631-7795	
Wadena Fire Department 121 Southeast Colfak Avenue Wadena, MN 56482	911 (218) 631-7600 (218) 631-7700 (Police)	

Washington County		
Bayport Fire Department 301 2nd Avenue North Bayport, MN? 55003	911 (651) 275-4401	
Cottage Grove Fire Department 8641 80th Street South Cottage Grove, MN 55016	911 (651) 458-2809 (651) 458-2860	
Cottage Grove Police Department 15015 62nd Street North Stillwater, MN 55082	(651) 439-9381*	
Hugo Fire Department 5323 140th Street North Hugo, MN 55038	911 (651) 429-6366	
Newport Fire Department, Police 155 20th Street Newport, MN 55055	911 (651) 439-9381*	
Oakdale Fire Department 5000 Hadley Avenue North Oakdale, MN 55128	(651) 731-8886 (651) 439-9381 (Dispatch) 911	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS
Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Minnesota		
Washington County		
St Paul Fire Department 100 East 11th Street St Paul, MN 55101	911 (651) 224-7811	
St. Paul Park Fire Department 600 Portland Ave St Paul Park, MN 55071	911 (651) 459-9918	
Stillwater Fire Department 216 N Fourth Street Stillwater, MN 55082	(651) 351-4963 (651) 351-4967 (FAX)	
Washington Co. Sheriff Department	(651) 439-9381	

15015 62nd Street North Stillwater, MN 55082		
Washington County Emergency Management Deb Paige 14949 62nd Street North, P.O. Box 6 Stillwater, MN 55082-0006	(651) 430-7621 (651) 430-7623 (fax)	
Washington County LEPC 14949 62nd Street North PO Box 3803 Stillwater, MN 55082	(651) 430-7621	
White Bear Lake Fire Department 4701 Highway 61 White Bear Lake, MN 55110	911 (651) 429-8511	
Woodbury Emergency Dispatch (Police, Fire) 2100 Radio Drive Woodbury, MN 55125	911 (651) 439-9381	
Wright County		
Cokato Ambulance Service Attn: Jim Erickson, Director 350 Jenks Ave. Box 1030 Cokato, MN 55321	(320) 286-5505	
Monticello Fire Department 303 W 6th Steet Monticello, MN 55362	(763) 295-4111 (763) 271-3290 (fax)	
Wright Co. Emergency Management Attn: Stephen Berg, Coordinator 10 NW Second St., C-170 Buffalo, MN 55313	(763) 684-2364 (763) 682-7610 (fax)	
Wright Co. Sheriff's Office Attn: Gary Miller, Sheriff 10 NW Second St., C-170 Buffalo, MN 55313	(763) 682-1162 (763) 682-7610 (fax)	

FIGURE 3.1-6 - OIL SPILL RESPONSE CONTRACTOR RESOURCES AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Non-Classified OSRO's		
Minnesota Limited Inc., Bemidji Office	(763) 428-4444	
Minnesota Limited, Inc., Big Lake Office	(763) 428-4444	

USCG Classified OSRO's		
Bay West5 Empire DriveSt Paul, WI 55103 St. Paul, MN	(800) 279-0456* press 1	
Clean Harbors Cannon Falls, Mn	507-263-0200	
Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137 Bellefontaine , MO	(800) 377-2440*	
Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956 Sheboygan, WI	(800) 688-4005*	

FIGURE 3.1-7 - ADDITIONAL RESOURCES, NOTIFICATIONS, AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Aviation Companies		
Eagle Sky Patrol 12191 Nemo Rd Nemo, SD 57759	(605) 578-1176 (b) (6) (Cell)	
Scott's Helicoper Service 780 South Elmwood Avenue PO Box 92 La Sewer, MN 56058	(507) 665-4064 Business Phone (b) (6) Scott Churchill Cell Phone Scott Churchill Home Phone (507) 665-3680 Office Fax	
Spill Management Technical Advisors		
Dan Shisler Insurance Claims Manager KBS Financial Solutions, Claims Management Services	(316) 828-5026	
Jim Andrew KPL Compliance Director Koch Pipeline Company, L.P.	316-828-5511 (office) (b) (6) (cell) 888-732-1764 (pager) 316-828-7887 (fax)	
Joel Davidson Emergency Response Capability Leader Koch Pipeline Company, L.P.	316-828-6604 (office) (b) (6) (cell) 316-828-7199 (fax)	
John Bale Environmental Manager-	(b) (6) (Cell) 651-480-3966 (Office)	

Terminals Flint Hills Resources, Pine Bend, LLC		
Katie Stavinoha Director, Public Affairs KCPS, LLC	(281) 363-7260 (office) (b) (6) (cell) (316) 828-6997 (fax)	
PATRICIA A MCCULLOUGH MANAGING DIR-COMPLIANCE, EH&S, INTEGRITY KPL-WICHITA KS 4111 E 37TH ST N WICHITA, KS 67220	(316) 828-6373 (work) (b) (6) (Cell) PAT.MCCULLOUGH@KOCHPIPELINE.COM	
Water Intakes		
(b) (3), (b) (7)(F)		
Missouri Wildlife Rescue (St. Louis area) 1128 NEW BALLWIN RD BALLWIN, MO 63021-7239	(636) 394-1880	
Tree House Wildlife Center (Brighton, IL) 1825 Fosterburg Road Brighton, IL 62012	(618) 372-8092	
Tri State Bird Rescue (Delaware)	(302) 737-7241	

110 Possum Hollow Road Newark, DE 19711		

FIGURE 3.1-8 - ADJOINING NEIGHBORS

KPL Pipeline Facilities	Entity / Business Name	Emergency Contact Name or Title	Emergency Contact Phone Number	Type of Entity	Special Instructions
Minnesota Zone					
	Amtrak Police	24-Hour Emergency Contact:	1-800-331-0008	Railroad	
	Burlington Northern Santa Fe (BNSF)Railroad	24-Hour Emergency Contact:	1-800-832-5452	Railroad	
	Enbridge Energy Company, Inc	24-Hour Emergency Contact:	(800) 858-5253	Pipeline Breakout Station	United States: Illinois, Indiana, Kansas, Michigan, Minnesota, Mississippi, Missouri, Montana, North Dakota, New York, Ohio, Eastern Oklahoma and Wisconsin
	Enbridge Pipelines Inc	24-Hour Emergency Contact:	1 (877) 420-8800		Canada Enbridge?s 24-hour toll-free emergency number
Cottage Grove	Northern Tier Energey	Isaac Bailey	651-458-2633	Tank Farm	
Cottage Grove	Northern Tier Energy	John Walker	515-360-2885	Safety Professionals	
Cottage Grove	Northern Tier Energy	24-hr Communication Center and Security	651458-6498	Tank Farm	
		NTE Pumper			Tank Farm

Cottage Grove	Northern Tier Energy	Blending Shift Manager	651-458-6498		Operators 24-hrs
	Union Pacific Railroad Critical Call Center	24-Hour Emergency Contact:	1-888-877-7267	Railroad	

SECTION 4 Last revised:

RESPONSE TEAM ORGANIZATION

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4.1 Description

4.2 Activation Procedures

4.3 Team Member Response Times

4.4 Incident Command System / Unified Command Structure

4.5 Qualified Individual (QI)

Figure 4.5-1 - Incident Management Team (IMT) Activation Procedure

Figure 4.5-2 - Incident Management Team (IMT) Organization Chart

4.6 Incident Management Team (IMT) Job Descriptions and Guidelines

4.1 DESCRIPTION

The Incident Management Team (IMT) has been created and organized to plan for and manage emergencies. The IMT is composed of Company personnel from offices within the Area. Additional personnel from outlying offices can be used (if needed). The IMT will develop strategies and priorities for a response, then will supervise contractors, handle safety and security matters, and will provide logistical support for contractor personnel. The IMT will handle all communications with the media and the public (**SECTION 7.2**). Job descriptions for each IMT member are provided in **SECTION 4.6**. The IMT will train by participating in exercises as noted in APPENDIX A.1.

4.2 ACTIVATION PROCEDURES

Activation of the IMT may be accomplished in stages. Initially, the First Responder assumes the role of Incident Commander (IC). During an incident, the initial IC may be able to respond without assistance from the IMT. If the situation requires more resources, the First Responder having assumed the role of the IC, may request additional personnel or management support from the IMT through the QI and the notification process. Depending on the situation, the QI may assume the role of Incident Commander. Having adopted the ICS/UCS protocols as the company response management system, the QI/IC can call out the other IMT members to expand or contract as needed by the requirements of the specific incident. The IMT activation procedure is provided in FIGURE 4.5-1.

4.3 TEAM MEMBER RESPONSE TIMES

See **FIGURE 3.1-4** for each team member's response time "EPA Facilities only".

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND STRUCTURE

The Incident Command System (ICS) will be used by the Company IMT for managing emergencies. The IMT organization chart is provided in FIGURE 4.5-2. The organization can be expanded or contracted as necessary for any specific incident. Not all sections or jobs need to be established. The Incident Commander and General Staff will decide on the components to be activated.

The Unified Command Structure (UCS) is the accepted method of organizing key emergency management entities within the Incident Command System. The primary entities include:

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Company Incident Commander (may also be the QI)

These three people share decision-making authority within the Incident Command System and are each responsible for coordinating other federal, state, and company personnel to form an effective integrated Incident Management Team. Refer to **SECTION 4.6** for detailed checklists of the IMT roles and responsibilities as well as organizational interfaces with external parties.

4.5 QUALIFIED INDIVIDUAL (QI)

Authority and Responsibilities

The Qualified Individual (QI) is an English-speaking representative available on a 24-hour basis and capable of arriving at the facility in a reasonable time.

As required by the Oil Pollution Act of 1990, the QI(s) identified have full authority to:

- Activate and contract with oil spill removal organization(s),
- Activate personnel and equipment maintained by the operator,
- Act as a liaison with the pre-designated Federal On-Scene Coordinator (OSC), and
- Obligate funds necessary to carry out required or directed response actions

Each QI identified is:

- Located in the United States,
- Familiar with the implementation of the response plan, and
- Trained in the responsibilities of the qualified individual under the response plan.

QI responsibilities include:

- Activate internal alarms and hazard communication systems to notify facility personnel;
- Notify response personnel, as needed;
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;
- Notify and provide necessary information to the appropriate Federal, State, and local authorities with designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Committee;
- Assess the interaction of the discharged substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion;
- Assess and implement prompt removal actions to contain and remove the substance released;
- Coordinate rescue and response actions as previously arranged with all response personnel;
- Use authority to immediately access company funding to initiate cleanup activities; and
- Direct cleanup activities until properly relieved of this responsibility.

4.5 QUALIFIED INDIVIDUAL (QI), CONTINUED

If off-site, the QI will coordinate with Incident Commander to ensure company response plan is implemented for the emergency response; ensure a response is occurring.

Once on-site, the QI may assume the responsibilities of the Incident Commander and assume overall command of the response operations as described in **SECTION 4.6**.

For further information on Qualified Individual's training, refer to **APPENDIX A.2**. Phone numbers for Qualified Individuals are provided in **FIGURES 1-2 and 3.1-4**.

For the purposes of 40 CFR 265 the QI is assumed to be the Emergency Coordinator.

FIGURE 4.5-1 - INCIDENT MANAGEMENT TEAM (IMT) ACTIVATION PROCEDURE

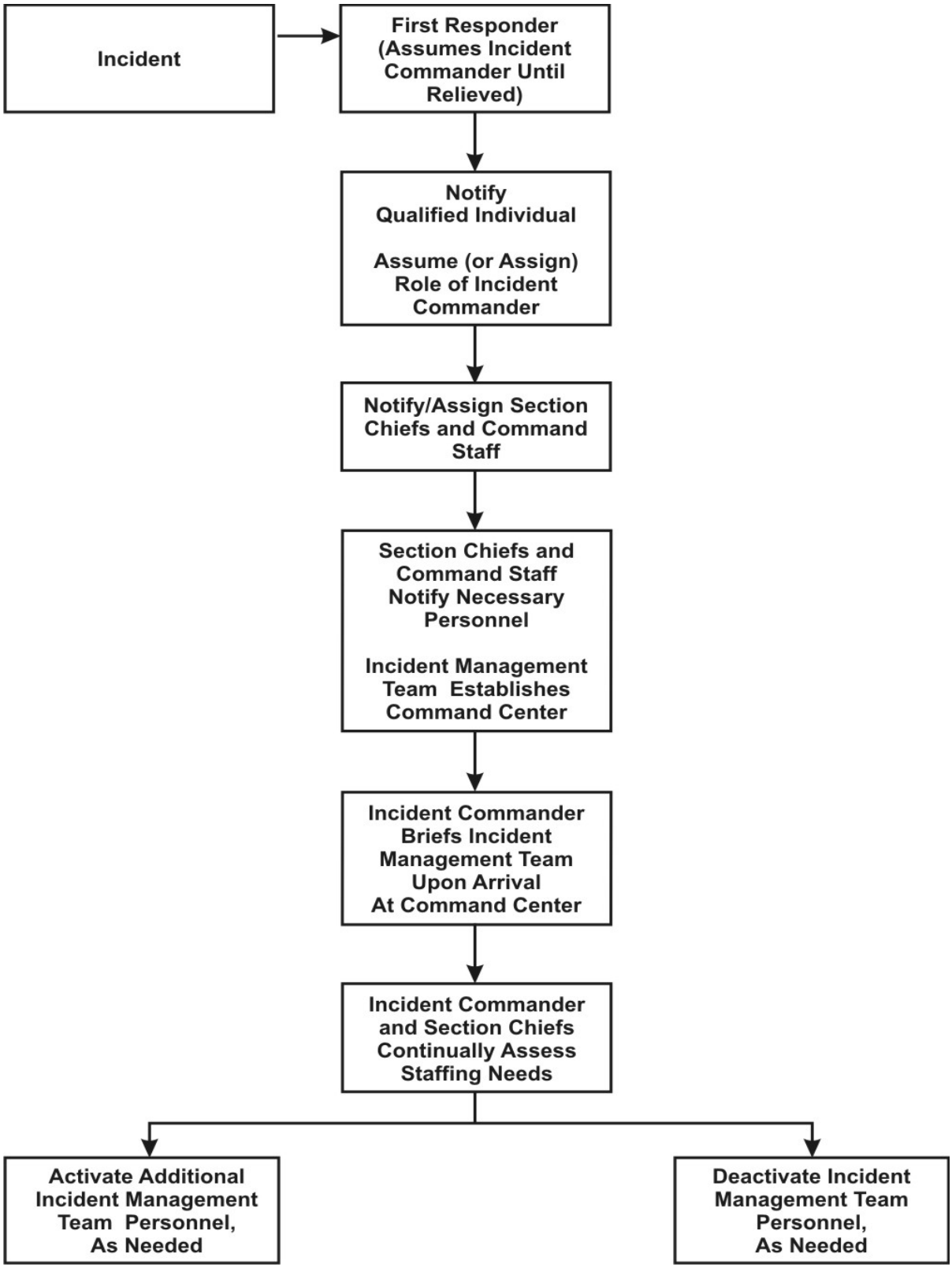
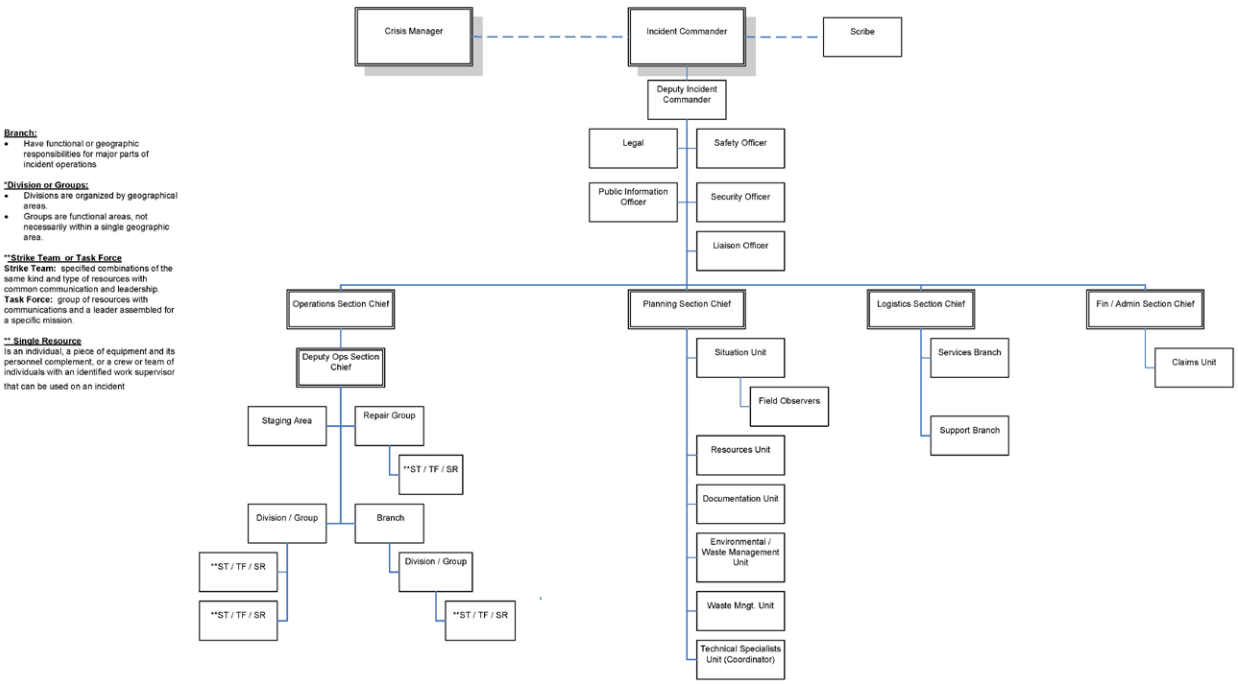


FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM (IMT) ORGANIZATION CHART

(Click here for larger view)



4.6 INCIDENT MANAGEMENT TEAM (IMT) JOB DESCRIPTIONS AND GUIDELINES

The following job descriptions and guidelines are intended to be used as a tool to assist IMT members in their particular positions within the Incident Command System (ICS).

- Common Responsibilities
- Incident Commander (IC)
- Safety Officer (SOFR)
- Public Information Officer (PIO)
- Security Manager (SECM)
- Liaison Officer (LNO)
- Operations Section Chief (OSC)
- Staging Area Manager (STAM)
- Branch Director (OPBD)
- Division Supervisor (DIVS)
- Planning Section Chief (PSC)
- Situation Unit Leader (SITL)
- Resource Unit Leader (RESL)
- Documentation Unit Leader (DOCL)
- Environmental Unit Leader (ENVL)
- Logistics Section Chief (LSC)
- Finance Section Chief (FSC)

COMMON RESPONSIBILITIES

The following responsibilities are applicable to all personnel in an ICS organization:

Responsibilities:

- ☐ Receive your job assignment (position, designation), including:
  - ☐ Brief overview of type and magnitude of incident.
  - ☐ Travel instructions including reporting location and reporting time.
  - ☐ Any special communications instructions (e.g. travel, radio frequency).
- ☐ Upon arrival at the incident, check in at the designated check-in location.
- ☐ Receive briefing from immediate supervisor and/or person you are relieving.
- ☐ Acquire work materials; ensure all equipment is operational prior to each work period.
- ☐ Participate in IMT meetings and briefings as appropriate.
- ☐ Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
- ☐ Supervisors shall maintain accountability for their assigned personnel; Organize and brief subordinates.
- ☐ Know your assigned communication methods; Use clear text and ICS terminology (no codes) in all radio communications.
- ☐ Complete Incident ISC forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
- ☐ Brief shift replacement on ongoing operations when relieved at operational periods or rotation out.
- ☐ Respond to demobilization orders and return all assigned equipment to appropriate location.
- ☐ Complete Demobilization Check-out process before returning to home base.
- ☐ Participate in After-Action activities as directed.

INCIDENT COMMANDER (IC)

The IC's have responsibility for management of the incident. On many incidents, the command activity is carried out by a single IC.

The IC may have Deputy IC's, who may be from the same company or from an assisting mutual aid group. The Deputy IC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC/Chief of Staff may be assigned to manage the Command Staff.

The major responsibilities of the IC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain a briefing from the prior IC (201 Briefing).
- ☐ Set Incident Objectives, establish incident priorities and give general direction for managing the incident. (This is done in concert with Unified Command, if applicable)
- ☐ Establish an Incident Command Post.
- ☐ Brief Command Staff and Section Chiefs.
- ☐ Establish an appropriate response organization.
- ☐ Ensure planning meetings are scheduled as required or delegate to Planning Section Chief.
- ☐ Approve and authorize the implementation of an Incident Action Plan.
- ☐ Ensure that adequate safety measures are in place.
- ☐ Coordinate activity for Command and General Staff.
- ☐ Ensure adequate resources are being made available to the response effort.
- ☐ Approve requests for additional resources or for the demobilization of resources.
- ☐ Maintain clear and effective communications, plus ensure incident information is shared with key stakeholders on incident status.
- ☐ Approve the use of third party resources.
- ☐ Authorize release of information to the news media.
- ☐ Ensure Incident Status Summary (ICS 209) is completed and forwarded to appropriate individuals.
- ☐ Approve demobilization of the incident when appropriate.
- ☐ Maintain Unit Log (ICS 214).

SAFETY OFFICER (SOFR)

The SOFR function is to develop and recommend measures for assuring personnel safety and to assess and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident.

The SOFR may have assistants, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as potential hazardous material exposures, air monitoring operations, etc.

The major responsibilities of the SOFR are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Ensure hazardous situations associated with the incident are identified.
- ☐ Develop the Site Safety Plan and publish Site Safety Plan Summary (ICS 208) as required.
- ☐ Exercise emergency authority to stop and prevent unsafe acts.

- ☐ Develop the Work Safety Analysis Worksheet (ICS-215a) as required.
- ☐ Review the IAP for health and safety hazard mitigation strategies.
- ☐ Provide health and safety technical support for assigned responders.
- ☐ Participate in tactics and planning meetings, and other meetings and briefings as required.
- ☐ Ensure accidents that have occurred within the incident area are investigated.
- ☐ Review and approve the Medical Plan (ICS 206).
- ☐ Ensure that all applicable health and safety agency forms, reports and documents are completed prior to demobilization.
- ☐ Brief Command on safety issues and concerns.
- ☐ Have debriefing session with the IC prior to demobilization.
- ☐ Maintain Unit Log (ICS 214).

PUBLIC INFORMATION OFFICER (PIO)

The PIO is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one primary PIO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The PIO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

The following are the major responsibilities of the PIO, which would generally apply on any incident.

The major responsibilities of the PIO are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Determine if there are any limits on information release ? consult with IC and Legal.
- ☐ Develop material for use in media briefings media releases and review with IC. Coordinate with Legal.
- ☐ Receive authorization from IC and conduct media briefings.
- ☐ Obtain media information that may be useful to incident planning.
- ☐ Arrange for tours and other interviews or briefings that may be required.
- ☐ Manage a Joint Information Center (JIC) if established.
- ☐ Brief Command on PIO issues and concerns.
- ☐ Maintain Unit Log (ICS 214).

SECURITY MANAGER (SECM)

The SECM is responsible for providing safeguards needed to prevent unauthorized access and protect personnel and property from loss or damage.

The major responsibilities of the SECM are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Establish contacts with local/state/federal law enforcement agencies, as required. NOTE: The extent of this interaction will change extensively if the cause of the incident is a security breach and the role may be elevated to a command staff position.
- ☐ Request required personnel support to accomplish work assignments.
- ☐ Ensure that support personnel are qualified to manage assigned responsibilities.
- ☐ Develop Security Plan and adjust as needed.
- ☐ Coordinate security activities with appropriate incident personnel.
- ☐ Control access to response site.
- ☐ Prevent theft of property and maintain order at the response site.
- ☐ Maintain Unit Log (ICS 214).

LIAISON OFFICER (LNO)

Incidents that are multijurisdictional, or have several agencies involved, may require the establishment of the LNO position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents.

The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency Representatives.

The major responsibilities of the LNO are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Be a contact point for Agency Representatives ? maintain a list, including name and contact information.
- ☐ Assist in establishing and coordinating interagency contacts.
- ☐ Maintain list of Agency Representatives that are on site each day.
- ☐ Brief Incident Commander on agency issues and concerns.
- ☐ Keep agencies supporting the incident aware of incident status (NOTE: This applies even if agency is not on site).
- ☐ Coordinate activities of visiting dignitaries.
- ☐ Participate in planning meetings, providing limitations and capability of assisting

agency resources.

- ☐ Coordinate response resource needs of Agency Representatives for incident investigation activities with the Operations Section Chief.
- ☐ Maintain Unit Log (ICS 214).

OPERATIONS SECTION CHIEF (OSC)

The OSC, a member of the General Staff, is responsible for the management of tactical operations applicable to the primary objectives.

The OSC activates and supervises operational elements in accordance with the Incident Action Plan (IAP) and directs its execution. The OSC directs the preparation of operational plans, requests or releases resources, monitors operational progress, and makes expedient changes to the IAP as necessary, and reports such to the IC.

The OSC is responsible for the major duties described for each Branch, Division/Group, Strike Team/Task Force or Single Resources Unit within the Operations Section. The OSC may assign Deputy OSC's, to supervise on-scene operations (major responsibilities (d) through (k) listed below). The Deputy OSC must be capable to takeover as the OSC, if the situation warrants.

The major responsibilities of the OSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Request sufficient personnel for supervisory staffing of each Branch, Division/Group, Strike Team/Task Force or Single Resources Unit identified within the Operations Section.
- ☐ Initially, develop work assignments and allocate tactical resources based on strategic requirements.
- ☐ Coordinate planned activities with the SOFR to ensure compliance with safety practices.
- ☐ Subdivide work areas into manageable units.
- ☐ Supervise operations field personnel or assign to Deputy OSC.
- ☐ Coordinate and consult with the PSC, SOFR technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
- ☐ Participate in the planning process and the development of the tactical portions of the IAP.
- ☐ Convert operational incident objectives into strategic and tactical options. These options may be documented on a Work Analysis Matrix (ICS-234).
- ☐ Identify kind and number of resources required to support Incident Strategies; develop operations portion of the IAP and complete Operational Planning Worksheet (ICS 215).
- ☐ Participate in the development of the Incident Action Plan Safety Analysis (ICS 215a).

- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Implement the IAP for the Operations Section.
- ☐ Evaluate on-scene operations and make adjustments to Operational organization, strategies, tactics, and resources, as necessary.
- ☐ Evaluate and monitor current situation for use in next operational period planning; coordinate information with Situation Unit Leader.

OPERATIONS SECTION CHIEF (OSC), CONTINUED

Responsibilities, Continued:

- ☐ Ensure the Resources Unit is advised of changes in the status of resources assigned to the section.
- ☐ Assist with development of long-range strategic, contingency, and demobilization plans.
- ☐ Receive and implement applicable portions of the incident Demobilization Plan.
- ☐ Participate in operational briefings to IMT members.
- ☐ Maintain Unit Log (ICS 214).

STAGING AREA MANAGER (STAM)

The STAM is under the direction of the Operations Section Chief and is responsible for managing all activities within a Staging Area.

The major responsibilities of the STAM are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Proceed to Staging Area.
- ☐ Determine any support needs for equipment, materials, supplies, feeding, sanitation and security for staging area.
- ☐ Establish Staging Area layout and post areas for identification and traffic control.
- ☐ Establish check-in function as appropriate.
- ☐ Maintain Staging Area in orderly condition.
- ☐ Ensure security of staged resources.
- ☐ Obtain and issue receipts for equipment and other supplies distributed and received at Staging Area.
- ☐ Request maintenance service for equipment at Staging Area as appropriate.

- ☐ Respond to request for resource assignments.
- ☐ Advise the OSC when reserve levels reach minimums.
- ☐ Maintain and provide status to Resource Unit of all resources in Staging Area, especially when being relieved of position.
- ☐ Demobilize Staging Area in accordance with the Incident Demobilization Plan.
- ☐ Participate in meetings and briefings as required,
- ☐ Maintain Unit Log (ICS 214).

BRANCH DIRECTOR (OPBD)

The OPBD's when activated, are under the direction of the Operations Section Chief and are responsible for the implementation portion of the Incident Action Plan appropriate to the Branches.

The major responsibilities of the OPBD are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Identify Divisions, Groups, and resources assigned to the Branch.
- ☐ Implement IAP for the Branch; ensure that Division and/or Group Supervisors (DIVS) assigned to the Branch have a copy of the relevant portions IAP.
- ☐ Review Division/Group Assignment Lists (ICS 204) for Divisions/Groups within the Branch. Modify assignments where necessary, based on effectiveness of current operation plan.
- ☐ Report to OSC when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- ☐ Resolve logistic problems reported by subordinates.
- ☐ Attend planning meetings as requested by the OSC.
- ☐ Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
- ☐ Demobilize in accordance with the Incident Demobilization Plan.
- ☐ Participate in meetings and briefings as required.
- ☐ Debrief with OSC and/or as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214).

DIVISION SUPERVISOR (DIVS)

The DIVS reports to the OSC (or OPBD when activated). The DIVS is responsible for the implementation of the assigned portion of the IAP, assignment of resources within the Division/Group, and reporting on the progress of control operations and status of resources within the Division/Group.

The major responsibilities of the DIVS are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Receive briefing from Operations Section Chief and obtain briefing from person relieving.
- ☐ Provide the IAP to Division/Group members, as needed.
- ☐ Review Division/Group assigned tasks and incident activities with subordinates and Identify resources assigned to the Division/Group.
- ☐ Implement IAP for Division/Group.
- ☐ Supervise Division/Group resources and make changes as appropriate.
- ☐ Ensure through chain of command that Resources Unit is advised of all changes in the status of resources assigned to the Division/Group.
- ☐ Coordinate activities with adjacent Division/Group.
- ☐ Determine need for assistance on assigned tasks.
- ☐ Submit situation and resources status information to the Branch Director or the OSC as directed.
- ☐ Report hazardous situations, special occurrences, or significant events, e.g., accidents, sickness, discovery of unanticipated sensitive resources, to the Safety Officer.
- ☐ Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner.
- ☐ Resolve logistics problems within the Division/Group.
- ☐ Participate in the development of Branch plans for the next operational period, as requested.
- ☐ Consider demobilization well in advance.
- ☐ Debrief as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214).

PLANNING SECTION CHIEF (PSC)

The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources.

The PSC must obtain Information to:

1. Understand the current situation;
2. Predict the probable course of incident events;
3. Prepare strategies, plans and alternative strategies and plans for the incident; and
4. Submit required incident status reports.

The PSC is responsible for the major duties described for each Unit within the Planning Section. The PSC may have Deputy PSC's, The Deputy PSC must be capable to takeover as the PSC, if the situation warrants.

The major duties of the PSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Assist the OSC in the development of response strategies.
- ☐ Determine need for any specialized resources in support of the incident.
- ☐ Supervise preparation of the IAP.
- ☐ Facilitate the Operational Period Planning Cycle meetings and briefings (ICS 230).
- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Keep Incident Management Team apprised of any significant changes in incident status.
- ☐ Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation, Environmental, and Waste Management).
- ☐ Establish special information collection activities as necessary (e.g., maps, weather, environmental, toxics, etc.).
- ☐ Assemble information on alternative strategies (in-situ burn, bioremediation, etc).
- ☐ Incorporate documents and plans (e.g., ICS 202 Incident Objectives, ICS 232 Resources at Risk, Medical, Communications, Security and Site Safety) into the IAP.
- ☐ Incorporate other incident technical and supporting plans (e.g., salvage, integrity, volume estimation) into IAP.
- ☐ Oversee preparation, distribution and implementation of the Demobilization Plan.
- ☐ Maintain Unit Log (ICS 214).

SITUATION UNIT LEADER (SITL)

The Situation Unit Leader is responsible for collecting, processing and organizing information relating to the growth and/or mitigation activities taking place in response to the incident. The SITL reports to the PSC and supervises Field Observers, Data Management Specialists, GIS Specialists, Display Processors, and other Technical Specialists (e.g. Weather Observers, Report Writer) as needed.

The major responsibilities of the SITL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Verify response activities and status of work locations (may be assigned to a field observer if needed),
  - ☐ Progress of operations resources.

- ☐ Locations of trouble spots or hazards
- ☐ Conditions likely to impact response activities (e.g. weather, road conditions, and access routes);
- ☐ Incident perimeter changes

☐ Collect, compile, and manage overall incident data, establish data quality objectives, implement the QA/QC process for incident data.

☐ Prepare, display, or disseminate resource and situation status information as required, including special requests.

- ☐ Number, types and locations of displays required
- ☐ Information posted in the Incident displays
- ☐ Time limits / update frequency for information on the displays

☐ Develop and maintain master chart(s)/map(s) of the incident and provide charts/maps in the common area of the Incident Command Post as needed.

☐ Prepare the Incident Status Summary Form (ICS 209-CG).

☐ Coordinate photographic services; plus weather, tidal and current information, as needed.

☐ Coordinate situation briefings at meetings and briefings as required by the PSC.

☐ Maintain Unit Log (ICS 214).

RESOURCE UNIT LEADER (RESL)

The RESL is responsible for maintaining status of tactical resources and personnel at an incident. This is accomplished by maintaining a status-keeping system indicating current location and status of these resources.

The major responsibilities of the RESL are:

Responsibilities:

☐ Review Common Responsibilities.

☐ Establish the check-in/check-out function of tactical resources/personnel at incident locations (note this is not security check-in)

☐ Prepare Organizational Assignment List (ICS 203) & Organizational Chart (ISC 207).

☐ Prepare appropriate parts of Division Assignment Lists (ICS 204).

☐ Maintain and post current status and location of tactical resources.

☐ Attend meetings and briefings as required by PSC.

☐ Maintain Unit Log (ICS 214).

DOCUMENTATION UNIT LEADER (DOCL)

The DOCL is responsible for the maintenance of accurate, up-to-date incident files. The DOCL shall ensure each section is maintaining and providing appropriate documents. The Documentation Unit will ensure appropriate storage incident files.

The major responsibilities of the DOCL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Organize incident files.
- ☐ Assist in preparation of documents as appropriate.
- ☐ Arrange for copying and other printing services as needed.
- ☐ Review records for accuracy and completeness ? provide feedback, when appropriate, to document preparers.
- ☐ Provide incident documentation as requested.
- ☐ Maintain Unit Log (ICS 214).

ENVIRONMENTAL UNIT LEADER (ENVL)

The ENVL is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance and environmental monitoring and permitting.

The major responsibilities of the ENVL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Identify sensitive areas including historical/cultural resources to ensure protection of wildlife and other resources (consult with local, state and federal natural resource trustees as appropriate). See ICS 232.
- ☐ Monitor the impact of response actions and make appropriate recommendations to protect resources at risk.
- ☐ Develop environmental cleanup and assessment plans and evaluate alternatives.
- ☐ Request technical support to accomplish work assignments, if needed.
- ☐ Develop disposal plan (consider sampling protocols, transportation regulations, etc.) and adjust as needed.
- ☐ Assign the Disposal Group Supervisor to ensure waste management plan is implemented appropriately if needed.
- ☐ Attend meetings and briefings as required by PSC.
- ☐ Maintain Unit Log (ICS 214).

LOGISTICS SECTION CHIEF (LSC)

The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section.

The LSC is responsible for the major duties described for each Branch and Unit within the Logistic Section. The LSC may have Deputy LSC's. The Deputy LSC must be capable to takeover as the OSC, if the situation warrants.

The major responsibilities of the LSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Determine and supply immediate incident resource and facility needs.
- ☐ Identify Branch Directors and Unit Leaders, assigning work locations and preliminary work tasks to the Logistic Section personnel.
- ☐ Assemble and brief Logistics Branch Directors and Unit Leaders.
- ☐ Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
- ☐ Set up an ordering process as appropriate to support the incident.
- ☐ In conjunction with IC, develop and advise Sections of the Incident Management Team resource approval and requesting process.
- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
- ☐ Advise IC and other Section Chiefs on resource availability to support incident needs.
- ☐ Ensure the Communications Plan (ICS 205); Medical Plan (ICS 206), and Traffic Plan are created for the IAP.
- ☐ Identify long-term service and support requirements for planned and expected operations.
- ☐ Identify resource needs for incident contingencies.
- ☐ Track resource effectiveness and make necessary adjustments.
- ☐ Set up Release Process for demobilization plan.
- ☐ Ensure the general welfare and safety of Logistics Section personnel.
- ☐ Maintain Unit Log (ICS 214).

FINANCE/ADMINISTRATION SECTION CHIEF (FSC)

The FSC, a member of the General Staff, is responsible for financial, administrative and cost

analysis aspects of the incident and for supervising members of the Finance/Admin Section.

The FSC may have Deputy FSC's. The Deputy FSC must meet the same qualification requirements as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the FSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Manage financial aspects of an incident.
- ☐ Provide financial and cost analysis information as requested.
- ☐ Gather pertinent information from briefings.
- ☐ Develop an operating plan for the Finance/ Admin Section; fill supply and support needs.
- ☐ Meet with other Section Chiefs, as needed.
- ☐ Provide financial input to demobilization planning.
- ☐ Ensure that obligation documents initiated at the incident are properly prepared and completed.
- ☐ Brief personnel on incident-related financial issues needing attention or follow-up prior to leaving incident.
- ☐ Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
- ☐ Receive and implement applicable portions of the incident Demobilization Plan.
- ☐ Establish a process or activate a Claims Group to accept claim submission as a result of incident.
- ☐ Maintain Unit Log (ICS 214).

SECTION 5 Last revised: February 2006

INCIDENT PLANNING

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5.1 Documentation Procedures

5.2 Incident Action Plan (IAP) Process and Meetings

Figure 5.2-1 Operational Period Planning Cycle

5.2.1 Incident Occurs / Notifications

5.2.2 Initial Response and Assessment

5.2.3 Unified Command Objectives Meeting

5.2.4 Tactics Meeting

5.2.5 Planning Meeting

5.2.6 Incident Action Plan (IAP) Preparation and Approval

5.2.7 Operations Briefing

5.2.8 Assess Progress

5.2.9 Initial Unified Command Meeting

5.2.10 Command Staff Meeting

5.2.11 Command General Staff Breakfast/Supper

5.2.12 Business Management Meeting

5.2.13 Agency Representative Meeting

5.2.14 News Briefing

SECTION 5 Last revised: January 2005

INCIDENT PLANNING, CONTINUED

5.3 ICS Forms

5.3.1 Incident Briefing ICS 201-OS

5.3.2 Incident Action Plan (IAP) Cover Sheet

5.3.3 Incident Objectives ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

5.3.5 Assignment List ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

5.3.7 Medical Plan ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

5.3.9 Unit Log ICS 214-OS

5.3.10 Individual Log ICS 214a-OS

5.4 Site Safety and Health Plan

5.4.1 Safety Introduction and Overview

5.4.2 Initial Site Safety and Health Plan

5.4.3 Site Safety and Health Plan

5.5 Decontamination Plan

5.6 Disposal Plan

5.7 Incident Security Plan

5.8 Demobilization Plan

5.1 DOCUMENTATION PROCEDURES

Documentation of an emergency response provides a historical record, keeps management informed, serves as a legal instrument, and is a means to account for the cleanup activities.

Documentation should begin immediately upon discovery of incident and continue until termination of operations. Documentation may include the following:

- Description of Incident (origin and characteristics)
- MSDS
- Notifications (external and internal)
- Sampling surveys
- Photographs
- Climatological data
- Labor and equipment accounting
- Copies of logs, contracts, contacts, and plans prepared for incident

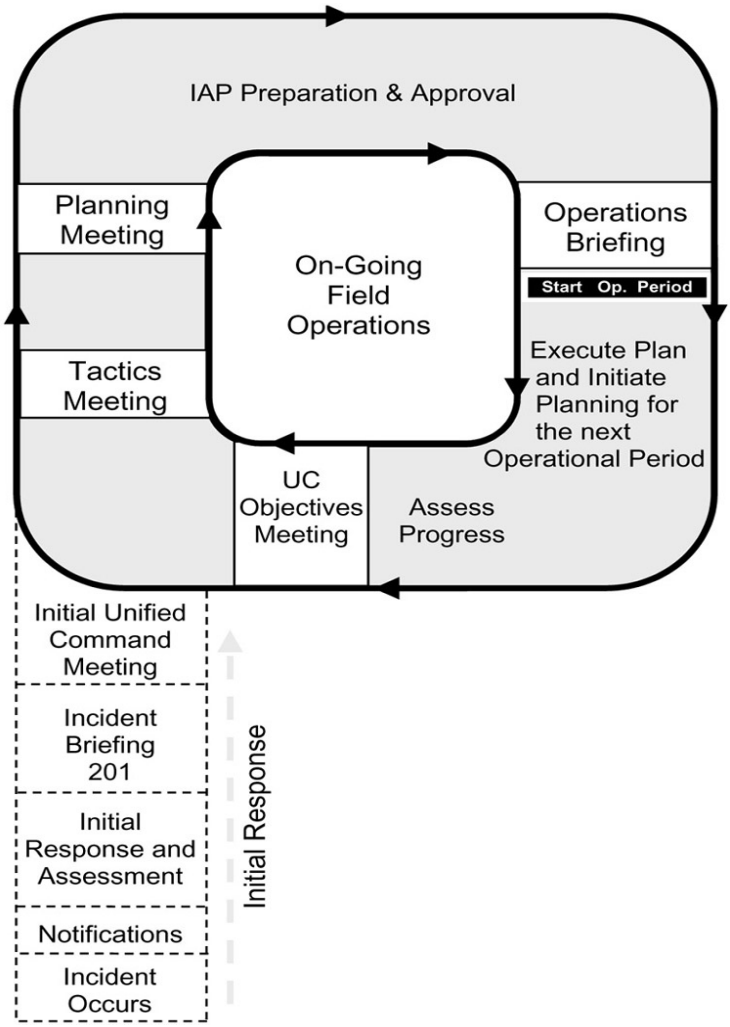
5.2 INCIDENT ACTION PLAN (IAP) PROCESS AND MEETINGS

The period of INITIAL RESPONSE AND ASSESSMENT occurs in most incidents. Short-term responses (small in scope and/or duration, e.g., few resources working one operational period) can often be coordinated by the initial responder utilizing procedures and forms described in this Plan (suggested ICS Form 201, Incident Briefing).

Longer-term, more complex responses, will likely require a dedicated Incident Commander (IC) / Unified Command (UC) who will assign members of the Command and General Staff as needed (e.g., Planning Section Chief (PSC) arranges for transition into the OPERATIONAL PERIOD PLANNING CYCLE). Certain meetings, briefings, and information-gathering during the Cycle lead to the Incident Action Plan (IAP) that guides operations of the next operational period. The IC/UC specifies objectives and the operational periods (e.g., 12-hour shifts, sunrise to sunset, 24-hour shifts, etc.) to engage the cleanup activities.

SPECIAL PURPOSE meetings are most applicable to larger incidents requiring an OPERATIONAL PERIOD PLANNING CYCLE, but may have utility during INITIAL RESPONSE AND ASSESSMENT. The UNIFIED COMMAND MEETING and other special purpose meetings are briefly noted.

FIGURE 5.2-1 OPERATIONAL PERIOD PLANNING CYCLE



5.2.1 Incident Occurs / Notifications

When an incident occurs, an initial assessment and response actions will begin (**FIGURE 3.1-2**, Incident Report Form). Notifications will be made internally and to the appropriate federal, state, and local agencies (**FIGURE 3.1-5**).

5.2.2 Initial Response and Assessment

INCIDENT BRIEFING

During the transfer of command process, a briefing provides the incoming IC/UC with basic information regarding the incident situation and the resources allotted to the incident (Incident Briefing ICS 201-OS). This briefing is the beginning of the Incident Action Plan (IAP) for the initial response and remains in force and continues to develop until the response ends or the Planning Section generates the incident's first IAP. It is also suitable for briefing individuals newly assigned to Command and General Staff, as well as for needed assessment briefings for the staff.

When: New IC/UC; staff briefing, as required
Briefer: Current IC/UC
Attendees: Prospective IC/UC; Command, and General Staff, as required
Agenda: Using ICS 201 as an outline, included:

1. Situation (note territory, exposures, safety concerns, etc; use map/charts).
2. Objectives and priorities.
3. Strategies and tactics.
4. Current organization.
5. Resource assignments.
6. Resources enroute and/or ordered.
7. Facilities established.

OPERATIONAL PERIOD PLANNING CYCLE
(Events most related to assembling IAP)

5.2.3 Unified Command Objectives Meeting

The IC/UC will review/identify and prioritize objectives for the next operational period (Incident Objectives ICS 202-OS). Objectives from the previous operational period are reviewed and any new objectives are identified.

When: Prior to Tactics Meeting
Facilitator: UC Member
Attendees: UC Members; Command and General Staff, as appropriate
Agenda:

1. Review/identify objectives for the next operational period (clearly stated and attainable with the resources available, yet flexible enough to allow Operations Section Chief to choose tactics).
2. Review any open agenda items from initial/previous meetings.

5.2.4 Tactics Meeting

This meeting creates the blueprint for tactical deployment during the next operational period. In preparation for the Tactics Meeting, the Planning Section Chief and Operations Section Chief review the current IAP and situation status information, as provided through the Situation Unit, to assess work progress against IAP objectives. The Operations Section Chief/Planning Section Chief will jointly develop primary and alternate strategies to meet objectives for consideration at the next Planning Meeting.

When: Prior to Planning Meeting
Facilitator: Planning Section Chief
Attendees: Planning Section Chief, Operations Section Chief, Logistics Section Chief, Resources Unit Leader, Situation Unit Leader, and Environmental Unit Leader
Agenda:

1. Review the objectives for the next operational period.
2. Develop strategies (primary and alternative).
3. May prepare a draft of ICS 215 to identify resources that should be ordered through Logistics.

5.2.5 Planning Meeting

This meeting defines incident objectives, strategies, and tactics and identifies resource needs for the next operational period. This meeting fine-tunes objectives and priorities, identifies and

solves problems, and defines work assignments and responsibilities (suggested ICS Form 215, Operations Planning Worksheet). Meeting preparations include conducting a Tactics Meeting. Displays in the meeting room may include Objectives (ICS 202) for the next period; large sketch maps or charts clearly dated and timed; poster-size Operational Planning Worksheet (ICS 215); current resource inventory prepared by Resources Unit; and current situation status displays prepared by Situation Unit. After the meeting, the Logistics Section Chief prepares the off-incident tactical and logistical resource orders which are used by Planning Section Chief to develop IAP assignment lists (suggested ICS Form 215).

When: After the Tactics Meeting
Facilitator: Planning Section Chief
Attendees: Determined by IC/UC, generally IC/UC, Command Staff, General Staff, Air Operations Section Chief, Resources Unit Leader, Situation Unit Leader, Environmental Unit Leader, and Technical Specialists, as required
Agenda: Primary Responsibility:

5.2.5 Planning Meeting, Continued

1. State incident objectives and policy issues. IC/UC
2. Briefing of situation, critical and sensitive areas, weather/sea forecast, resource status/availability. Planning Section Chief w/Situation Unit Leader, Resources Unit Leader
3. State primary and alternative strategies to meet objectives. Operations Section Chief w/Planning Section Chief, Logistics Section Chief
4. Designate Branch, Division, Group boundaries and functions, as appropriate; use maps and ICS 215. Operations Section Chief
5. Specify tactics for each Division, note limitations. Operations Section Chief, Situation Unit Leader assist
6. Specify resources needed by Divisions/Groups. Operations Section Chief, w/Planning Section Chief, Logistics Section Chief
7. Specify operations facilities and reporting locations (plot on map). Operations Section Chief, Logistics Section Chief assist
8. Develop resources, support, and overhead order(s). Planning Section Chief, Logistics Section Chief
9. Consider support issues and agree on plans: communications, traffic, safety, medical, etc. Logistics Section Chief, Planning Section Chief assist
10. Assisting or cooperating agency and stakeholder group considerations regarding Incident Action Plan. Liaison Officer
11. Safety considerations regarding Incident Action Plan. Safety Officer
12. News media/public considerations regarding Incident Action Plan. Information Officer
13. Finalize, approve Incident Action Plan for next operational period. IC/UC

5.2.6 Incident Action Plan (IAP) Preparation and Approval

Immediately following the Planning Meeting, the attendees prepare their assignments for the IAP to meet the Planning Section Chief deadline for assembling the IAP components. The deadline will be early enough to permit timely IC/UC approval and duplication of sufficient copies for the Operations Briefing and for overheads.

When: Immediately following Planning Meeting, Planning Section Chief assigns deadline
Facilitator: Planning Section Chief

Common Components:		Responsible to Prepare
1.	Incident Objectives (ICS 202)	[Resources Unit Leader]
2.	Organization List (ICS 203)	[Resources Unit Leader]
3.	Assignment List (ICS 204)	[Resources Unit Leader/Planning Section Chief]
4.	Communications Plan (ICS 205)	[Communications Unit Leader]
5.	Medical Plan (ICS 205)	[Medical Unit Leader/Safety Officer]
6.	Incident Map	[Situation Unit Leader]

Optional Components (use as pertinent):

Optional Components (use as pertinent):		Responsible to Prepare
1.	Air Operations Summary (ICS 220)	[Air Operations Branch Director]
2.	Traffic Plan	[Ground Support Unit Leader]
3.	Demobilization Plan	[Demobilization Unit Leader]

5.2.7 Operations Briefing

This meeting conveys the IAP for the oncoming shift to the response organization. After this meeting, off-going field supervisors should be interviewed by their reliefs and by Operations Section Chief in order to further confirm or adjust the course of the new shift's IAP. Shifts in tactics may be made by the operations section supervisors. Similarly, a supervisor may reallocate resources within a Division or Group to adapt to changing conditions.

When: About an hour prior to each shift
Facilitator: Planning Section Chief
Attendees: IC/UC, Command Staff, General Staff, Branch Directors, Division/Group Supervisors, Task Force/Strike Team Leaders (if possible), Unit Leaders, others as appropriate

Agenda:		Responsible to Present
1.	Review of IC/UC Objectives, changes to IAP.	[Planning Section Chief]
2.	Current response actions and last shift's accomplishments.	[Operations Section Chief]
3.	Weather and sea conditions forecast.	[Situation Unit Leader]
4.	Division/Group and Air Operations assignment.	[Operations Section Chief]
5.	Trajectory analysis.	[Situation Unit Leader]
6.	Transport, communications, supply updates.	[Logistics Section Chief]
7.	Safety message.	[Safety Officer]
8.	Financial report (e.g. Claims Number set-up).	[Finance/Administration Section Chief]
9.	News Media report.	[Information Officer]

10.	Assisting/cooperating organization/agency reports of concern.	[Liaison Officer]
11.	Incident Action Plan endorsement and motivational remarks.	[IC/UC]

5.2.8 Assess Progress

The Operations and Planning Sections will review the incident response progress and make recommendations to the IC/UC in preparation for reviewing/identifying objectives for the next operational period. This feedback/information is gathered from various sources including Field Observers, responder debriefs, stakeholders, etc.

SPECIAL PURPOSE MEETINGS

5.2.9 Initial Unified Command Meeting

Provides UC officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The meeting should be brief and important points should be documented. Prior to the meeting, parties should review and prepare to address the agenda items. Planning Meeting participants will use the results of this meeting to guide the response efforts.

5.2.9 Initial Unified Command Meeting, Continued

When: When UC is formed, prior to the first operational period Planning Meeting
Facilitator: UC member
Attendees: Only ICs who will comprise UC

Agenda:

1. Identify jurisdictional priorities and objectives.
2. Present jurisdictional limitations, concerns, restrictions.
3. Develop collective set of incident objectives.
4. Establish and agree on acceptable priorities.
5. Adopt an overall strategy to accomplish objectives.
6. Agree on basic organizational structure and size.
7. Designate the best-qualified and acceptable Operations Section Chief.
8. Agree on General Staff personnel designations and planning, logistical, and finance agreements and procedures.
9. Agree on resource ordering procedures.
10. Agree on cost-sharing procedures.
11. Agree on informational matters.
12. Designate a Unified Command spokesperson.

5.2.10 Command Staff Meeting

The purpose of this meeting is to coordinate Command Staff functions responsibilities, and objectives. It is scheduled as necessary by the IC/UC. Command Staff (IC/UC, Safety Officer, Liaison Officer, and the Information Officer) attend.

5.2.11 Command and General Staff Breakfast/Supper

An opportunity for the Command (IC/UC, Safety Officer, Liaison Officer, Information Officer) and General Staff (Operations Section Chief, Planning Section Chief, Logistics Section Chief, Finance/Administration Section Chief) to gather under informal and relaxing conditions to share and update each other on developing issues.

5.2.12 Business Management Meeting

This meeting is for participants to develop and update the Crisis Manager on the status, progress, and forecast of the IAP. The agenda could include: finance requirements and criteria imposed by contributing organizations, business operating plan for resource procurement and incident funding, cost analysis, and financial summary data. Attendees include: Incident Commander, Operations, Planning, Logistics, and Finance/Administration Section Chiefs, Cost Unit Leader, Supply Unit Leader, Situation Unit Leader, Environmental Unit Leader, and Demobilization Unit Leader. This meeting is generally conducted outside of the ICS Structure allowing exchange of information between Company Management Liaison (Crisis Manager) and the Response effort. It is suggested this meeting is held before the ICS PLANNING MEETING.

5.2.13 Agency Representative Meeting

The purpose of this meeting is to update agency representatives and to ensure that they can support IAP. Conducted by Liaison Officer, attended by Agency Representatives. Most appropriately held after the PLANNING MEETING in order to announce plans for next operational period, yet flexible enough to allow for changes should the plan's expectations be unattainable by an agency.

5.2.14 News Briefing

Refer to **SECTION 7.2** for Public Affairs information and policies.

5.3 ICS FORMS

ICS Forms are available electronically via this Plan's Forms Navigator.

Note: These forms are alternate or suggested forms to be used as appropriate.

- INCIDENT BRIEFING FORM - ICS 201 (Initial Report Only)

  For use by the Command Staff to gather information on the Incident Management Team?s (IMT) efforts to implement applicable response plans. It is prepared by the initial Incident Commander (IC) for providing documentation of the initial response.

- INCIDENT ACTION PLAN

  For use by the Planning Section to plan each day?s response actions. This plan consists of the portions identified on the IAP cover page and needs to be approved by the Incident Commander, Federal On-Scene Coordinator (FOSC), and State On-Scene Coordinator (SOSC).

  In addition, these Incident Command System (ICS) forms may be found on the U.S. Coast Guard web page: http://www.uscg.mil/pacarea/pm/icsforms/ics.htm

  - **INCIDENT ACTION PLAN (IAP) COVER SHEET**

For use in presenting initial information, signature approval, and table of contents of forms contained in the IAP.

- INCIDENT OBJECTIVES - ICS 202

  Describes the basic incident strategy, control objectives, provides weather, tide and current information, and safety considerations for use during the next operational period.

- **ORGANIZATION ASSIGNMENT LIST - ICS 203**

  Provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit.

- ASSIGNMENT LIST - ICS 204

  Submits assignments at the Division/Group level.

- COMMUNICATIONS PLAN - ICS 205

  Is used to provide, in location, information on radio frequency assignments down to Division/Group level for each operation period.

- MEDICAL PLAN - ICS 206

  Provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

5.3 ICS FORMS, CONTINUED

ICS Forms are available electronically via this Plan's Forms Navigator.

Note: These forms are alternate or suggested forms to be used as appropriate.

- **INCIDENT STATUS SUMMARY - ICS 209**

  Used to inform personnel about the status of response efforts. It is not included in the IAP.

- **UNIT LOG - ICS 214**

  Used to log activities for an entire unit.

- **INDIVIDUAL LOG - ICS 214a**

  Used to log activities for an individual.

5.3.1 Incident Briefing ICS 201-OS

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

3. Map/Sketch

(Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines or other graphics depicting situational and response status)

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 1 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
4. Initial Incident Objectives		
5. Summary of Current Actions		

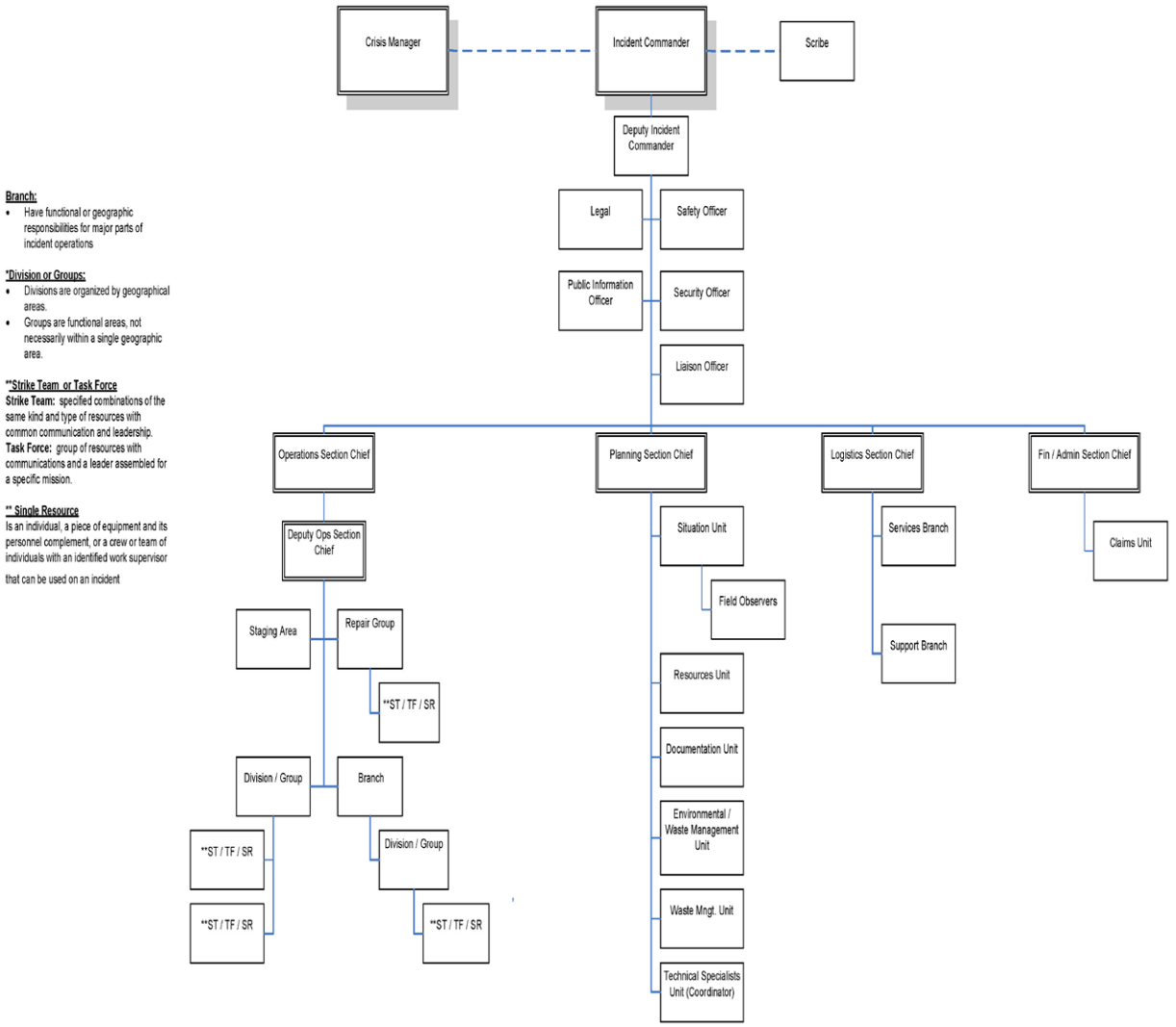
Time	Action/Note

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 2 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

6. Current Organization



INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 3 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

7. Resources Summary

Resources Needed	Time Ordered	Resource Identifier	ETA	On Scene? (X)	Notes: (Location/Assignment/Status)

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 4 of 4)

5.3.2 Incident Action Plan (IAP) Cover Sheet

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time)		IAP COVER SHEET
	From:	To:	

3. Approved by:

FOSC

SOSC

IC

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☐ ICS 202-OS (Incident Objectives)
- ☐ ICS 203-OS (Organization Assignment List)
- ☐ ICS 204-OS (Assignment List)
- ☐ ICS 205-OS (Communications Plan)
- ☐ ICS 206-OS (Medical Plan)
- ☐ ICS 209-OS (Incident Status Summary)
- ☐ ICS 214-OS (Unit Log)
- ☐ ICS 214a-OS (Individual Log)
- ☐
- ☐

4. Prepared By: (Planning Section Chief)	**Date/Time:**
IAP COVER SHEET	March, 2000

5.3.3 Incident Objectives ICS 202-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-OS
3. Overall Incident Objective(s)		
4. Objectives for Specified Operational Period		
5. Safety Message for Specified Operational Period Approved Site Safety Plan Located at:		
6. Weather: See Attached Weather Sheet		
7. Tides/Currents: See Attached Tide/Current Data		
8. Time of Sunrise:	**Time of Sunset:**	

9. Attachments (check if attached)

☐ Organization List (ICS 203-OS) ☐ Assignment List (ICS 204-OS) ☐ Communications Plan (ICS 205-OS)

☐ Medical Plan (ICS 206-OS) ☐ Weather

10. Prepared By: (Planning Section Chief)	**Date/Time:**

INCIDENT OBJECTIVES	March, 2000	ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	ORGANIZATION ASSIGNMENT LIST ICS 203-OS

3. Incident Commander and Staff

	Primary	Deputy
Federal:		
State:		
IC:		

Safety Officer :

Information Officer:

Liaison Officer:

4. Agency Representatives

Agency	Name

5. Planning Section

Chief	
Deputy	
Resources Unit	
Situation Unit	
Environmental Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

6. Logistics Section

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation Unit	
Cost Unit	

7. Operations Section

Chief		
Deputy		
a. Branch I - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
b. Branch II - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
c. Branch III - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
d. Air Operations Branch		
Air Operations Br. Dir.		
Air Tactical Supervisor		
Air Support Supervisor		

a. Support Branch		Helicopter Coordinator	
Director		Fixed-wing Coordinator	
Supply Unit		8. Finance Section	
Facilities Unit		Chief	
Transportation Unit		Deputy	
Vessel Support Unit		Time Unit	
Ground Support Unit		Procurement Unit	
b. Service Branch		Compensation Unit	
Director		Cost Unit	
Communications Unit			
Medical Unit			
Food Unit			

9. Prepared by: (Resources Unit)	Date/Time	
ORGANIZATION ASSIGNMENT LIST	March, 2000	ICS 203-OS

5.3.5 Assignment List ICS 204-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	ASSIGNMENT LIST ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel	Name	Affiliation	Contact # (s)
Operations Section Chief:			
Branch Director:			
Division/Croup Supervisor:			

6. Resources Assigned This Period	?X? indicates 204a attachment with special instructions			
Strike Team/Task Force/ Resource Identifier	**Leader**	**Contact Info. #**	**# of Persons**	**Notes/Remarks**

7. Assignments

8. Special Instruction for Division/Group

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/ Channel	Phone	Pager
Emergency Communications			
Medical	Evacuation	Other	

10. Prepared By (Resources Unit Leader)	Date/Time	**11. Approved By** (Planning Section Chief)	Date/Time

ASSIGNMENT LIST June, 2000 ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	COMMUNICATIONS PLAN ICS 205-OS

3. Basic Radio Channel Use

SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared By (Communications Unit)	Date/Time

COMMUNICATIONS PLAN	March, 2000	ICS 205-OS

5.3.7 Medical Plan ICS 206-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	MEDICAL PLAN ICS 206-OS

3. Medical Aid Stations

Name	Location	Contact #	Paramedics On Site (Y/N)

4. Transportation

Ambulance Service	Address	Contact #	Paramedics On Board

			(Y/N)

5. Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

7. Prepared By (Medical Unit Leader)	Date/Time	8. Reviewed By (Safety Officer)	Date/Time

MEDICAL PLAN March, 2000 ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

1. Incident Name	2. Period Covered By Report From: To:	Time of Report	INCIDENT STATUS SUMMARY ICS 209-OS

3. Spill Status (Estimated, in Barrels)		[OPS/EUL/SSC]	
Source Status:	Remaining Potential (bbl):		
	Rate of Spillage (bbl/hr):		
Secured	☐	Unsecured	☐

	Since Last Report	Total
Volume Spilled		
Mass Balance/Oil Budget		
Recovered Oil		

7. Safety Status	[Safety Officer]
Since Last Report	Total
Responder Injury	
Public Injury	

8. Equipment Resources				[RUL]
Description	Ordered	Available / Staged	Assigned	Out of Service
Spill Resp.				

Evaporation		
Natural Dispersion		
Chemical Dispersion		
Burned		
Floating, Contained		
Floating, Uncontained		
Onshore		
Total Spilled Oil Accounted For:		

4. Waste Management (Estimated)			[OPS/Disposal]
	Recovered	Stored	Disposed
Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

5. Shoreline Impacts (Estimated, in miles)			[PSC/EUL/SSC]
Degree of Oiling	Affected	Cleaned	To Be Cleaned
Light			
Medium			
Heavy			
Total			

6. Wildlife Impacts						[OPS/Wildlife Br.]
Numbers in ( ) indicate subtotal that are threatened / endangered species.					Died in Facility	
	Captured	Cleaned	Released	DOA	Euth.	Other
Birds						
Mammals						
Reptiles						
Fish						
Total						

Vsls				
Fishing Vessels				
Tugs				
Barges				
Other Vessels				
Skimmers				
Boom (ft.)				
Sbnt/Snr Bm. (ft.)				
Vacuum Trucks				
Helicopters				
Fixed Wing				

9. Personnel Resources			[RUL]
Description	People in Cmd. Post	People in the Field	Total People On Scene
Federal			
State			
Local			
RP			
Contract Personnel			
Volunteers			
Total Response Personnel From All Organizations:			

10. Special Notes

11. Prepared By (Situation Unit Leader)	Date/Time

INCIDENT STATUS SUMMARY	March, 2000	ICS 209-OS

5.3.9 Unit Log ICS 214-OS

1. Incident Name	2. Operational Period (Date / Time) From: To:	UNIT LOG ICS 214-OS
3. Unit Name	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

UNIT LOG	June 2000	ICS 214-OS

5.3.9 Unit Log ICS 214-OS, Continued

1. Incident Name	2. Operational Period (Date / Time) From: To:	UNIT LOG(Cont) ICS 214-OS
3. Unit Name	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

UNIT LOG	June 2000	ICS 214-OS

5.3.10 Individual Log ICS 214a-OS

1. Incident Name	2. Operational Period (Date / Time) From: To:	INDIVIDUAL LOG **ICS 214a-OS**

3. Individual Name	**4. ICS Section**	**5. Assignment / Location**

6. Activity Log	Page	of

TIME	MAJOR EVENTS

7. Prepared by:	**Date / Time**

		ICS

INDIVIDUAL LOG	June 2000	214a-OS

5.4 SITE SAFETY AND HEALTH PLAN

5.4.1 Safety Introduction and Overview

Responding to incidents can be very hazardous. Critical areas deserving special attention are **Prevention of Incidental Ignition** and **Personnel Safety**. The following safety considerations shall be followed:

Prevention of Incidental Ignition

- Establish a safe working area.
- Monitor for LEL with appropriate air monitoring equipment.
- Utilize EH&S Work Permit during the Incident.
- Use non-sparking tools as applicable.

Personnel Safety

- Utilize the appropriate air monitoring equipment to protect yourselves from the vapors or fumes of petroleum products and crude oils. High concentrations of these vapors may be toxic and can be an asphyxiate.
- Work using the "buddy system" (that is, two people working as a team).
- Use proper respiratory protection equipment (APRs or SCABA) and other applicable PPE when necessary.

The Site Safety Plan in conjunction with the EH&S Work Permit System provides a comprehensive framework for initiating and maintaining quality safety practices. All personnel are responsible for promoting a safe and healthy environment during the incident response. The following Site Safety Plan is designed to provide a consistent, comprehensive process to meet this objective.

For small, minor incidents, the Safety Plan may consist of a EH&S Work Permit and the Safety Plan Checklist or equivalent company Work Permit.

5.4.2 Initial Site Safety and Health Plan

SAFETY PLAN CHECKLIST

ASSIGN SITE SAFETY RESPONSIBILITY
Name:
ESTABLISH PERIMETER AND RESTRICT ACCESS (Compile sketch as necessary)
CHARACTERIZE SITE HAZARDS
• Identify pollutant:
• Obtain Material Safety Data Sheets

• Conduct air monitoring as necessary:
• Identify physical and biological hazards, i.e.: slips, trips, falls, confined spaces, noise, weather conditions, poisonous insects, reptiles, plants, and biological waste:
ESTABLISH CONTROL ZONES
• Exclusion zone:
• Contamination reduction zone:
• Support zone:
ASSESS TRAINING REQUIREMENTS
• Ensure only authorized persons are allowed access
UTILIZE EH&S SAFE WORK PERMITS AS INITIAL SITE SAFETY PLAN
• Ensure safety briefings
• Select Personal Protective Equipment
• Level A, B, C, or D:
ESTABLISH DECONTAMINATION STATION(S)
ESTABLISH EMERGENCY MEDICAL PLAN
• Locate hospital, EMT, and first aid stations:
• List emergency numbers:
Fire:
Police:
Ambulance:
For other spills of significance, the Site Safety Plan is designed to meet the Safety Objectives.

5.4.3 Site Safety and Health Plan

Incident Name:	
Date:	Site Safety Officer:
Scope	
This Site Safety Plan is for use on the specified above incident and response to a spill of _____ estimated to be approximately _____ in volume. This incident is being managed by designated Company personnel integrated with on-site	

Federal, State, and/or Local response representatives along with the use of commercial HAZWOPER-accepted qualified contractors.

This plan is based on the regulations and recommendations of Federal Agencies such as OSHA, EPA, DOT, and USCG and the Company.

Company personnel or contractors will be on site to address safety concerns, site safety plans, conduct Industrial Hygiene monitoring, and for special assistance; however, the day-to-day safe operation of the site and project is the responsibility of trained site supervisors. Every site employee shall comply with provisions of this plan and focus constant attention on preventing loss or damage to any person, property, process, or the environment.

Site Description
Location:
This incident is at _____, in the state of _____, and in the vicinity of _____. The Command Post is currently located at _____. The Incident Base and Staging Area are located at _____.

5.4.3 Site Safety and Health Plan, Continued

On-Site Control Boundaries:	**Marking:**
Exclusion Zone - Hotline	As designated by:
Contamination Reduction Zone	As designated by:
Support Zone	As designated by:
Hazards:	
Area Affected:	
The area is _____and is identified as the Hot Zone.	
Surrounding Population:	
Topography:	
Weather Conditions:	

The weather is _____, temp. is _____, and there is a _____ % chance of precipitation. The prevailing wind is from the _____ at _____ mph throughout the day.
Environmental and Archeological Concerns:
Initial Entry Objectives:

5.4.3 Site Safety and Health Plan, Continued

Additional Information:
Identified sources of ignition within or adjacent to the spill or contained liquid will be shut down, secured, isolated or monitored, as appropriate. Electrical equipment shall be in compliance with regulatory requirements. Note: Smoking is not allowed on Company property.
Site Access
Personnel shall notify the Site Safety Officer or designee prior to entering or leaving the site. _____ has been designated to control access. A sign-in log will be maintained at the incident base. Persons entering the area shall sign in/out. Entry into spill area will be by trained personnel only. Training documentation shall be provided to the Site Safety Officer prior to entry.
Hazard Evaluation
Chemical Hazards:
The following substance is known to be at the Spill site.

Substance:	**Primary Hazard:**
☐ Crude Oil	Flammable/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Gasoline	Flammable/Slightly Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Diesel Fuel	Flammable/Slightly Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Jet Fuel	Flammable/Moderately Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Additive	Flammable/Slightly-Moderately Toxic/Skin, Eye, Nose, Throat, and Lung Irritant
☐ Butane	Flammable/Asphyxiant/Prolonged contact may cause frostbite

☐ Kerosene	Flammable/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Propane	Flammable/Asphyxiant/Prolonged contact may cause frostbite/Explosive mixtures with air
☐ Benzene	Flammable/Skin and Eye Irritant/May be toxic if inhaled or ingested
☐ Hydrogen	Flammable gas/Asphyxiant/Colorless and odorless
☐ Toluene	Flammable/Skin and Eye Irritant/may be toxic if inhaled or ingested
☐ Xylene	Flammable/Skin and Eye Irritant/may be toxic if inhaled or ingested
☐ Natural Gas	Flammable gas/Asphyxiant/Colorless and odorless
☐ Fuel Gas	Flammable/Poisonous Gas/Skin and Eye Irritant/Prolonged contact may cause frostbite/Harmful or fatal is swallowed

5.4.3 Site Safety and Health Plan, Continued

Material Safety Data Sheets
Material Safety Data Sheets for Company Products are located on the company intranet. Employees involved in an emergency response are trained to read Company MSDS and to know where they are located. MSDS for material released/spilled during this incident can be found at the following locations:

Personal Protective Equipment		
The following Personal Protective Equipment (PPE) shall be required for entry into the Spill Area during the cleanup process.		
Level B	Level C	Level D
1. Hard Hat 2. Self Contained Breathing Apparatus 3. Latex inner gloves, Neoprene outer gloves 4. Flame retardant clothing, such as Nomex suits, with cuffs and pant legs duct tape sealed 5. Radios will be provided to the entry team, backup team, and command staff. These radios shall be intrinsically safe and tested prior to entry	1. Hard Hat 2. Safety glasses with side shields, splash goggles, or safety glasses with full face shield 3. Neoprene gloves 4. Tyvek disposable suit with cuffs and pant legs duct tape sealed 5. If monitoring results indicate the continued need for respiratory protection, SCABAs or SARs may be used. If a half mask or a full face respirator is allowed, it must be NIOSH-approved and use the correct type of cartridge	1. Hard Hat 2. Safety Glasses 3. Long sleeved shirt - tank tops will not be allowed 4. Long legged pants or overalls - shorts will not be allowed 5. Hand protection as needed 6. Additional items as required by Safety Officer

Minnesota Zone 5 - 32

5.4.3 Site Safety and Health Plan, Continued

Decontamination
A Decon Site Layout (**SECTION 5.5**) shall be used to construct the Decon area. Personnel involved in the response and entering the Hot Zone area shall be trained and equipped to meet the requirements of Emergency Response. Decon Site(s) should be constructed at the point of entry to the Hot Zone. Multiple Decon Sites may be necessary for multiple cleanup areas or when an area has multiple entry points.
Communications
Only intrinsically safe electronic devices will be allowed within the Hot Zone. Verbal and hand signal communication is allowed in the Hot Zone. Cellular phones, pagers, lamps, or flare devices shall not be allowed into Hot Zone unless intrinsically safe and approved by the Safety Office or designee. Other non-sparking methods which cannot produce ignition may be allowed in the Hot Zone, but must be approved by the Safety Officer. Cellular phones, pagers, stationary telephones, and any other communication devices shall be allowed by the Safety Officer into other support areas of the incident.
Personal Identification
As available, Incident Command position personnel shall wear vests with the position label on the vest (Incident Commander, Planning, Logistics, Operations, Safety, etc.) If vests are not available, the IC personnel shall ensure they are recognized by personnel they are supervising.
First Aid
First aid kits are located at _____. Serious injuries will be treated by 911 EMS response systems as needed. Injuries, no matter how slight, shall be reported to a Safety Officer immediately.

Minnesota Zone 5 - 33

5.4.3 Site Safety and Health Plan, Continued

Emergency Eye Wash Station:
Portable emergency eyewash stations are located at _____.
Potable Water:
Potable water is available at _____.
Toilet Facilities:
Toilet facilities are available at _____.

Air Monitoring:
Air monitoring shall be conducted by _____, who will utilize _____ to monitor the levels of _____. Other sampling devices or media must be approved by the Safety Officer prior to being allowed into the area. A log sheet shall be maintained for gas monitoring data to be logged on _____ minute interval. Readings shall be collected from the perimeter of the cleanup area on a _____ interval. Air monitoring shall continue until the Safety Officer determines that it is no longer necessary.

5.4.3 Site Safety and Health Plan, Continued

Additional Health/Hygiene Sampling
Additional testing of atmosphere, personnel, or equipment may be conducted at the discretion of the Safety Officer or Incident Commander.
Emergency Procedures
The following standard emergency procedures will be used by the on-site personnel. The Incident Commander, Operations Chief, and Safety Supervisor shall be made aware of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed: **Injury/Illness in the area:** An injury or illness occurring in the response area shall be immediately communicated through the Command Staff to the Safety Officer in order that it may be responded to in the degree necessary. This includes everything from minor first aid treatment to the more serious injuries involving the 911 EMS system. A medical emergency shall receive immediate attention and appropriate response. Company notification by the on-site personnel shall be in the following order until contact is made with one of the following: the Site Safety Officer, Operations Section Chief, Incident Commander, or Operations Manager.
911 EMS Response Service:
Refer to **SECTION 3** for the appropriate notifications.
Personal Protective Equipment Failure:
If worker experiences a failure or alteration of protective equipment that affects the protection factor, that person shall immediately evacuate to a safe area. Decon procedures shall be followed. The Safety Officer shall be notified immediately. Return to the area shall not be permitted until the equipment has been properly and effectively repaired or replaced.

Other Equipment Failure:
If other equipment fails to operate properly, the Operations Chief shall be notified and then

determine the effect of this failure on continuing the operations. If the failure affects the safety of personnel or prevents completion of the planned tasks, personnel shall leave the area until the situation is corrected.		
Plan Prepared By:		
Safety Officer:		
Printed Name	Signature	Date
Plan Reviewed By:		
Operations Chief:		
Printed Name	Signature	Date
Plan Approved By:		
Incident Commander:		
Printed Name	Signature	Date

5.5 DECONTAMINATION PLAN

Incident Name:	Location:
Effective Date of Plan:	Effective Time Period of Plan:
Spill Location:	Plan Prepared By:

- Work Zones:

  - Support (cold) zone
  - Contamination reduction (warm) zone
  - Exclusion (hot) zone

  These zones are identified by signs, barrier tape, or other means. Decontamination is performed in the contamination reduction zone. When responders exit the exclusion zone, they must be decontaminated.

  Crews are available to assist in decontamination procedures as needed. The crews shall wear appropriate Personal Protective Equipment (PPE) and are responsible for packaging and labeling of contaminated PPE.

- Decontamination Stations:

  Decontamination is performed within the contamination reduction zones or where otherwise designated. Decontamination stations are to be equipped and manned to assist personnel leaving a contaminated zone to remove, package, and label soiled or contaminated response equipment, thus preventing the spread of contaminants.

Listed below are recommended stations for a Decontamination Plan.

Note 1: Not all of these stations may be necessary. The actual type and number of stations will be decided by the Decontamination Group in conjunction with the Safety Officer based on the type of material released and the hazards of the material.

Note 2: Can sizes of 10 and 32 gallon in Minimum Decontamination Layout are recommended sizes. Actual container size used will depend upon availability (i.e. using a 55 gallon drum in lieu of a 32 gallon trash can).

5.5 DECONTAMINATION PLAN, CONTINUED

MAXIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Segregated equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Boot cover and glove wash	Scrub outer boot cover and gloves with decontamination solution or detergent and water.
STATION 3	Boot cover and glove rinse	Rinse off decontamination solution from Station 2 using copious amounts of water.
STATION 4	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
STATION 5	Boot cover removal	Remove boot covers and deposit in containers with plastic liner.
STATION 6	Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
STATION 7	Suit and boot wash	Wash splash suit, gloves, and safety boots. Scrub with a scrub brush and decontamination solution.
STATION 8	Suit, boot and glove rinse	Rinse off decontamination solution using water. Repeat as many times as necessary.
STATION 9	Canister or mask change	If worker leaves exclusion zone to change canister or this is the last step in the decontamination procedure, worker?s canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 10	Safety boot removal	Remove safety boots and deposit in container with plastic liner.
STATION 11	Suit removal	With assistance of helper, remove outer suit (Tyvek suits). Deposit in container with plastic liner.
STATION 12	Inner glove wash	Wash inner gloves with decontamination solution.
STATION 13	Inner glove rinse	Rinse inner gloves with water.
STATION 14	Face piece removal	Remove face piece. Deposit in container with

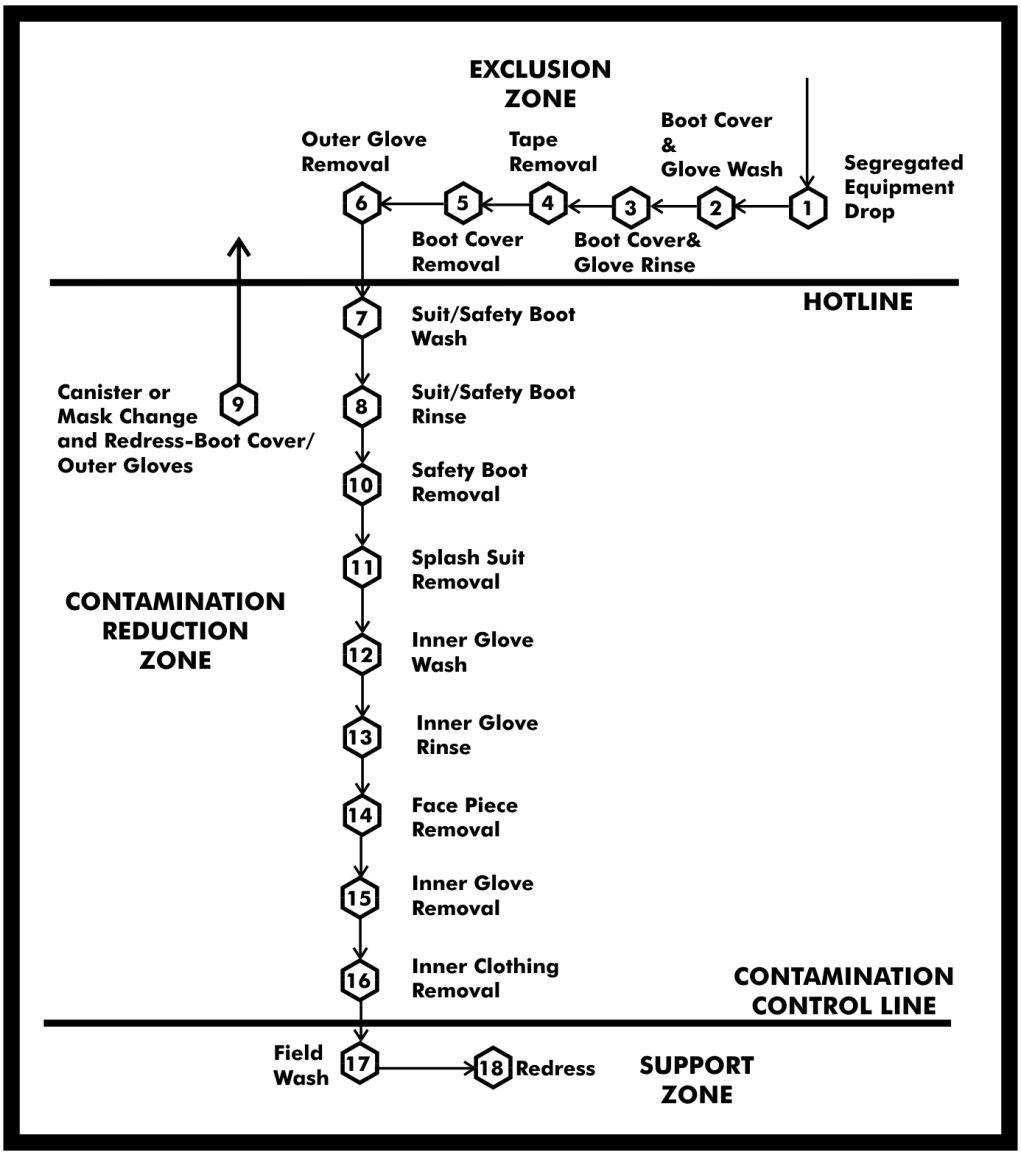
		plastic liner. Avoid touching face with fingers.
STATION 15	Inner glove removal	Remove inner gloves and deposit in lined container.

5.5 DECONTAMINATION PLAN, CONTINUED

MAXIMUM MEASURES FOR DECONTAMINATION, CONTINUED		
STATION 16	Inner clothing removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contamination might have been transferred in removing the protective suit.
STATION 17	Field wash	If highly toxic, skin-corrosive, or skin-absorbable materials are known or suspected to be present, work with safety; an on-site shower may be necessary. Wash hands and face if shower is not available.
STATION 18	Re-dress	Put on clean clothes. Exit point of the Decontamination Site.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



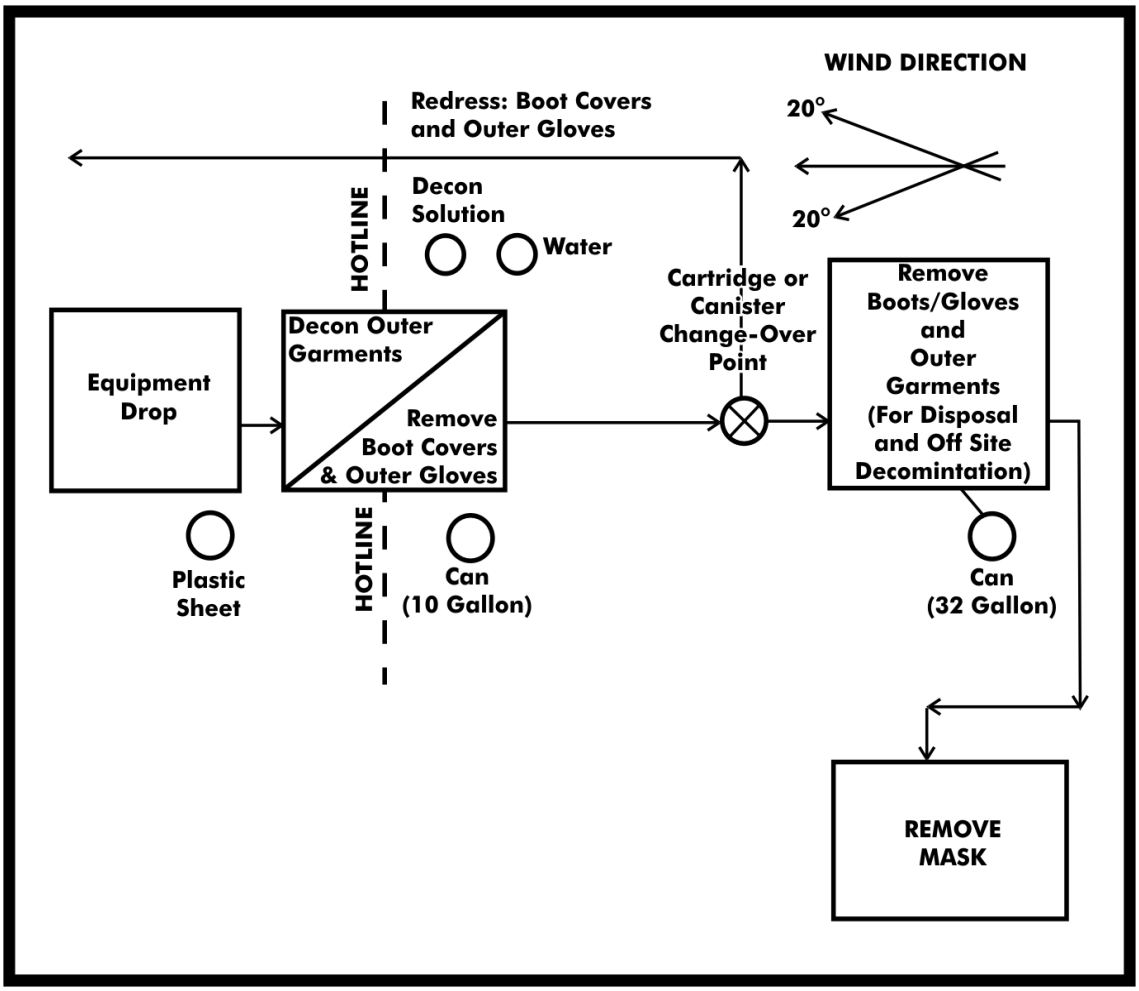
5.5 DECONTAMINATION PLAN, CONTINUED

MINIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Outer garment, boots, and gloves wash and rinse	Scrub outer boots, outer gloves, and splash suit with decontamination solution or detergent and water. Rinse off using copious amounts of water.
STATION 3	Outer boot and glove removal	Remove outer boots and gloves. Deposit in container with plastic liner.
STATION 4	Canister or mask	If worker leaves exclusion zone to change canister

	change	(or mask) or this is the last step in the decontamination procedures, worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 5	Boot, gloves, and outer garment removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic.
STATION 6	Face piece removal	Face piece is removed. Avoid touching face with fingers. Face piece deposited on plastic sheet.
STATION 7	Field wash	Hands and face are thoroughly washed. Shower as soon as possible. Exit point of the Decontamination Site.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.6 DISPOSAL PLAN

This Disposal Plan is to be completed after a discharge has taken place in and accordance with guidance presented in **SECTION 7.4**, "Waste Management".

Date:	Location:
Source of release:	
Amount of release:	
Incident name:	
State On-Scene Coordinator:	
Federal On-Scene Coordinator:	
Time required for temporary storage:	
Proposed storage method:	

Disposal priorities:

Sample date:	Sample ID:
Analysis required (type):	
Laboratory performing analysis:	

Disposal options:

	Available	Likely	Possible	Unlikely
Landfill:				
In situ/ bio-remediation:				
In situ burn:				
Pit burning:				
Hydrocyclone:				
Off site incineration:				
Reclaim:				
Recycle:				

Resources required for disposal options:

General information:

Generator name:	US EPA ID#:
Waste properties:	Waste name:
US EPA waste code:	State waste code:
EPA hazardous waste:	
Waste storage and transportation:	

Proposed storage method:
Proposed transportation method:

5.6 DISPOSAL PLAN, CONTINUED

Permits required for storage:
Permits required for transportation:
Estimated storage capacity:
Number and type of storage required:
Local storage available for temporary storage of recovered oil:

PPE required for waste handling:	
Waste coordinator:	Date:

Resources required for disposal options:

Incident name:	
Sample number:	Date sent:
Source of sample:	
Date sample data received:	
Waste hazardous:	Non-hazardous:
Permits/variances requested:	
Approval received on waste profile:	
Date disposal can begin:	
Disposal facilities:	
Profile number:	
Storage contractors:	

Waste transporters:
PPE designated and agrees with Site Safety and Health Plan:

5.6 DISPOSAL PLAN, CONTINUED

Additional information:
Waste coordinator:

5.7 INCIDENT SECURITY PLAN

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)



5.8 DEMOBILIZATION PLAN

Incident name:	**Location:**
Effective date of plan:	**Effective time period of plan:**
Incident location:	**Plan prepared by:**

Demobilization procedures:

- Each incident will require a Decontamination Area or designate where larger equipment may be sent for decontamination
- Operations Section will send resources not in use at a specific collection site to a designated decontamination sites for re-assignment or release
- Decontaminated equipment will be returned to appropriate staging area for release or re-deployment at other locations
- Long term information maintained by the Planning and Operations Section Chiefs may be utilized to assist in the prioritization of releasing equipment versus placing it on stand-

by

- Each Planning Section (Decontamination Site, Staging Area, and Logistics) will document the demobilization, decontamination, re-deployment, or release of equipment at each stage
- The Staging Group Leader will provide Demobilization Plan detailing re-deployment strategies on equipment, plus priorities on demobilization and release recommendations for equipment at the staging areas
- The Demobilization Plan is to be incorporated into the Incident Action Plan (IAP) for ICS Approval. As assigned by the Demobilization Plan within the IAP, equipment designated for re-assignment will be mobilized to the appropriate staging area
- The Operations Section will ensure that re-deployed personnel receive proper rest prior to returning to duty
- The Planning Section Chief will monitor personnel re-deployment activities to ensure number of hours worked is within acceptable guidelines
- Staging Group Leader will release equipment designated for release. Transports may be required for equipment if in remote staging area
- Once equipment is released and removed from staging areas, Logistics and the Finance Unit shall be informed to ensure invoicing reflects the dates released

SECTION 6 Last revised: June 17, 2011

SENSITIVE AREAS / RESPONSE TACTICS

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6.1 Area Description

6.2 Spill Containment / Recovery

Figure 6.2-1 - Response Tactics for Various Shorelines

6.3 Sensitive Area Protection

Figure 6.3-1 - Sensitive Area Protection Implement Sequence

Figure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques

6.4 Wildlife Protection and Rehabilitation

6.5 Endangered and Threatened Species by State

6.6 Sensitivity Maps

6.7 Tactical Plan Index

6.8 Tactical Maps

6.9 Tactical Plans

6.10 Areas of Concern

6.1 AREA DESCRIPTION

Description of shoreline types and specific shoreline protection and cleanup techniques are presented in **FIGURE 6.2-1 and FIGURE 6.3-2.** The strategies and response examples are guidelines and should be evaluated during the response to ensure that the selected response methods are appropriate for the situation.

Sensitivity maps are provided in **SECTION 6.6**.

6.2 SPILL CONTAINMENT / RECOVERY

Containment and recovery refer to techniques that can be employed to contain and recover terrestrial and aquatic petroleum spills.

Terrestrial spills typically result from pipeline or tank leaks. The Company is equipped with secondary containment systems for areas with non-pressurized breakout tanks. Spills occurring within the secondary containment area or along the pipeline areas should be contained at or near their source to minimize the size of the cleanup area and quantity of soil affected.

Containment is most effective when conducted near the source of the spill, where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or cleanup. The feasibility of effectively implementing containment and recovery techniques is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain in the spill area.

For terrestrial spills, trenches, earthen berms, or other dams are most often used to contain oil migration on the ground surface. Recovery of free oil is best achieved by using pumps, vacuum sources, and/or sorbents. Forming collection ponds for containing free product may be considered when attempting to recover free oil. Absorbents such as hay, straw, dry dirt or sand, and other commercial products (such as peat moss) may be considered as alternative methods of containment.

Spills that reach water spread faster than those on land. They also have greater potential to contaminate water supplies, to affect wildlife and populated areas, and to impact manmade structures and human activities. Responses on water should therefore emphasize stopping the spill, containing the oil near its source, and protecting sensitive areas before they are impacted.

Sorbents are used to remove minor on-water spills. For larger spills, booming is used to protect sensitive areas and to position oil so it can be removed with skimmers or vacuum trucks.

Due to entrainment, booming is not effective when the water moves faster than one knot or waves exceed 1.5 feet in height. Angling a boom will minimize entrainment. Using multiple, parallel booms will also improve recovery in adverse conditions. A summary of booming techniques is provided below.

Containment/Diversion Berming	• Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area • May cause disturbance of soils and some increased soil

	penetration
Blocking/Flow-Through Dams	• Construct dam in drainage course/stream bed to block and contain flow of spill. Cover with plastic sheeting. If water is flowing, install inclined pipes during dam construction to pass water underneath dam • May increase soil penetration
Culvert Blocking	• Block culvert with plywood, sandbags, sediments, etc. to prevent oil from entering culvert
Interception Trench	• Excavate ahead of advancing surface spill to contain spill and prevent further advancement; cover bottom and gradients with plastic • May cause disturbance of soils and increased soil penetration
Containment booming	• Boom is deployed around free oil • Boom may be anchored or left to move with the oil
Diversion booming	• Boom is deployed at an angle to the approaching oil • Oil is diverted to a less sensitive area • Diverted oil may cause heavy oil contamination to the shoreline downwind and down current • Anchor points may cause minor disturbance to the environment
Exclusion booming	• Boom is placed around a sensitive area or across an inlet, a river mouth, a creek mouth, or a small bay • Approaching oil is contained or deflected (diverted) by the boom • Anchor points may cause minor disturbance to the environment

Sorbent booming

- Used only on quiet water with minor oil contamination
- Boom is anchored along a shoreline or small areas of surface water (e.g. ponds, rivers, and creeks) and may be used in a manner which allows boom to work with the fluctuating water currents
- May use boom made of sorbent material or may pack sorbent material between multiple booms placed parallel to each other

Other cleanup methods include: natural recovery, manual removal/scraping, low-pressure flushing, warm water washing, and burning. Berms and dams are also used in shallow waterways to protect areas.

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://www.response.restoration.noaa.gov for the latter two.)

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY

Developed/ Unforested Land	• This class includes towns, cities, farms, pastures, fields, reclaimed wetlands, and other altered areas
	• Organisms and algae may be common in riprap structures and on pilings
		• Oil would percolate easily between the gravel and boulders of riprap structures
		• Oil would coat the intertidal areas of solid structures
		• Biota would be damaged or killed under heavy accumulations
			• May require high pressure spraying:
			  • To remove oil
			  • To prepare substrate for recolonization of barnacle and oyster communities
			  • For aesthetic reasons

Freshwater Flat	• Mud or organic deposits located along the shore or in shallow portions of nontidal freshwater lakes and ponds • They are exposed to low wave and current energy • They are often areas of heavy bird use	• Oil is expected to be deposited along the shoreline • Penetration of spilled oil into the water-saturated sediments of the flat will not occur • When sediments are contaminated, oil may persist for years	• These areas require high priority for protection against oil contamination • Cleanup of freshwater flats is nearly impossible because of soft substrate • Cleanup is usually not even considered because of the likelihood of mixing oil deeper into the

			sediments during the cleanup effort • Passive efforts, such as sorbent boom can be used to retain oil as it is naturally removed

Fresh Marsh	• Found along freshwater ponds and lakes
	• These marshes have various types of vegetative cover, including floating aquatic mats, vascular submerged vegetation, needle and broad-leaved deciduous scrubs and shrubs, and broad-leaved evergreen scrubs and shrubs
	• Birds and mammals extensively use fresh marshes for feeding and breeding purposes
		• Small amounts of oil will contaminate the outer marsh fringe only; natural removal by wave action can occur within months
		• Large spills will cover more area and may persist for decades
		• Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses
			• Marshes require the highest priority for shoreline protection
			• Natural recovery is recommended when:
			  • A small extent of marsh is affected
			  • A small amount of oil impacts the marsh fringe
			• The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats
			• Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots
			• Oil wrack and other debris may be removed by hand

Swamp	• Swamps are freshwater wetlands having varying water depths with vegetation types ranging from shrubs and scrubs to poorly drained forested wetlands. Major vegetative types include: scrubs, shrubs, evergreen trees, and hardwood	• Even small amounts of spilled oil can spread through the swamp • Large spills will cover more area and may persist for decades since water-flushing rates are low • Oil, particularly the heavy fuel oils, will adhere to swamp vegetation • Unlike mangroves,	• No cleanup recommended under light conditions • Under moderate to heavy accumulations, to prevent chronic oil pollution of surrounding areas placement of sorbent along fringe swamp forest (to absorb oil as it is slowly released) may be effective under close scientific supervision

	forested woodlands • Birds and mammals use swamps during feeding and breeding activities	the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted	• Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests • Oil trapped by boom can be reclaimed through the use of skimmers and vacuums

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Salt and Brackish Water Marshes	• Marshes are intertidal wetlands containing emergent, herbaceous vegetation. • Width of the marsh can vary widely, from a narrow fringe to extensive areas. • They are relatively sheltered from waves and strong currents. • Sediments are composed of organic muds except on the margins of barrier islands where sand is abundant. • Resident flora and fauna are abundant, with numerous species with high utilization by birds.	• Oil adheres readily to marsh vegetation. • The band of coating will vary widely, depending upon the water level at the time oil slicks are in the vegetation. There may be multiple bands. • Large slicks will persist through multiple water-level changes and coat the entire stem from the high-water line to the base. • If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, although lighter oils can penetrate deeper, to the limit of inundation. • Medium to heavy oils do not readily adhere to or penetrate the fine	• Under light oiling, the best practice is to let the area recover naturally. • Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transporting oil to sensitive areas down slope or along shore. • Cleanup activities should be carefully supervised to avoid vegetation damage. • Any cleanup activity must not mix the oil deeper into the sediments. Trampling of the roots must be minimized. • Cutting of oiled vegetation should only be considered when other resources are at great risk from leaving oiled

		sediments, but can pool on the surface or in burrows. • Light oils can penetrate the top few centimeters of sediment and deeply into burrows and cracks (up to one meter).	vegetation in place.
Open Water	• Have ocean like waves and currents • Weather changes effect on-water conditions • River mouths present problems • Thermal stratification occurs	• Most organisms are mobile enough to move out of the spill area • Aquatic birds are vulnerable to oiling • Human usage (such as transportation, water intakes, and recreational activities) may be restricted	• Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal
Large Rivers	• May have varying salinities, meandering channels, and high flow rates • May include manmade structures (such as dams and locks) • Water levels vary seasonally • Floods generate high suspended sediment and debris loads	• Fish and migratory birds are of great concern • Under flood conditions, may impact highly sensitive areas in floodplains • Human usage may be high • When sediments are contaminated, oil may persist for years	• Booming, skimming, and vacuuming are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal
Small Lakes and Ponds	• Water surface can be choppy • Water levels can fluctuate widely • May completely freeze in winter • Bottom sediments near the shore can be soft and muddy • Surrounding area	• Wildlife and socioeconomic areas likely to be impacted • Wind will control the oil's distribution	• Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods • Should not use containment booming, vacuuming, sorbents, and skimming on gasoline

	may include wet meadows and marshes		spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Small Rivers and Streams	• Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation • May include waterfalls, rapids, log jams, mid-channel bars, and islands • Weathering rates may be slower because spreading and evaporation are restricted	• Usually contaminate both banks and the water column, exposing a large number of biota to being oiled • Water intakes for drinking water, irrigation, and industrial use likely to be impacted	• Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods • Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills • Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn

6.3 SENSITIVE AREA PROTECTION

Protection refers to the implementation of techniques or methods to prevent oil from making contact with an area that is determined to be sensitive for aquatic, environmental, economic, cultural, or human use reasons. Implementation of sensitive area protection techniques should consider a number of factors such as sensitive features, priorities for areas to be protected, and potential degree of impact. In the event a product spill reaches a major area waterway, it may be necessary to protect downstream sensitive areas if it appears that local containment and recovery efforts will not be sufficient to control the entire spill. Major waterways and specific sensitive areas located downstream of the Facility are provided in SECTION 6.7.

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENT SEQUENCE

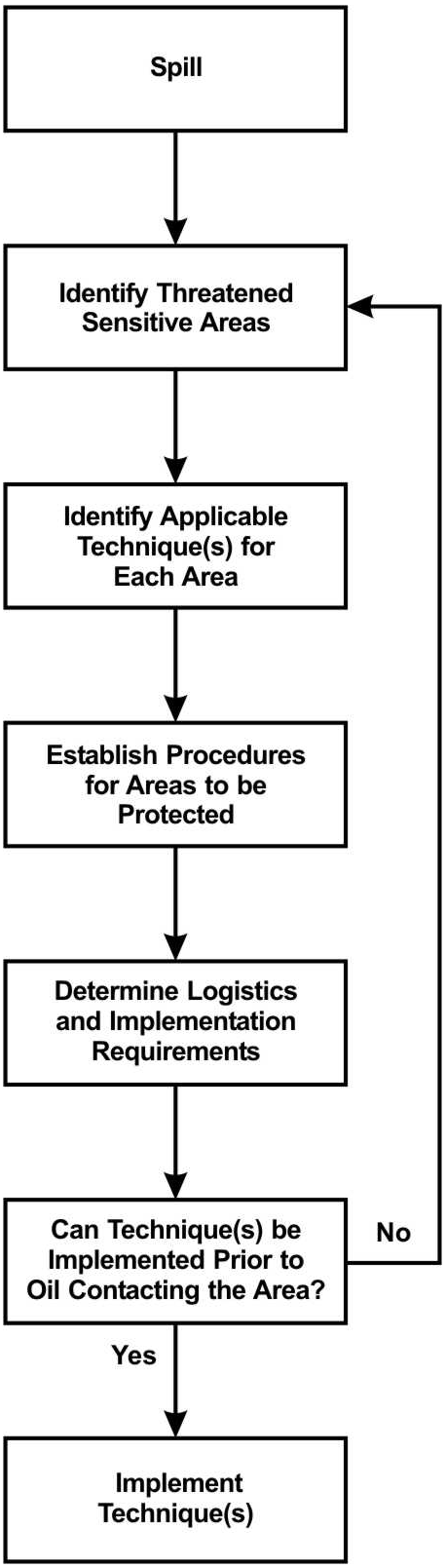


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL

				EFFECTS
Removal				
1. Manual Removal	Hand tool (scrapers, wire brushes, shovels, cutting tools, wheel barrows, etc.) are used to scrape oil off surfaces or recover oiled sediments, vegetation, or debris where oil conditions are light or sporadic and/or access is limited.	Equipment misc. hand tools Personnel 10-20 workers	• Can be used on all habitat types • Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses • In areas where roosting or birthing animals cannot or should not be disturbed	• Sediment disturbance and erosion potential
2. Mechanical Removal	Mechanical earthmoving equipment is used to remove oiled sediments and debris from heavily impacted areas with suitable access.	Equipment motor grader, backhoe, dump truck elevating scrapers Personnel 2-4 workers plus equipment operators	• On land, wherever surface sediments are accessible to heavy equipment • Large amounts of oiled materials	• Removes upper 2 to 12 inches of sediments
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc. to remove and recover the oil.	Equipment misc. hand tools misc. sorbents Personnel 2-10 workers	• Can be used on all habitat types • Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal • Sensitive areas where access is	• Sediment disturbance and erosion potential • Trampling of vegetation and organisms • Foot traffic can work oil deeper into soft sediments

			restricted	
4. Vacuum / Pumps / Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	Equipment 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads Personnel 2-6 workers plus truck operators	• Can be used on all habitat types • Stranded oil on the substrate • Shoreline access points	• Typically does not remove all oil • Can remove some surface organisms, sediments, and vegetation
Washing				
5. Flooding	High volumes of water at low pressure are used to flood the oiled area to float oil off and out of sediments and back into the water or to a containment area where it can be recovered.? Frequently used with flushing.	Equipment 1-5 100- to 200-gpm pumping systems 1 100-ft perforated header hose per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 6-8 workers per system	• All shoreline types except steep intertidal areas • Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate • Where oil has penetrated into gravel sediments • Used with other washing techniques	• Can impact clean downgradient areas • Can displace some surface organisms if present • Sediments transported into water can affect water quality

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove	Equipment 1-5 50- to 100-gpm/ 100-psi pumping systems with manifold 1-4 100-ft hoses	• Substrates, riprap, and solid man-made structures • Oil stranded	• Can impact clean downgradient areas • Will displace many surface

	oil from surface or near-surface sediments through agitation and direct contact.? Oil is flushed back into the water or a collection point for subsequent recovery.? May also be used to flush out oil trapped by shoreline or aquatic vegetation.	and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 8-10 workers per system	onshore • Floating oil on shallow intertidal areas	organisms if present • Sediments transported into water can affect water quality • Hot water can be lethal to many organisms • Can increase oil penetration depth
7. Spot (High Pressure Washing)	High pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective.? Oil is directed back into water or collection point for subsequent recovery.	Equipment 1-5 1,200- to 4,000-psi units with hose and spray wand 1-2 100-ft containment booms per unit 1 oil recovery device per unit Personnel 2-4 workers per unit	• Bedrock, man-made structures, and gravel substrates • When low-pressure flushing is not effective • Directed water jet can remove oil from hard to reach sites	• Will remove most organisms if present • Can damage surface being cleaned • Can affect clean downgradient or nearby areas
In Situ				
8. Passive Collection	Sorbent/snare booms or other sorbent materials are anchored at the waterline adjacent to heavily oiled areas to contain and recover oil as it leaches from the sediments.	Equipment 1,000-2,000 ft sorbent/snare boom 200-400 stakes or anchor systems Personnel 4-10 workers	• All shoreline types • Calm wave action • Slow removal process	• Significant amounts of oil can remain on the shoreline for extended periods of time
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface	Equipment 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools Personnel	• Any sedimentary substrate that can support heavy equipment • Sand and	• Significant amounts of oil can remain on the shoreline for extended periods of time • Disturbs surface

	sediments to maximize natural degradation processes.	2-10 workers	gravel beaches with subsurface oil • Where sediment is stained or lightly oiled • Were oil is stranded above normal high waterline	sediments and organisms

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
10. In Situ Bioremediation	Fertilizer is applied to lightly to moderately oiled areas to enhance microbial growth and subsequent biodegradation of oil.	Equipment 1-2 fertilizer applicators 1 tilling device if required Personnel 2-4 workers	• Any shoreline habitat type where nutrients are deficient Moderate to heavily oiled substrates After other techniques have been used to remove free product on lightly oiled shorelines Where other techniques are destructive or ineffective	• Significant amounts of oil can remain on the shoreline for extended periods of time • Can disturb surface sediments and organisms
11. Log/Debris?? Burning	Oiled logs, driftwood, vegetation, and debris are	Equipment 1 set of fire control equipment 2-4 fans	• On most habitats except dry muddy	• Heat may impact local near-surface organisms

	burned to minimize material handling and disposal requirements.? Material should be stacked in tall piles and fans used to ensure a hot, clean burn.	1 supply of combustion promoter Personnel 2-4 workers	substrates where heat may impact the biological productivity of the habitat • Where heavily oiled items are difficult or impossible to move • Many potential applications on ice	• Substantial smoke may be generated • Heat may impact adjacent vegetation
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	• All habitat types • When natural removal rates are fast • Degree of oiling is light • Access is severely restricted or dangerous to cleanup crews • When cleanup actions will do more harm than natural removal	• Oil may persist for significant periods of time • Remobilized oil or sheens may impact other areas • Higher probability of impacting wildlife
13. Dispersants (use of dispersants requires Federal or State approval)	Dispersants are used to reduce the oil/water interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. ? Specially formulated	Dispersants Boat or aircraft	• Water bodies with sufficient depth and volume for mixing and dilution • When the impact of the floating oil has been determined to be greater than the	• Use in shallow water could affect benthic resources • May adversely impact organisms in the upper 30 feet of the water column • Some water-surface and shoreline impacts could

	products containing surface-active agents are sprayed from aircraft or boats onto the slick.		impact of dispersed oil on the water-column community	occur
1 - Per 1000 feet of shoreline or oiled area				

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://response.restoration.noaa.gov for the latter two).

6.4 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the response but will not typically directly manage these efforts.
- Domestic Animal Specialists such as veterinarians may be utilized to rescue or clean oiled animals such as livestock, dogs, horses, etc. **FIGURE 3.1-7**, Additional Resources and Telephone Numbers.
- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies are included in **FIGURE 3.1-5**.
- Wildlife rehabilitation specialists may be utilized to assist in capturing and rehabilitating oiled wildlife as well as deterring unaffected animals away from the spill site. **FIGURE 3.1-7**, Additional Resources and Telephone Numbers.

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Adder's-mouth, Bog	*Malaxis paludosa*	Habitat includes rich conifer swamps of Picea mariana (black spruce) and Larix laricina (tamarack). In its chosen habitat, M. paludosa generally occurs on hummocks of Sphagnum spp. (sphagnum moss).	E (State)	Minnesota	Hubbard County

Adder's-mouth, Bog	*Malaxis paludosa*	Habitat includes rich conifer swamps of Picea mariana (black spruce) and Larix laricina (tamarack). In its chosen habitat, M. paludosa generally occurs on hummocks of Sphagnum spp. (sphagnum moss).	E (State)	Minnesota	Clearwater County
Bartonia, Virginia	*Bartonia virginica*	Habitat is restricted to conifer swamps and in wet meadows at the edge of conifer swamps.	E (State)	Minnesota	Anoka County
Beak-rush, Hair-like	*Rhynchosporta capillacea*	Habitat includes calcareous fens, as they occur in the prairie region of the state. Calcareous fens are groundwater-maintained wetlands that have a deep accumulation of peat.	T (State)	Minnesota	Clearwater County
Beak-rush, Hair-like	*Rhynchosporta capillacea*	Habitat includes calcareous fens, as they occur in the prairie region of the state. Calcareous fens are groundwater-maintained wetlands that have a deep accumulation of peat.	T (State)	Minnesota	Dakota County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Beak-rush, Hair-like	*Rhynchosporta capillacea*	Habitat includes calcareous fens, as they occur in the prairie region of the state. Calcareous fens are groundwater-maintained wetlands that have a deep accumulation of peat.	T (State)	Minnesota	Stearns County
Beak-rush, Hair-like	*Rhynchosporta capillacea*	Habitat includes calcareous fens, as they occur in the prairie region of the state. Calcareous fens are groundwater-maintained wetlands that have a deep accumulation of peat.	T (State)	Minnesota	Carver County

Beak-rush, Hair-like	*Rhynchosporta capillacea*	Habitat includes calcareous fens, as they occur in the prairie region of the state. Calcareous fens are groundwater-maintained wetlands that have a deep accumulation of peat.	T (State)	Minnesota	Scott County
Beetle, Little White Tiger	*Cicindela lepida*	Inhabits steep, open, blowing sand dunes.	T (State)	Minnesota	Anoka County
Beetle, Little White Tiger	*Cicindela lepida*	Inhabits steep, open, blowing sand dunes.	T (State)	Minnesota	Hennepin County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Beetle, Little White Tiger	*Cicindela lepida*	Inhabits steep, open, blowing sand dunes.	T (State)	Minnesota	Morrison County
Bluegrass, Bog	*Poa paludigena*	Habitat is restricted to wetland habitats that are maintained by groundwater seeps. These may include swamps, sedge meadows, margins of small pools, or rivulets of water.	T (State)	Minnesota	Morrison County
Bluegrass, Bog	*Poa paludigena*	Habitat is restricted to wetland habitats that are maintained by groundwater seeps. These may include swamps, sedge meadows, margins of small pools, or rivulets of water.	T (State)	Minnesota	Benton County
Bluegrass, Bog	*Poa paludigena*	Habitat is restricted to wetland habitats that are maintained by groundwater seeps. These may include swamps, sedge meadows, margins of small pools, or rivulets of water.	T (State)	Minnesota	Washington County

Bush Clover, Prairie	*Lespedeza leptostachya*	Habitat includes native prairie areas and pastures that have retained many of the original prairie species.	T	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Bush Clover, Prairie	*Lespedeza leptostachya*	Habitat includes native prairie areas and pastures that have retained many of the original prairie species.	T	Minnesota	Dakota County
Butterfly	*Ellipsaria lineolata*	Riparian habitat required. Habitats include areas of large rivers with swift currents in sand or gravel substrates.	E (State)	Minnesota	Washington County
Butterfly	*Ellipsaria lineolata*	Riparian habitat required. Habitats include areas of large rivers with swift currents in sand or gravel substrates.	E (State)	Minnesota	Dakota County
Butterfly	*Ellipsaria lineolata*	Riparian habitat required. Habitats include areas of large rivers with swift currents in sand or gravel substrates.	E (State)	Minnesota	Hennepin County
Butterfly	*Ellipsaria lineolata*	Riparian habitat required. Habitats include areas of large rivers with swift currents in sand or gravel substrates.	E (State)	Minnesota	Carver County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON	SCIENTIFIC	HABITAT	STATUS	STATE	COUNTY

NAME	NAME				
Butterfly	*Ellipsaria lineolata*	Riparian habitat required. Habitats include areas of large rivers with swift currents in sand or gravel substrates.	E (State)	Minnesota	Scott County
Butterfly, Karner Blue	*Lycaeides melissa samuelis*	Habitat is restricted to a mosaic of oak savanna and sand barrens habitats in the southeast, where wild blue lupine is common.	E	Minnesota	Anoka County
Caddisfly, Headwaters Chilostigman	*Chilostigma itascae*	Habitat includes rich swamp to poor fen habitats within a large, acid to minerotrophic peatland complex.	E (State)	Minnesota	Clearwater County
Chickweed, Forked	*Paronychia fastigiata*	Habitat includes dry woods and openings. Minnesota populations have been found in open, sandy ground and on a southwest-facing bank in a partially shaded, deciduous forest.	E (State)	Minnesota	Washington County
Clubmoss, Rock	*Huperzia porophila*	Habitat primarily found on sandstone bluffs and ledges in southeastern Minnesota. However, beginning in 2000, the species was found at a number of sites in northeastern Minnesota on diabase cliffs. Sites in the northeast are typically northerly facing, wooded habitats that are moist and well shaded.	E (State)	Minnesota	Hennepin County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY

Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Washington County
Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Dakota County
Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Hennepin County
Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Carver County
Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Sibley County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Ebonyshell	*Fusconaia ebena*	Requires riparian environment. The ebony shell mussel primarily inhabits large rivers in sand or gravel.	E (State)	Minnesota	Scott County
Elephant-ear	*Elliptio crassidens*	Requires riparian environment. Inhabits large rivers in mud, sand or fine gravel.	E (State)	Minnesota	Dakota County

Elephant-ear	*Elliptio crassidens*	Requires riparian environment. Inhabits large rivers in mud, sand or fine gravel.	E (State)	Minnesota	Hennepin County
Elephant-ear	*Elliptio crassidens*	Requires riparian environment. Inhabits large rivers in mud, sand or fine gravel.	E (State)	Minnesota	Carver County
Elephant-ear	*Elliptio crassidens*	Requires riparian environment. Inhabits large rivers in mud, sand or fine gravel.	E (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Elephant-ear	*Elliptio crassidens*	Requires riparian environment. Inhabits large rivers in mud, sand or fine gravel.	E (State)	Minnesota	Washington County
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Washington County
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Dakota County
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Hennepin County

Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Wright County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Carver County
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Sibley County
Elktoe	*Alasmidonta marginata*	Requires riparian environment. Inhabitant of medium to large rivers. Suitable habitats include sand and gravel substrates in areas with moderate to fast velocities.	T (State)	Minnesota	Scott County
Ellipse	*Venustaconcha ellipsiformis*	Requires riparian environment. Occurs primarily in the headwater reaches of rivers in gravel riffles and silty areas along stream banks.	T (State)	Minnesota	Rice County
		Requires riparian environment. Occurs			

Ellipse	*Venustaconcha ellipsiformis*	primarily in the headwater reaches of rivers in gravel riffles and silty areas along stream banks.	T (State)	Minnesota	Steele County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Ellipse	*Venustaconcha ellipsiformis*	Requires riparian environment. Occurs primarily in the headwater reaches of rivers in gravel riffles and silty areas along stream banks.	T (State)	Minnesota	Washington County
Ellipse	*Venustaconcha ellipsiformis*	Requires riparian environment. The ellipse occurs in the swift currents of riffles or runs of clear, small to medium sized streams in gravel or sand and gravel substrates.	T (State)	Minnesota	Dakota County
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Benton County
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Sherburne County
		Habitat includes cliff ledges along rivers or			

Falcon, Peregrine	*Falco peregrinus*	lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Anoka County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Washington County
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Dakota County
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Hennepin County
		Habitat includes cliff ledges along rivers or lakes. Presently, they nest			

Falcon, Peregrine	*Falco peregrinus*	primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Stearns County
Falcon, Peregrine	*Falco peregrinus*	Habitat includes cliff ledges along rivers or lakes. Presently, they nest primarily on buildings and bridges in urban settings and use historic eyries on cliffs along Lake Superior and the Mississippi River in southeastern Minnesota.	T (State)	Minnesota	Wright County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Fameflower, Rough-seeded	*Talinum rugospermum*	Habitat includes open, sandy habitats. These include sandy terraces, fluvial sand dunes associated with rivers, and sand barrens with Pinus banksiana (jack pine), Quercus ellipsoidalis (northern pin oak), or Q. velutina (black oak).	E (State)	Minnesota	Scott County
Fameflower, Rough-seeded	*Talinum rugospermum*	Habitat includes open, sandy habitats. These include sandy terraces, fluvial sand dunes associated with rivers, and sand barrens with Pinus banksiana (jack pine), Quercus ellipsoidalis (northern pin oak), or Q. velutina (black oak).	E (State)	Minnesota	Rice County
Foxglove, Eared False	*Agalinis auriculata*	Habitats include prairies, particularly prairie remnants along railroad rights-of-way.	E (State)	Minnesota	Dakota County

Foxglove, Eared False	*Agalinis auriculata*	Habitats include prairies, particularly prairie remnants along railroad rights-of-way.	E (State)	Minnesota	McLeod County
Foxglove, Fernleaf False	*Aureolaria pedicularia*	Habitat restricted to dry, sand savanna or dry, open, oak woods with acidic soil. It exhibits a strong dependence upon oak trees, especially Quercus ellipsoidalis (northern pin oak) and Q. velutina (black oak).	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Frog, Northern Cricket	*Acris crepitans*	Preferred habitat includes shallow wetlands, lakes, streams, or rivers, and are rarely found in large lakes, wide rivers, or polluted sites. They typically occupy areas along the water's edge, and prefer open areas with muddy shorelines and abundant emergent vegetation.	E (State)	Minnesota	Hinnepin County
Fungus, A species of	*Psathyrella rhodospora*	The more recent finds have been on and beside a large, undecayed Populus deltoides (cottowood) stump located on a bank above the Mississippi River (McLaughlin 1998) and under a large P. deltoides located on the St. Paul campus of the University of Minnesota.	E (State)	Minnesota	Hennepin County
Fungus, A species of	*Psathyrella cystidiosa*	Habitat was found in only two recent collections, found on the ground and also scattered along a dead branch on the ground. Both were found in	E (State)	Minnesota	Washington County

		deciduous forests.			
Fungus, A species of	*Psathyrella cystidiosa*	Habitat was found in only two recent collections, found on the ground and also scattered along a dead branch on the ground. Both were found in deciduous forests.	E (State)	Minnesota	Hennepin County
Fungus, A species of	*Psathyrella rhodospora*	The more recent finds have been on and beside a large, undecayed Populus deltoides (cottowood) stump located on a bank above the Mississippi River (McLaughlin 1998) and under a large P. deltoides located on the St. Paul campus of the University of Minnesota.	E (State)	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Golden-seal	*Hydrastis canadensis*	Habitat includes mesic hardwood forest, usually in sheltered ravines or on talus slopes. It appears to be intolerant of grazing or disturbances that open the forest canopy.	E (State)	Minnesota	Rice County
Grapefern, Blunt-lobed	*Botrychium oneidense*	Habitat includes moist loam in low areas, swamp edges, or between the high and low water marks of vernal pools.	E (State)	Minnesota	Anoka County
Grapefern, Blunt-lobed	*Botrychium oneidense*	Habitat includes moist loam in low areas, swamp edges, or between the high and low water marks of vernal pools.	E (State)	Minnesota	Washington County
Grapefern, St. Lawrence	*Botrychium rugulosum*	Habitat includes low, moist habitats in brushy or grassy areas and in open forest areas.	T (State)	Minnesota	Sherburne County

Grapefern, St. Lawrence	*Botrychium rugulosum*	Habitat includes low, moist habitats in brushy or grassy areas and in open forest areas.	T (State)	Minnesota	Anoka County

T - Threatened
E - Endangered

Minnesota Zone 6 - 28

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Grapefern, St. Lawrence	*Botrychium rugulosum*	Habitat includes low, moist habitats in brushy or grassy areas and in open forest areas.	T (State)	Minnesota	Washington County
Grapefern, St. Lawrence	*Botrychium rugulosum*	Habitat includes low, moist habitats in brushy or grassy areas and in open forest areas.	T (State)	Minnesota	Todd County
Grass, Twisted Yellow-eyed	*Xris torta*	Habitat is restricted to wet, sandy shores of shallow lakes in the Anoka Sandplain and in sandy or peaty meadows or swales.	E (State)	Minnesota	Anoka County
Grebe, Horned	*Podiceps auritus*	Habitat includes marshes and lakes The species builds floating nests, so on large water bodies (over 10 ha (24.7 ac.)) they prefer to use bays and inlets, which provide protection from wind and wave action. Nests are constructed in shallow water, usually within emergent vegetation.	T (State)	Minnesota	Wright County
Grebe, Horned	*Podiceps auritus*	Habitat includes marshes and lakes The species builds floating nests, so on large water bodies (over 10 ha (24.7 ac.)) they prefer to use bays and inlets, which provide protection from wind and wave action. Nests are constructed in shallow water, usually within emergent vegetation.	T (State)	Minnesota	McLeod County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Higgens eye (pearly mussel)	*Lampsilis higginsii*	Requires riparian environment. Habitat includes larger rivers in areas with deep water and moderate currents.	E	Minnesota	Dakota County
Higgens eye (pearly mussel)	*Lampsilis higginsii*	Requires riparian environment. Habitat includes larger rivers in areas with deep water and moderate currents.	E	Minnesota	Hennepin County
Higgens eye (pearly mussel)	*Lampsilis higginsii*	Requires riparian environment. Habitat includes larger rivers in areas with deep water and moderate currents.	E	Minnesota	Carver County
Higgens eye (pearly mussel)	*Lampsilis higginsii*	Requires riparian environment. Habitat includes larger rivers in areas with deep water and moderate currents.	E	Minnesota	Scott County
Higgens eye (pearly mussel)	*Lampsilis higginsii*	Requires riparian environment. Habitat includes larger rivers in areas with deep water and moderate currents.	E	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Indian-plantain,	*Arnoglossum plantagineum*	Habitat is largely restricted to native, moist prairies in the southern portion of the state. A few	T (State)	Minnesota	Dakota County

Tuberous		populations are found on bluff prairies where the soil is dry.			
Indian-plantain, Tuberous	*Arnoglossum plantagineum*	Habitat is largely restricted to native, moist prairies in the southern portion of the state. A few populations are found on bluff prairies where the soil is dry.	T (State)	Minnesota	Steele County
Indian-plantain, Tuberous	*Arnoglossum plantagineum*	Habitat is largely restricted to native, moist prairies in the southern portion of the state. A few populations are found on bluff prairies where the soil is dry.	T (State)	Minnesota	Freeborn County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Washington County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Dakota County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
		Habitat includes oak savanna communities, though it also occurs in dry prairies and oak			

Kitten-tails	*Besseya bullii*	woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Hennepin County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Rice County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Carver County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Scott County
Kitten-tails	*Besseya bullii*	Habitat includes oak savanna communities, though it also occurs in dry prairies and oak woodlands (including dry-mesic oak (maple) woodlands, dry-mesic oak-hickory woodlands, and dry-mesic pine-oak woodlands).	T (State)	Minnesota	Morrison County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lady's-slipper, Ram's-head	*Cypripedium arietinum*	Habitat includes coniferous forest habitats. Several populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Clearwater County
Lady's-slipper, Ram's-head	*Cypripedium arietinum*	Habitat includes coniferous forest habitats. Several populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Hubbard County
Lady's-slipper, Ram's-head	*Cypripedium arietinum*	Habitat includes coniferous forest habitats. Several populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Wadena County
Lady's-slipper, Ram's-head	*Cypripedium arietinum*	Habitat includes coniferous forest habitats. Several populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Anoka County
		Habitat includes coniferous forest habitats. Several			

Lady's-slipper, Ram's-head	*Cypripedium arietinum*	populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Stearns County

T - Threatened
E - Endangered

Minnesota Zone 6 - 33

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lady's-slipper, Ram's-head	*Cypripedium arietinum*	Habitat includes coniferous forest habitats. Several populations occur in swamps, bogs, or lowland forests dominated by Thuja occidentalis (northern white cedar), Larix laricina (tamarack), Abies balsamea (balsam fir), or Picea mariana (black spruce).	T (State)	Minnesota	Wright County
Lily, Dwarf Trout	*Erythronium propullans*	Habitat is most commonly a wooded floodplain or river terrace, or a north-facing slope above or near a stream. The plants typically occupy the lower part of the slope but may extend nearly to the top of the slope or descend into the level floodplain.	E	Minnesota	Rice County
Lily, Dwarf Trout	*Erythronium propullans*	Habitat is most commonly a wooded floodplain or river terrace, or a north-facing slope above or near a stream. The plants typically occupy the lower part of the slope but may extend nearly to the top of the slope or descend into the level floodplain.	E	Minnesota	Steele County
		Habitat is most commonly a wooded floodplain or river terrace, or a north-			

Lily, Dwarf Trout	*Erythronium propullans*	facing slope above or near a stream. The plants typically occupy the lower part of the slope but may extend nearly to the top of the slope or descend into the level floodplain.	E	Minnesota	Carver County
Lily, Dwarf Trout	*Erythronium propullans*	Habitat is most commonly a wooded floodplain or river terrace, or a north-facing slope above or near a stream. The plants typically occupy the lower part of the slope but may extend nearly to the top of the slope or descend into the level floodplain.	E	Minnesota	Hennepin County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Washington County
Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Dakota County
Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Hennepin County
Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Carver County

Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Sibley County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Mapleleaf, Winged	*Quadrula fragosa*	Requires riparian environment. Habitat includes riffles with clean gravel, sand, or rubble bottoms and in clear, high quality water.	E	Minnesota	Scott County
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild quinine).	T (State)	Minnesota	Dakota County
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild quinine).	T (State)	Minnesota	Rice County
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild	T (State)	Minnesota	Steele County

		quinine).			
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild quinine).	T (State)	Minnesota	Freeborn County

T - Threatened
E - Endangered

Minnesota Zone 6 - 36

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild quinine).	T (State)	Minnesota	McLeod County
Milkweed, Sullivant's	*Asclepias sullivantii*	Habitat restricted to undisturbed mesic tallgrass prairies. It frequently occurs with other declining prairie species such as Arnoglossum plantagineum (tuberous Indian-plantain) and Parthenium integrifolium (wild quinine).	T (State)	Minnesota	Sibley County
Milkwort, Cross-leaved	*Polygala cruciata*	Habitat includes wet, sandy shores of shallow lakes in the Anoka Sand Plain, and in sandy or peaty meadows or swales.	E (State)	Minnesota	Sherburne County
Milkwort, Cross-leaved	*Polygala cruciata*	Habitat includes wet, sandy shores of shallow lakes in the Anoka Sand Plain, and in sandy or peaty meadows or swales.	E (State)	Minnesota	Anoka County

Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Dakota County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Hennepin County
Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Carver County
Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and	T (State)	Minnesota	Sibley County

		small trees are found.			
Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Scott County
Monkeyface	*Quadrula metanevra*	Requires riparian environment. Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Moonwort, Triangle	*Botrychium lanceolatum*	Habitat includes moist, shady, mature northern hardwood forests, particularly in low areas.	T (State)	Minnesota	Morrison County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Morrison County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Washington
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Dakota County
		Inhabits medium to large			

Mucket	*Actinonaias ligamentina*	rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Hennepin County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Rice County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Steele County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Carver County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Sibley County
Mucket	*Actinonaias ligamentina*	Inhabits medium to large rivers. Substrates that are most preferred include coarse sand and gravel.	T (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
		Habitats are restricted to			

Nut-rush, Tall	*Scleria triglomerata*	native sand savannas and sand prairies, often in areas of sand dune formations. Found in very localized microhabitats at each site, usually in moist soil near wet swales or wet meadows.	E (State)	Minnesota	Anoka County
Nut-rush, Tall	*Scleria triglomerata*	Habitats are restricted to native sand savannas and sand prairies, often in areas of sand dune formations. Found in very localized microhabitats at each site, usually in moist soil near wet swales or wet meadows.	E (State)	Minnesota	Dakota County
Nut-rush, Tall	*Scleria triglomerata*	Habitats are restricted to native sand savannas and sand prairies, often in areas of sand dune formations. Found in very localized microhabitats at each site, usually in moist soil near wet swales or wet meadows.	E (State)	Minnesota	Sherburne County
Orchid, Western Prairie Fringed	*Platanthera praeclara*	Habitat is almost exclusively in remnant native prairies and sedge meadows. The majority of sites occur in full sunlight on moist, calcareous till or sandy soils.	T (Federal) E (State)	Minnesota	Freeborn County
Paddlefish	*Polyodon spathula*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.	T (State)	Minnesota	Hennepin County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Paddlefish	*Polyodon spathula*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.	T (State)	Minnesota	Dakota County
Paddlefish	*Polyodon spathula*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.	T (State)	Minnesota	Carver County
Paddlefish	*Polyodon spathula*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.	T (State)	Minnesota	Sibley County
Paddlefish	*Polyodon*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow	T (State)	Minnesota	Washington

	spathula	lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.			County
Paddlefish	*Polyodon spathula*	Aquatic habitat required. Preferred habitat includes open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. In the upper Mississippi River drainage, they have been associated with areas of deep water and low current velocities.	T (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Phalarope, Wilson's	*Phalaropus tricolor*	Habitat includes wet prairie, rich fen, and other grass- or sedge-dominated wetlands. The presence of short vegetation in or adjacent to shallow pools of open water is an important microhabitat feature.	T (State)	Minnesota	Morrison County
Phalarope, Wilson's	*Phalaropus tricolor*	Habitat includes wet prairie, rich fen, and other grass- or sedge-dominated wetlands. The presence of short vegetation in or adjacent to shallow pools of open water is an important microhabitat feature.	T (State)	Minnesota	Anoka County
		Habitat includes wet prairie, rich fen, and other			

Phalarope, Wilson's	*Phalaropus tricolor*	grass- or sedge-dominated wetlands. The presence of short vegetation in or adjacent to shallow pools of open water is an important microhabitat feature.	T (State)	Minnesota	Washington County
Phalarope, Wilson's	*Phalaropus tricolor*	Habitat includes wet prairie, rich fen, and other grass- or sedge-dominated wetlands. The presence of short vegetation in or adjacent to shallow pools of open water is an important microhabitat feature.	T (State)	Minnesota	Stearns County
Phalarope, Wilson's	*Phalaropus tricolor*	Habitat includes wet prairie, rich fen, and other grass- or sedge-dominated wetlands. The presence of short vegetation in or adjacent to shallow pools of open water is an important microhabitat feature.	T (State)	Minnesota	Todd County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Anoka County
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Washington County
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Dakota County

Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Hinnepin County
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Steele County
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Carver County
Pigtoe, Round	*Pleurobema coccineum*	Riparian environment required. Primarily in medium to large rivers but occasionally occurs in smaller rivers.	T (State)	Minnesota	Scott County
Pinweed, Narrow-leaved	*Lechea tenuifolia*	Inhabits dry, sandy prairies or openings in sand savannas. In neighboring states it is found in similar habitats such as sandstone outcrops, sandy slopes, and open, sandy woods.	E (State)	Minnesota	Dakota County
Pinweed, Narrow-leaved	*Lechea tenuifolia*	Inhabits dry, sandy prairies or openings in sand savannas. In neighboring states it is found in similar habitats such as sandstone outcrops, sandy slopes, and open, sandy woods.	E (State)	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pinweed, Narrow-leaved	*Lechea tenuifolia*	Inhabits dry, sandy prairies or openings in sand savannas. In neighboring states it is found in similar habitats such as sandstone outcrops, sandy slopes, and open, sandy woods.	E (State)	Minnesota	Washington County
Pistolgrip	*Tritogonia cerrucosa*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	Washington County
Pistolgrip	*Tritogonia cerrucosa*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	Dakota County
Pistolgrip	*Tritogonia cerrucosa*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	Hinnepin County
Pistolgrip	*Tritogonia cerrucosa*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	Carver County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
	Tritogonia	Riparian environment required. Habitat include			Sibley

Pistolgrip	*cerrucosa*	larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	County
Pistolgrip	*Tritogonia cerrucosa*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	T (State)	Minnesota	Scott County
Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Dakota County
Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Hennepin County
Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Carver County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY

Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Sibley County
Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Scott County
Pocketbook, Rock	*Arcidens confragosus*	Requires riparian environment. Inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials.	E (State)	Minnesota	Washington County
Polanisia, James'	*Cristatella jamesii*	Habitat includes sandy or sandy-gravelly soil in dry, open settings with sand prairie species. The sites are all on post-glacial stream deposits, especially where glacial melt water streams cut into fluvial deposits creating coulees or small valleys.	E (State)	Minnesota	Washington County
Polanisia, James'	*Cristatella jamesii*	Habitat includes sandy or sandy-gravelly soil in dry, open settings with sand prairie species. The sites are all on post-glacial stream deposits, especially where glacial melt water streams cut into fluvial deposits creating coulees	E (State)	Minnesota	Dakota County

		or small valleys.			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Polanisia, James'	*Cristatella jamesii*	Habitat includes sandy or sandy-gravelly soil in dry, open settings with sand prairie species. The sites are all on post-glacial stream deposits, especially where glacial melt water streams cut into fluvial deposits creating coulees or small valleys.	E (State)	Minnesota	Scott County
Pondweed, Diverse-leaved	*Potamogeton diversifolius*	Habitat is restricted to clear lakes on the Anoka Sand Plain with relatively low levels of dissolved minerals (soft water).	E (State)	Minnesota	Anoka County
Pondweed, Snailseed	*Potamogeton bicupulatus*	Primarily occurs in clear, soft water lakes.		Minnesota	Anoka County
Rail, King	*Rallus elegans*	Habitat includes a wide variety of shallow freshwater, brackish, or saltwater marshes. A complex of wetland types is ideal for breeding, as densely vegetated sites are used for nesting, and drier areas are used for foraging by pairs and their broods.	E (State)	Minnesota	McLeod County
Rattlesnake, Timber	*Crotalus horridus*	Habitat includes forested bluffs, south-facing rock outcrops, and bluff prairies, particularly in the Mississippi River valley. Bluff prairies located on steep, south or west-facing hillsides, with rock outcroppings and ledges, are essential habitat components because over-wintering dens are often located in these areas.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Rattlesnake, Timber	*Crotalus horridus*	Habitat includes forested bluffs, south-facing rock outcrops, and bluff prairies, particularly in the Mississippi River valley. Bluff prairies located on steep, south or west-facing hillsides, with rock outcroppings and ledges, are essential habitat components because over-wintering dens are often located in these areas.	T (State)	Minnesota	Dakota County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Benton County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Stearns County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Anoka County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Washington County

T - Threatened
E - Endangered

Minnesota Zone 6 - 50

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Dakota County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Sherburne County
Rein-orchid, Tubercled	*Platanthera flava var. herbiola*	Habitat includes wet prairies and meadows, swales in mesic prairies, or the sandy or peaty habitats along the edges of marshes, swamps, or lakeshores.	E (State)	Minnesota	Morrison County
Salamander	*Simpsonaias ambigua*	Riparian environment required. Habitat is very specific, living only under flat rocks or under ledges of rock walls, habitats also occupied by its glochidial host, the mudpuppy salamander.	T (State)	Minnesota	Washington County
Salamander	*Simpsonaias ambigua*	Riparian environment required. Habitat is very specific, living only under flat rocks or under ledges of rock walls, habitats also occupied by its glochidial host, the mudpuppy salamander.	T (State)	Minnesota	Dakota County

T - Threatened
E - Endangered

Minnesota Zone 6 - 51

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Dakota County
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Hennepin County
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Carver County
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Sibley County
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Scott County

T - Threatened
E - Endangered

Minnesota Zone 6 - 52

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sandshell, Yellow	*Lampsilis teres*	Habitat includes fine sediments, but it may also occur in coarse substrates, and in slow or moving current.	E (State)	Minnesota	Washington County
		Habitat includes mature alluvial forests associated			

Sedge, Davis'	*Carex davisii*	with major river valleys of the Mississippi River drainage in the southeastern corner of the state.	T (State)	Minnesota	Rice County
Sedge, Handsome	*Carex formosa*	Habitat includes moist areas in deciduous woodlands along the Mississippi River. The extant populations in southeastern Minnesota are in forests on low river valley slopes dominated by Acer saccharum (sugar maple), Quercus macrocarpa (bur oak), Tilia americana (basswood), and Ulmus americana (American elm).	E (State)	Minnesota	Clearwater County
Sedge, Handsome	*Carex formosa*	Habitat includes moist areas in deciduous woodlands along the Mississippi River. The extant populations in southeastern Minnesota are in forests on low river valley slopes dominated by Acer saccharum (sugar maple), Quercus macrocarpa (bur oak), Tilia americana (basswood), and Ulmus americana (American elm).	E (State)	Minnesota	Hennepin County
Sedge, Jointed	*Carex conjuncta*	Habitat includes mature alluvial forests under a canopy of Ulmus americana (American elm), Juglans nigra (black walnut), and Acer saccharinum (silver maple). This habitat type is usually flooded in the spring and may remain wet or moist throughout the summer.	T (State)	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sedge, Plantain-leaved	*Carex Plantaginea*	Habitat includes moist, shaded, hardwood forest in southeastern Minnesota. Within such forests it may favor north-facing slopes, steep ravines, or other cool, protected microhabitats.	E (State)	Minnesota	Hennepin County
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Clearwater County
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Dakota County
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Rice County
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Stearns County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Carver County
Sedge, Sterile	*Carex sterillis*	Habitat includes mineral-rich calcareous fens of the prairie region.	T (State)	Minnesota	Scott County
Sheepnose (Mussel)	*Plethobasus cyphyus*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	Proposed Candidate (Federal) E (State)	Minnesota	Dakota County
Sheepnose (Mussel)	*Plethobasus cyphyus*	Riparian environment required. Habitat include larger rivers in areas with moderate current and	Proposed Candidate (Federal)	Minnesota	Carver County

		gravel substrates.	E (State)		
Sheepnose (Mussel)	*Plethobasus cyphyus*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	Proposed Candidate (Federal) E (State)	Minnesota	Scott County

T - Threatened
E - Endangered

Minnesota Zone 6 - 55

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sheepnose (Mussel)	*Plethobasus cyphyus*	Riparian environment required. Habitat include larger rivers in areas with moderate current and gravel substrates.	Proposed Candidate (Federal) E (State)	Minnesota	Washington County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Morrison County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Benton County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Sherburne County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching	T (State)	Minnesota	Anoka County

		sites such as hedgerows, shrubs, and small trees are found.			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Washington County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Dakota County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Rice County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Steele County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows,	T (State)	Minnesota	Freeborn County

		shrubs, and small trees are found.			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Meeker County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Wright County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Carver County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Sibley County
Shrike, Loggerhead	*Lanius ludovicianus*	Habitat includes upland grasslands and sometimes in agricultural areas, where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.	T (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Skeletonweed, Annual	*Shinnersoseris rostrata*	Habitat restricted to open sand dunes in a prairie landscape.	T (State)	Minnesota	Sherburne County
Skipper, Dakota	*Hesperia dacotae*	Habitat includes native dry-mesic to dry prairie where mid-height grasses, such as little bluestem (Schizachyrium scoparium), prairie dropseed (Sporobolus heterolepis), and side-oats grama (Bouteloua curtipendula), are a major component of the vegetation.	Proposed Candidate (Federal) T (State)	Minnesota	Stearns County
Skullcap, Ovate-Leaved	*Scutellaria ovata*	Habitat includes mixed hardwood forests, bottomland and floodplain forests, oak woodland, and the transition zone between floodplain and oak woodland.	T (State)	Minnesota	Dakota County
Skullcap, Ovate-Leaved	*Scutellaria ovata*	Habitat includes mixed hardwood forests, bottomland and floodplain forests, oak woodland, and the transition zone between floodplain and oak woodland.	T (State)	Minnesota	Rice County
Skunk, Eastern Spotted	*Spilogale putorius*	Habitat includes open lands with sufficient cover, such as fencerows, shelterbelts, thickets, brush, and riparian woodlands. In agricultural areas they use buildings, corncribs, trash piles, rock piles, and haystacks for cover and den sites.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Skunk, Eastern Spotted	*Spilogale putorius*	Habitat includes open lands with sufficient cover, such as fencerows, shelterbelts, thickets, brush, and riparian woodlands. In agricultural areas they use buildings, corncribs, trash piles, rock piles, and haystacks for cover and den sites.	T (State)	Minnesota	Hennepin County
Skunk, Eastern Spotted	*Spilogale putorius*	Habitat includes open lands with sufficient cover, such as fencerows, shelterbelts, thickets, brush, and riparian woodlands. In agricultural areas they use buildings, corncribs, trash piles, rock piles, and haystacks for cover and den sites.	T (State)	Minnesota	Hubbard County
Snuffbox	*Epioblasma triquetra*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	T (State)	Minnesota	Washington County
Snuffbox	*Epioblasma triquetra*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	T (State)	Minnesota	Dakota County
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Todd County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Washington County
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Hennepin County
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Steele County
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Stearns County
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sparrow, Henslow's	*Ammodramus henslowii*	Habitat includes uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.	E (State)	Minnesota	Hubbard County
		Riparian environment required.Inhabits large rivers with moderate to swift currents, such as	Proposed		

Spectaclecase	*Cumberlandia monodonta*	the St. Croix, and appears to often colonize microhabitats that are sheltered from the main force of the current.	Candidate (Federal) T (State)	Minnesota	Washington County
Spectaclecase	*Cumberlandia monodonta*	Riparian environment required.Inhabits large rivers with moderate to swift currents, such as the St. Croix, and appears to often colonize microhabitats that are sheltered from the main force of the current.	Proposed Candidate (Federal) T (State)	Minnesota	Dakota County
Spike-rush, Beaked	*Eleocharis rostellata*	Habitat includes fens that are maintained by the surface discharge of calcareous or circumneutral groundwater. This habitat type is rare compared with the other wetland types in the prairie region and in the vast expanses of acidic, mineral-poor peatlands in the forested region.	T (State)	Minnesota	Scott County
Spike-rush, Beaked	*Eleocharis rostellata*	Habitat includes fens that are maintained by the surface discharge of calcareous or circumneutral groundwater. This habitat type is rare compared with the other wetland types in the prairie region and in the vast expanses of acidic, mineral-poor peatlands in the forested region.	T (State)	Minnesota	Carver County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON	SCIENTIFIC	HABITAT	STATUS	STATE	COUNTY

NAME	NAME				
Spike-rush, Beaked	*Eleocharis rostellata*	Habitat includes fens that are maintained by the surface discharge of calcareous or circumneutral groundwater. This habitat type is rare compared with the other wetland types in the prairie region and in the vast expanses of acidic, mineral-poor peatlands in the forested region.	T (State)	Minnesota	Clearwater County
Spike-rush, Olivaceous	*Eleocharis olivacea*	Exhibits a preference for shoreline habitats, where substrates may include peat, sand, silt, or mud.	T (State)	Minnesota	Clearwater County
Spike-rush, Wolf's	*Eleocharis wolfii*	The preferred habitat of E. wolfii in Minnesota is poorly known, and more research is needed. Historical collections refer to its habitat only as moist places.	E (State)	Minnesota	Scott County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Hubbard County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Clearwater County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
		Habitat includes during the breeding season, trumpeter swans select			

Swan, Trumpeter	*Cygnus buccinator*	small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Wadena County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Todd County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Sheburne County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Anoka County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

Minnesota Zone 6 - 64

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Swan,	*Cygnus*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger	T (State)	Minnesota	Dakota

Trumpeter	*buccinator*	water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.			County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Hinnepin County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Rice County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Freeborn County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Wright County

T - Threatened
E - Endangered

Minnesota Zone 6 - 65

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	McLeod County
		Habitat includes during the breeding season, trumpeter			

Swan, Trumpeter	*Cygnus buccinator*	swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Carver County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Sibley County
Swan, Trumpeter	*Cygnus buccinator*	Habitat includes during the breeding season, trumpeter swans select small ponds and lakes or bays on larger water bodies with extensive beds of cattails, bulrush, sedges, and/or horsetail.	T (State)	Minnesota	Scott County
Tern, Common	*Sterna hirundo*	Strong association with aquatic habitat for breeding & foraging. Breeding habitat includes sandy beaches, gravelly or sparsely vegetated shores of small coastal islands, back bays, and both freshwater and salt high marshes. They may also nest on islands in some large lakes. Nests are on the ground, based in mats of wrack or bent-over grass stems in marshes, and sand mixed with shell hash or fine gravel on beaches.	E (State)	Minnesota	Wright County

T - Threatened
E - Endangered

Minnesota Zone 6 - 66

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Tooth-cup	*Rotala ramosior*	Habitat includes the sandy shores of small, shallow lakes set in a savanna landscape. Such shorelines undergo seasonal fluctuations that expose	T (State)	Minnesota	Anoka County

		broad beaches in late summer, to the apparent benefit of this species.			
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Washington County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Dakota County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Hennepin County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Rice County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with	T (State)	Minnesota	Steele County

		rich, aquatic vegetation are especially preferred.			
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Freeborn County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Stearns County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Wright County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are	T (State)	Minnesota	Hubbard County

		especially preferred.			
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Wadena County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Todd County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Morrison County
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Benton County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Sherburne County

Turtle, Blanding's	*Emydoidea blandingii*	Habitats include wetland complexes and adjacent sandy uplands, calm, shallow waters, including wetlands associated with rivers and streams, with rich, aquatic vegetation are especially preferred.	T (State)	Minnesota	Anoka County
Turtle, Wood	*Glyptemys insculpta*	Habitat includes lowland hardwood forests and open wet meadows associated with moderate to fast current streams and rivers passing over sand or gravel substrates. They may forage in upland deciduous mesic forest and open meadows throughout the summer.	T (State)	Minnesota	Rice County
Turtle, Wood	*Glyptemys insculpta*	Habitat includes lowland hardwood forests and open wet meadows associated with moderate to fast current streams and rivers passing over sand or gravel substrates. They may forage in upland deciduous mesic forest and open meadows throughout the summer.	T (State)	Minnesota	Steele County
Turtle, Wood	*Glyptemys insculpta*	Habitat includes lowland hardwood forests and open wet meadows associated with moderate to fast current streams and rivers passing over sand or gravel substrates. They may forage in upland deciduous mesic forest and open meadows throughout the summer.	T (State)	Minnesota	Dakota County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Uncas Skipper	*Hesperia uncas*	Inhabits dry native prairie or barrens prairie on sand dune forms.		Minnesota	Sherburne County

Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Dakota County
Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Hennepin County
Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Rice County
Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Steele County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Freeborn County
		Appears to favor a moist,			

Valerian	*Valeriana edulis var. ciliata*	sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Carver County
Valerian	*Valeriana edulis var. ciliata*	Appears to favor a moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies. Many of these habitats are found along railroad right-of-ways.	T (State)	Minnesota	Scott County
Violet, Lance-leaved	*Viola lanceolata*	Inhabits moist meadows with a sandy substrate, moist swales in sand dunes and savannas, and occasionally on sandy lakeshores.	T (State)	Minnesota	Anoka County
Violet, Lance-leaved	*Viola lanceolata*	Inhabits moist meadows with a sandy substrate, moist swales in sand dunes and savannas, and occasionally on sandy lakeshores.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Violet, Lance-leaved	*Viola lanceolata*	Inhabits moist meadows with a sandy substrate, moist swales in sand dunes and savannas, and occasionally on sandy lakeshores.	T (State)	Minnesota	Sherburne County
Wartyback	*Quadrula nodulata*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	E (State)	Minnesota	Washington County
Wartyback	*Quadrula nodulata*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel	E (State)	Minnesota	Dakota County

		substrates.			
Wartyback	*Quadrula nodulata*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	E (State)	Minnesota	Hennepin County
Wartyback	*Quadrula nodulata*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	E (State)	Minnesota	Carver County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Wartyback	*Quadrula nodulata*	Riparian environment required. Habitat include larger rivers in areas with steady current and gravel substrates.	E (State)	Minnesota	Scott County
Wartyback, Purple	*Cyclonaias tuberculata*	Aquatic environment required. Inhabits medium to large rivers. It may be found in fine substrates such as silt or sand in slow current areas.	T (State)	Minnesota	Dakota County
Wartyback, Purple	*Cyclonaias tuberculata*	Aquatic environment required. Inhabits medium to large rivers. It may be found in fine substrates such as silt or sand in slow current areas.	T (State)	Minnesota	Hennepin County
Wartyback, Purple	*Cyclonaias tuberculata*	Aquatic environment required. Inhabits medium to large rivers. It may be found in fine substrates such as silt or sand in slow current areas.	T (State)	Minnesota	Scott County
Wartyback, Purple	*Cyclonaias tuberculata*	Aquatic environment required. Inhabits medium to large rivers. It may be found in fine substrates such as silt or sand in slow current areas.	T (State)	Minnesota	Washington County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Washboard	*Megalonaias nervosa*	Requires riparian environment. Habitat includes large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	T (State)	Minnesota	Dakota County
Washboard	*Megalonaias nervosa*	Requires riparian environment. Habitat includes large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	T (State)	Minnesota	Washington County
Washboard	*Megalonaias nervosa*	Requires riparian environment. Habitat includes large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	T (State)	Minnesota	Hennepin County
Washboard	*Megalonaias nervosa*	Requires riparian environment. Habitat includes large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	T (State)	Minnesota	Carver County
		Requires riparian			

Washboard	*Megalonaias nervosa*	environment. Habitat includes large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	T (State)	Minnesota	Scott County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Whorled Nut-rush	*Scleria verticillata*	Habitat entirely restricted to calcareous fens in the prairie regions of Minnesota, and seems to occur only in the better quality, least disturbed examples of this specialized plant community.	T (State)	Minnesota	Scott County
Whorled Nut-rush	*Scleria verticillata*	Habitat entirely restricted to calcareous fens in the prairie regions of Minnesota, and seems to occur only in the better quality, least disturbed examples of this specialized plant community.	T (State)	Minnesota	Carver County

T - Threatened
E - Endangered

Reference:
- www.fws.gov
- www.dnr.state.mn.us.gov
- Note: Plants are not afforded regulatory protection unless found on public lands.

6.6 SENSITIVITY MAPS

Click here for Minnesota Zone Overview Map

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4001 - MPL 4 Segment 4001, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4002 - MPL 4 Segment 4002, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4003 - MPL 4 Segment 4003, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4005 - MPL 4 Segment 4005, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4005 - MPL 4 Segment 4005, 24in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4006 - MPL 4 Segment 4006, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4007 - MPL 4 Segment 4007, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4008 - MPL 4 Segment 4008, 24in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 4008 - MPL 4 Segment 4008, 24in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., B-3

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., B-4

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5062 - Pine Bend to Cottage Grove, B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5101 - Pine Bend to Airport Receive, 10in. & 12in., B-1

Minnesota Zone 6 - 94

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5201 - Pine Bend to Eau Claire, 12in., B-1

Minnesota Zone 6 - 95

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5201 - Pine Bend to Eau Claire, 12in., B-2

Minnesota Zone 6 - 96

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5201 - Pine Bend to Eau Claire, 12in., B-3

Minnesota Zone 6 - 97

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5601 - Clearbrook to Itasca, 16in., B-1

Minnesota Zone 6 - 98

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., B-1

Minnesota Zone 6 - 99

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., B-2

Minnesota Zone 6 - 100

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., B-3

Minnesota Zone 6 - 101

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., B-1

Minnesota Zone 6 - 102

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., B-3

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., B-3

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., B-3

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., B-1

Minnesota Zone 6 - 111

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., B-2

Minnesota Zone 6 - 112

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., B-3

Minnesota Zone 6 - 113

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5607 - Zimmerman to Hugo, 16in., B-1

Minnesota Zone 6 - 114

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5607 - Zimmerman to Hugo, 16in., B-2

Minnesota Zone 6 - 115

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5607 - Zimmerman to Hugo, 16in., B-3

Minnesota Zone 6 - 116

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5608 - Hugo to Cottage Grove, 16in., B-1

Minnesota Zone 6 - 117

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5608 - Hugo to Cottage Grove, 16in., B-2

Minnesota Zone 6 - 118

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5609 - Cottage Grove to Pine Bend, 16in., B-1

Minnesota Zone 6 - 119

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5701 - Clearbrook to Itasca, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5702 - Itasca to Park Rapids, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5703 - Park Rapids to Staples, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5704 - Staples to Little Falls, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5705 - Little Falls to Foley, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5706 - Foley to Zimmerman, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5707 - Zimmerman to Hugo, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5708 - Hugo to Cottage Grove, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5801 - MP 15.4 to Itasca, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5804 - MP 107.6 to Little Falls, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5804 - MP 107.6 to Little Falls, 16in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5805 - MP 138.3 to Foley, 16in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5805 - MP 138.3 to Foley, 16in., B-2

Minnesota Zone 6 - 136

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5806 - MP 174.2 to Zimmerman, 16in., B-1

Minnesota Zone 6 - 137

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5806 - MP 174.2 to Zimmerman, 16in., B-2

Minnesota Zone 6 - 138

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5807 - MP 204.1 to Hugo, 16in., B-1

Minnesota Zone 6 - 139

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5807 - MP 204.1 to Hugo, 16in., B-2

Minnesota Zone 6 - 140

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5808 - Hugo to MP 238.1, 16in., B-1

Minnesota Zone 6 - 141

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 5809 - MP 254 to Pine Bend, 16in., B-1

Minnesota Zone 6 - 142

6.7 TACTICAL PLAN INDEX

SITE #	SITE NAME
Rum River	
Site 1	Rum River - (b) (7)(F), (b) (3)
Rum River	
Site 2	Rum River - Strootman Park Canoe Landing
Rum River	
Site 3	Rum River - Cty Rd 30 and 4th Ave

Site 4	Rum River - Highway 7 Bridge
Site 5	Rum River - South Park
Site 6	Rum River - Central Park
Clearbrook Station	
Site 1	Road to Tank 10
Site 2	County Road 49
Site 3	Railroad Ave. N.E.
Site 4	Clearwater Cnty Rd 9/Gonvic Rd
Site 5	Bridge @ 550th St & 109th Ave
Cottage Grove Station	
Site 1	Front Entry Driveway NE Corner
Site 2	Gravel Road Work Site
Site 3	Gravel Parking Lot
Site 4	Retention Pond Outfall-103rdSt

Minnesota Zone 6 - 143

Waterway Details

Click here for Rum River - Overview

Minnesota Zone 6 - 144

Waterway Details

Click here for Rum River - Aerial Map

Minnesota Zone 6 - 145

Waterway Details

Click here for Rum River - Detail 1

Minnesota Zone 6 - 146

Waterway Details

Click here for Rum River - Detail 2

Minnesota Zone 6 - 147

Waterway Details

Click here for Rum River - Detail 3

Minnesota Zone 6 - 148

Waterway Details

Click here for Rum River - Detail 4

Minnesota Zone 6 - 149

6.8 TACTICAL MAPS

Click here for 4001 - MPL 4 Segment 4001, 24in., River Overview

Minnesota Zone 6 - 150

6.8 TACTICAL MAPS, CONTINUED

Click here for 4001 - MPL 4 Segment 4001, 24in., (Clearwater River Detail)

Minnesota Zone 6 - 151

6.8 TACTICAL MAPS, CONTINUED

Click here for 4001 - MPL 4 Segment 4001, 24in., (Mississippi River Detail)

Minnesota Zone 6 - 152

6.8 TACTICAL MAPS, CONTINUED

Click here for 4002 - MPL 4 Segment 4002, 24in., River Overview

Minnesota Zone 6 - 153

6.8 TACTICAL MAPS, CONTINUED

Click here for 4002 - MPL 4 Segment 4002, 24in., (Potato River Detail)

Minnesota Zone 6 - 154

6.8 TACTICAL MAPS, CONTINUED

Click here for 4002 - MPL 4 Segment 4002, 24in., (Shell River Detail)

Minnesota Zone 6 - 155

6.8 TACTICAL MAPS, CONTINUED

Click here for 4002 - MPL 4 Segment 4002, 24in., (Straight River Detail)

Minnesota Zone 6 - 156

6.8 TACTICAL MAPS, CONTINUED

Click here for 4003 - MPL 4 Segment 4003, 24in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 4003 - MPL 4 Segment 4003, 24in., (Leaf River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4003 - MPL 4 Segment 4003, 24in., (Partridge River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., (Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., (Long Prairie River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., (North Two River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., (South Branch Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 4004 - MPL 4 Segment 4004, 24in., (Swan River Detail)

Minnesota Zone 6 - 165

6.8 TACTICAL MAPS, CONTINUED

Click here for 4005 - MPL 4 Segment 4005, 24in., River Overview

Minnesota Zone 6 - 166

6.8 TACTICAL MAPS, CONTINUED

Click here for 4005 - MPL 4 Segment 4005, 24in., (Sauk River Detail)

Minnesota Zone 6 - 167

6.8 TACTICAL MAPS, CONTINUED

Click here for 4006 - MPL 4 Segment 4006, 24in., River Overview

Minnesota Zone 6 - 168

6.8 TACTICAL MAPS, CONTINUED

Click here for 4006 - MPL 4 Segment 4006, 24in., (South Fork Crow River Detail)

Minnesota Zone 6 - 169

6.8 TACTICAL MAPS, CONTINUED

Click here for 4007 - MPL 4 Segment 4007, 24in., River Overview

Minnesota Zone 6 - 170

6.8 TACTICAL MAPS, CONTINUED

Click here for 4007 - MPL 4 Segment 4007, 24in., (Minnesota River Detail)

Minnesota Zone 6 - 171

6.8 TACTICAL MAPS, CONTINUED

Click here for 4008 - MPL 4 Segment 4008, 24in., River Overview

Minnesota Zone 6 - 172

6.8 TACTICAL MAPS, CONTINUED

Click here for 4008 - MPL 4 Segment 4008, 24in., (South Branch Vermilion River Detail)

Minnesota Zone 6 - 173

6.8 TACTICAL MAPS, CONTINUED

Click here for 4008 - MPL 4 Segment 4008, 24in., (Vermilion River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., (Cannon River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., (Vermilion River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5061 - Clear Lake to Pine Bend, 18in., (Winnebago River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5062 - Pine Bend to Cottage Grove, River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5062 - Pine Bend to Cottage Grove, (Mississippi River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5101 - Pine Bend to Airport Receive, 10in. & 12in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5101 - Pine Bend to Airport Receive, 10in. & 12in., (Minnesota River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5201 - Pine Bend to Eau Claire, 12in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5201 - Pine Bend to Eau Claire, 12in., (Vermilion River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5601 - Clearbrook to Itasca, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5601 - Clearbrook to Itasca, 16in., (Clearwater River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5601 - Clearbrook to Itasca, 16in., (Mississippi River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., (Potato River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., (Shell River Detail)

Minnesota Zone 6 - 190

6.8 TACTICAL MAPS, CONTINUED

Click here for 5602 - Itasca to Park Rapids, 16in., (Straight River Detail)

Minnesota Zone 6 - 191

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., River Overview

Minnesota Zone 6 - 192

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Blueberry River Detail)

Minnesota Zone 6 - 193

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Cat River Detail)

Minnesota Zone 6 - 194

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Kettle River Detail)

Minnesota Zone 6 - 195

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Leaf River Detail)

Minnesota Zone 6 - 196

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Partridge River Detail)

Minnesota Zone 6 - 197

6.8 TACTICAL MAPS, CONTINUED

Click here for 5603 - Park Rapids to Staples, 16in., (Redeye River Detail)

Minnesota Zone 6 - 198

6.8 TACTICAL MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., (Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., (Lon Prairie River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5604 - Staples to Little Falls, 16in., (South Branch Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., (Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., (Mississippi River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5605 - Little Falls to Foley, 16in., (Platte River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., River Overview

Minnesota Zone 6 - 207

6.8 TACTICAL MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., (Saint Francis River Detail #1)

Minnesota Zone 6 - 208

6.8 TACTICAL MAPS, CONTINUED

Click here for 5606 - Foley to Zimmerman, 16in., (Saint Francis River Detail #2)

Minnesota Zone 6 - 209

6.8 TACTICAL MAPS, CONTINUED

Click here for 5607 - Zimmerman to Hugo, 16in., River Overview

Minnesota Zone 6 - 210

6.8 TACTICAL MAPS, CONTINUED

Click here for 5607 - Zimmerman to Hugo, 16in., (Rum River Detail)

Minnesota Zone 6 - 211

6.8 TACTICAL MAPS, CONTINUED

Click here for 5608 - Hugo to Cottage Grove, 16in., River Overview

Minnesota Zone 6 - 212

6.8 TACTICAL MAPS, CONTINUED

Click here for 5609 - Cottage Grove to Pine Bend, 16in., River Overview

Minnesota Zone 6 - 213

6.8 TACTICAL MAPS, CONTINUED

Click here for 5609 - Cottage Grove to Pine Bend, 16in., (Mississippi River Detail)

Minnesota Zone 6 - 214

6.8 TACTICAL MAPS, CONTINUED

Click here for 5701 - Clearbrook to Itasca, 16in., River Overview

Minnesota Zone 6 - 215

6.8 TACTICAL MAPS, CONTINUED

Click here for 5701 - Clearbrook to Itasca, 16in., (Clearwater River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5702 - Itasca to Park Rapids, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5703 - Park Rapids to Staples, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5703 - Park Rapids to Staples, 16in., (Blueberry River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5703 - Park Rapids to Staples, 16in., (Cat River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5703 - Park Rapids to Staples, 16in., (Kettle River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5704 - Staples to Little Falls, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5704 - Staples to Little Falls, 16in., (Long Prairie River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5705 - Little Falls to Foley, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5705 - Little Falls to Foley, 16in., (Mississippi River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5706 - Foley to Zimmerman, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5706 - Foley to Zimmerman, 16in., (Saint Francis River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5707 - Zimmerman to Hugo, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5707 - Zimmerman to Hugo, 16in., (Rum River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5708 - Hugo to Cottage Grove, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5801 - MP 15.4 to Itasca, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5801 - MP 15.4 to Itasca, 16in., (Mississippi River Detail)

Minnesota Zone 6 - 232

6.8 TACTICAL MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., River Overview

Minnesota Zone 6 - 233

6.8 TACTICAL MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., (Potato River Detail)

Minnesota Zone 6 - 234

6.8 TACTICAL MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., (Shell River Detail)

Minnesota Zone 6 - 235

6.8 TACTICAL MAPS, CONTINUED

Click here for 5802 - MP 38.85 to Park Rapids, 16in., (Straight River Detail)

Minnesota Zone 6 - 236

6.8 TACTICAL MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., River Overview

Minnesota Zone 6 - 237

6.8 TACTICAL MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., (Leaf River Detail)

Minnesota Zone 6 - 238

6.8 TACTICAL MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., (Partridge River Detail)

Minnesota Zone 6 - 239

6.8 TACTICAL MAPS, CONTINUED

Click here for 5803 - MP 72.9 to Staples, 16in., (Redeye River Detail)

Minnesota Zone 6 - 240

6.8 TACTICAL MAPS, CONTINUED

Click here for 5804 - MP 107.6 to Little Falls, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5804 - MP 107.6 to Little Falls, 16in., (Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5804 - MP 107.6 to Little Falls, 16in., (South Branch Little Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5805 - MP 138.3 to Foley, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5805 - MP 138.3 to Foley, 16in., (Elk River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5805 - MP 138.3 to Foley, 16in., (Platte River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5806 - MP 174.2 to Zimmerman, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5806 - MP 174.2 to Zimmerman, 16in., (Saint Francis River Detail)

6.8 TACTICAL MAPS, CONTINUED

Click here for 5807 - MP 204.1 to Hugo, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5808 - Hugo to MP 238.1, 16in., River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 5809 - MP 254 to Pine Bend, 16in., River Overview

6.9 TACTICAL PLANS

Click here for Rum River - Rum River - (b) (7)(F), (b) (3)

6.9 TACTICAL PLANS , CONTINUED

Click here for Rum River - Rum River - Strootman Park Canoe Landing

6.9 TACTICAL PLANS , CONTINUED

Click here for Rum River - Rum River - Cty Rd 30 and 4th Ave

6.9 TACTICAL PLANS , CONTINUED

Click here for Rum River - Rum River - Highway 7 Bridge

6.9 TACTICAL PLANS , CONTINUED

Click here for Rum River - Rum River - South Park

6.9 TACTICAL PLANS , CONTINUED

Click here for Rum River - Rum River - Central Park

6.9 TACTICAL PLANS , CONTINUED

Click here for Clearbrook Station - Site 1 - Road to Tank 10

6.9 TACTICAL PLANS , CONTINUED

Click here for Clearbrook Station - Site 2 - County Road 49

6.9 TACTICAL PLANS , CONTINUED

Click here for Clearbrook Station - Site 3 - Railroad Ave. N.E.

6.9 TACTICAL PLANS , CONTINUED

Click here for Clearbrook Station - Site 4 - Clearwater Cnty Rd 9/Gonvic Rd

6.9 TACTICAL PLANS , CONTINUED

Click here for Clearbrook Station - Site 5 - Bridge @ 550th St & 109th Ave

6.9 TACTICAL PLANS , CONTINUED

Click here for Cottage Grove Station - Site 1 - Front Entry Driveway NE Corner

6.9 TACTICAL PLANS , CONTINUED

Click here for Cottage Grove Station - Site 2 - Gravel Road Work Site

6.9 TACTICAL PLANS , CONTINUED

Click here for Cottage Grove Station - Site 3 - Gravel Parking Lot

6.9 TACTICAL PLANS , CONTINUED

Click here for Cottage Grove Station - Site 4 - Retention Pond Outfall-103rdSt

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			(b) (7)(F), (b) (3)
Burlington Northern Railroad	Anoka	Zimmerman to Hugo 16in	
Burlington Northern Railroad	Anoka	Zimmerman to Hugo 16in	
Burlington Northern Railroad	Anoka	(b) (7)(F), (b) (3)	
I 35E	Anoka	Zimmerman to Hugo 16in	
I 35W	Anoka	Zimmerman to Hugo 16in	
S 65	Anoka	Zimmerman to Hugo 16in	
I 35E	Anoka	Zimmerman to Hugo 16in	
I 35W	Anoka	Zimmerman to Hugo 16in	
I 35E	Anoka	Zimmerman to Hugo 16in	
I 35W	Anoka	Zimmerman to Hugo 16in	
S 47	Anoka	Zimmerman to Hugo 16in	
S 65	Anoka	Zimmerman to Hugo 16in	

I 35E	Anoka	Zimmerman to Hugo 16in	(b) (7)(F), (b) (3)
I 35W	Anoka	Zimmerman to Hugo 16in	
S 47	Anoka	Zimmerman to Hugo 16in	
I 35E	Anoka	(b) (7)(F), (b) (3)	
I 35W	Anoka	(b) (7)(F), (b) (3)	
S 65	Anoka	(b) (7)(F), (b) (3)	
I 35E	Anoka	(b) (7)(F), (b) (3)	
I 35W	Anoka	(b) (7)(F), (b) (3)	
Rum River	Anoka	Zimmerman to Hugo 16in	
Rum River	Anoka	Zimmerman to Hugo 16in	
UNKNOWN	Benton	Foley to Zimmerman 16in	
UNKNOWN	Benton	Foley to Zimmerman 16in	
S 25	Benton	Little Falls to Foley 16in	
S 25	Benton	Little Falls to Foley 16in	
S 25	Benton	(b) (7)(F), (b) (3)	
S 23	Benton	Foley to Zimmerman 16in	
S 25	Benton	Foley to Zimmerman 16in	
S 95	Benton	Foley to Zimmerman 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			(b) (7)(F), (b) (3)
S 23	Benton	Foley to Zimmerman 16in	
S 25	Benton	Foley to Zimmerman 16in	
S 95	Benton	Foley to Zimmerman 16in	

			(b) (7)(F), (b) (3)
Elk River	Benton	Little Falls to Foley 16in	
Elk River	Benton	Little Falls to Foley 16in	
Elk River	Benton	(b) (7)(F), (b) (3)	
Saint Francis River	Benton	Foley to Zimmerman 16in	
Saint Francis River	Benton	Foley to Zimmerman 16in	
Chi Milwauk St Paul and Pac RR	Carver	(b) (7)(F), (b) (3)	
Chi and Northwestern Railroad	Carver	(b) (7)(F), (b) (3)	
U 212	Carver	(b) (7)(F), (b) (3)	
S 5	Carver	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Clearwater	Clearbrook to Itasca 16in	
Burlington Northern Railroad	Clearwater	Clearbrook to Itasca 16in	
Burlington Northern Railroad	Clearwater	(b) (7)(F), (b) (3)	
U 2	Clearwater	Clearbrook to Itasca 16in	
U 2	Clearwater	Clearbrook to Itasca 16in	
U 2	Clearwater	(b) (7)(F), (b) (3)	
Clearwater River	Clearwater	Clearbrook to Itasca 16in	
Mississippi River	Clearwater	Clearbrook to Itasca 16in	
Clearwater River	Clearwater	Clearbrook to Itasca 16in	
Mississippi River	Clearwater	Clearbrook to Itasca 16in	
Mississippi River	Clearwater	(b) (7)(F), (b) (3)	
Clearwater River	Clearwater	(b) (7)(F), (b) (3)	
Mississippi River	Clearwater	(b) (7)(F), (b) (3)	
C and NW Railroad	Dakota	#1 AND #2 FUEL OIL 8 in	
C and NW Railroad	Dakota	ASPHALT TO BARGE	

		DOCK 10 in	(b) (7)(F), (b) (3)
MPLS Northfield and Southern R	Dakota	Clear Lake to Pine Bend 18in	
CMSP and P Railroad	Dakota	Clear Lake to Pine Bend 18in	
Cri and P Railroad	Dakota	Clear Lake to Pine Bend 18in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			(b) (7)(F), (b) (3)
Chicago and Northwestern RR	Dakota	Pine Bend to Airport Receive 10in and 12in	
CMSP and P Railroad	Dakota	Pine Bend to Airport Receive 10in and 12in	
CMSP and P Railroad	Dakota	Pine Bend to Airport Receive 10in and 12in	
Cri and P Railroad	Dakota	Pine Bend to Airport Receive 10in and 12in	
C and NW Railroad	Dakota	Pine Bend to Airport Receive 10in and 12in	
MPLS Northfield and Southern R	Dakota	(b) (7)(F), (b) (3)	
C and NW Railroad	Dakota	(b) (7)(F), (b) (3)	
Chi Mil St Paul and Pacific RR	Dakota	(b) (7)(F), (b) (3)	
UNKNOWN	Dakota	Cottage Grove to Pine Bend 16in	
UNKNOWN	Dakota	(b) (7)(F), (b) (3)	
C and NW Railroad	Dakota	(b) (7)(F), (b) (3)	
Chi Mil St Paul and Pacific RR	Dakota	Pine Bend to Eau Claire 12in	
C and NW Railroad	Dakota	Pine Bend to Eau Claire 12in	
UNKNOWN	Dakota	Pine Bend to Cottage Grove	
UNKNOWN	Dakota	Pine Bend to Cottage Grove	
UNKNOWN	Dakota	Pine Bend to Cottage Grove	
UNKNOWN	Dakota	Pine Bend to Cottage Grove	

			(b) (7)(F), (b) (3)
C and NW Railroad	Dakota	Pine Bend to Cottage Grove	
Cri and P Railroad	Dakota	Pine Bend to Cottage Grove	
U 52	Dakota	#1 AND #2 FUEL OIL 8 in	
U 52	Dakota	#1 AND #2 FUEL OIL 8 in	
U 52	Dakota	ASPHALT TO BARGE DOCK 10 in	
U 52	Dakota	ASPHALT TO BARGE DOCK 10 in	
U 52	Dakota	FRESH 4 in	
U 52	Dakota	FRESH 4 in	
S 3	Dakota	Clear Lake to Pine Bend 18in	
S 19	Dakota	Clear Lake to Pine Bend 18in	
S 50	Dakota	Clear Lake to Pine Bend 18in	
UNK	Dakota	Clear Lake to Pine Bend 18in	
S 3	Dakota	Pine Bend to Airport Receive 10in and 12in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / (b) (7)(F), (b) (3)
Minnesota Zone			
I 494	Dakota	Pine Bend to Airport Receive 10in and 12in	
I 494	Dakota	Pine Bend to Airport Receive 10in and 12in	
I 35E	Dakota	Pine Bend to Airport Receive 10in and 12in	
UNK	Dakota	Pine Bend to Airport Receive 10in and 12in	
UNK	Dakota	Pine Bend to Airport Receive 10in and 12in	
UNK	Dakota	Pine Bend to Airport Receive 10in and 12in	
UNK	Dakota	Pine Bend to Airport Receive 10in and 12in	
UNK	Dakota	Pine Bend to Airport Receive	

		10in and 12in	(b) (7)(F), (b) (3)
UNK	Dakota	Pine Bend to Airport Receive 10in and 12in	
I 35E	Dakota	Pine Bend to Airport Receive 10in and 12in	
S 13	Dakota	Pine Bend to Airport Receive 10in and 12in	
S 3	Dakota	(b) (7)(F), (b) (3)	
S 50	Dakota	(b) (7)(F), (b) (3)	
UNK	Dakota	(b) (7)(F), (b) (3)	
U 52	Dakota	Cottage Grove to Pine Bend 16in	
U 52	Dakota	Cottage Grove to Pine Bend 16in	
U 52	Dakota	(b) (7)(F), (b) (3)	
U 52	Dakota	(b) (7)(F), (b) (3)	
S 55	Dakota	(b) (7)(F), (b) (3)	
U 52	Dakota	Pine Bend to Eau Claire 12in	
U 52	Dakota	Pine Bend to Eau Claire 12in	
U 61	Dakota	Pine Bend to Eau Claire 12in	
S 316	Dakota	Pine Bend to Eau Claire 12in	
UNK	Dakota	Pine Bend to Eau Claire 12in	
U 52	Dakota	Pine Bend to Cottage Grove	
U 52	Dakota	Pine Bend to Cottage Grove	
Vermillion River	Dakota	Clear Lake to Pine Bend 18in	
South Branch Vermillion River	Dakota	(b) (7)(F), (b) (3)	
Vermillion River	Dakota	(b) (7)(F), (b) (3)	
Mississippi River	Dakota	Cottage Grove to Pine Bend 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			(b) (7)(F), (b) (3)
Vermillion River	Dakota	Pine Bend to Eau Claire 12in	
Chi Mil St Paul and Pacific RR	Freeborn	Clear Lake to Pine Bend 18in	
Chi Rock Island and Pacific RR	Freeborn	Clear Lake to Pine Bend 18in	
Chi and North Western Railroad	Freeborn	Clear Lake to Pine Bend 18in	
I 90	Freeborn	Clear Lake to Pine Bend 18in	
I 90	Freeborn	Clear Lake to Pine Bend 18in	
U 69	Freeborn	Clear Lake to Pine Bend 18in	
UNK	Freeborn	Clear Lake to Pine Bend 18in	
S 13	Freeborn	Clear Lake to Pine Bend 18in	
S 5	Hennepin	Pine Bend to Airport Receive 10in and 12in	
S 5	Hennepin	Pine Bend to Airport Receive 10in and 12in	
Minnesota River	Hennepin	Pine Bend to Airport Receive 10in and 12in	
S 34	Hubbard	Itasca to Park Rapids 16in	
U 71	Hubbard	Itasca to Park Rapids 16in	
U 71	Hubbard	Itasca to Park Rapids 16in	
S 34	Hubbard	Itasca to Park Rapids 16in	
U 71	Hubbard	Itasca to Park Rapids 16in	
S 34	Hubbard	(b) (7)(F), (b) (3)	
U 71	Hubbard	(b) (7)(F), (b) (3)	
S 34	Hubbard	(b) (7)(F), (b) (3)	
U 71	Hubbard	(b) (7)(F), (b) (3)	
Shell River	Hubbard	Itasca to Park Rapids 16in	
Shell River	Hubbard	Itasca to Park Rapids 16in	

			(b) (7)(F), (b) (3)
Shell River	Hubbard	(b) (7)(F), (b) (3)	
Shell River	Hubbard	(b) (7)(F), (b) (3)	
Potato River	Hubbard	Itasca to Park Rapids 16in	
Straight River	Hubbard	Itasca to Park Rapids 16in	
Potato River	Hubbard	Itasca to Park Rapids 16in	
Straight River	Hubbard	Itasca to Park Rapids 16in	
Potato River	Hubbard	(b) (7)(F), (b) (3)	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone		(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Straight River	Hubbard		
Potato River	Hubbard		
Straight River	Hubbard		
Burlington Northern Railroad	McLeod		
S 7	McLeod		
S 261	McLeod		
South Fork Crow River	McLeod		
Soo Line Railroad	Meeker		
S 22	Meeker		
S 24	Meeker		
S 55	Meeker		
S 15	Meeker		
North Fork Crow River	Meeker		

Burlington Northern Railroad	Morrison	Little Falls to Foley 16in	(b) (7)(F), (b) (3)
Soo Line Railroad	Morrison	Little Falls to Foley 16in	
Soo Line Railroad	Morrison	Little Falls to Foley 16in	
Soo Line Railroad	Morrison	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Morrison	Little Falls to Foley 16in	
U 10	Morrison	Staples to Little Falls 16in	
S 238	Morrison	Little Falls to Foley 16in	
S 27	Morrison	Little Falls to Foley 16in	
U 10	Morrison	Little Falls to Foley 16in	
U 10	Morrison	Little Falls to Foley 16in	
U 10	Morrison	(b) (7)(F), (b) (3)	
U 10	Morrison	Staples to Little Falls 16in	
S 27	Morrison	(b) (7)(F), (b) (3)	
U 10	Morrison		
S 238	Morrison	Little Falls to Foley 16in	
S 27	Morrison	Little Falls to Foley 16in	
U 10	Morrison	Little Falls to Foley 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			
U 10	Morrison	Little Falls to Foley 16in	(b) (7)(F), (b) (3)
South Branch Little Elk River	Morrison	Staples to Little Falls 16in	
South Branch Little Elk River	Morrison	(b) (7)(F), (b) (3)	
South Branch Little	Morrison	Staples to Little Falls 16in	

Elk River		(b) (7)(F), (b) (3)
North Two River	Morrison	(b) (7)(F), (b) (3)
South Branch Little Elk River	Morrison	(b) (7)(F), (b) (3)
Little Elk River	Morrison	Staples to Little Falls 16in
Mississippi River	Morrison	Little Falls to Foley 16in
Platte River	Morrison	Little Falls to Foley 16in
Little Elk River	Morrison	(b) (7)(F), (b) (3)
Platte River	Morrison	Little Falls to Foley 16in
Little Elk River	Morrison	Staples to Little Falls 16in
Platte River	Morrison	(b) (7)(F), (b) (3)
Little Elk River	Morrison	(b) (7)(F), (b) (3)
Swan River	Morrison	(b) (7)(F), (b) (3)
Mississippi River	Morrison	Little Falls to Foley 16in
Mississippi River	Morrison	Little Falls to Foley 16in
S 21	Rice	Clear Lake to Pine Bend 18in
S 60	Rice	Clear Lake to Pine Bend 18in
I 35	Rice	Clear Lake to Pine Bend 18in
I 35	Rice	Clear Lake to Pine Bend 18in
Cannon River	Rice	Clear Lake to Pine Bend 18in
Chicago and North Western RR	Scott	(b) (7)(F), (b) (3)
Chicago and Northwestern RR	Scott	
U 169	Scott	
S 21	Scott	
S 13	Scott	
I 35	Scott	

			(b) (7)(F), (b) (3)
I 35	Scott	(b) (7)(F), (b) (3)	
Minnesota River	Scott		

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			
U 169	Sherburne	Foley to Zimmerman 16in	(b) (7)(F), (b) (3)
U 169	Sherburne	Foley to Zimmerman 16in	
U 169	Sherburne	Foley to Zimmerman 16in	
U 169	Sherburne	Foley to Zimmerman 16in	
U 169	Sherburne	(b) (7)(F), (b) (3)	
U 169	Sherburne		
Saint Francis River	Sherburne	Foley to Zimmerman 16in	
Saint Francis River	Sherburne	(b) (7)(F), (b) (3)	
Saint Francis River	Sherburne	Foley to Zimmerman 16in	
Saint Francis River	Sherburne	Foley to Zimmerman 16in	
S 25	Sibley	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Stearns		
Soo Line Railroad	Stearns		
S 238	Stearns		
S 23	Stearns		
I 94	Stearns		
I 94	Stearns		
S 238	Stearns		

Sauk River	Stearns	(b) (7)(F), (b) (3)	(b) (3), (b) (7)(F)
Chi and Northwestern Railroad	Steele	Clear Lake to Pine Bend 18in	
S 30	Steele	Clear Lake to Pine Bend 18in	
U 14	Steele	Clear Lake to Pine Bend 18in	
UNKNOWN	Todd	Staples to Little Falls 16in	
Burlington Northern Railroad	Todd	Staples to Little Falls 16in	
Burlington Northern Railroad	Todd	Staples to Little Falls 16in	
Burlington Northern Railroad	Todd	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Todd	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Todd	Staples to Little Falls 16in	
Burlington Northern Railroad	Todd	Staples to Little Falls 16in	
UNKNOWN	Todd	Staples to Little Falls 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone		(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
UNKNOWN	Todd		
Burlington Northern Railroad	Todd		
Burlington Northern Railroad	Todd		
U 10	Todd	Staples to Little Falls 16in	
U 10	Todd	(b) (7)(F), (b) (3)	
U 10	Todd	Staples to Little Falls 16in	
U 10	Todd	Staples to Little Falls 16in	
U 10	Todd	(b) (7)(F), (b) (3)	

Long Prairie River	Todd	Staples to Little Falls 16in	(b) (7)(F), (b) (3)
Long Prairie River	Todd	Staples to Little Falls 16in	
Long Prairie River	Todd	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Wadena	Park Rapids to Staples 16in	
Burlington Northern Railroad	Wadena	Park Rapids to Staples 16in	
Burlington Northern Railroad	Wadena	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Wadena	(b) (7)(F), (b) (3)	
S 87	Wadena	Park Rapids to Staples 16in	
U 71	Wadena	Park Rapids to Staples 16in	
S 227	Wadena	Park Rapids to Staples 16in	
S 87	Wadena	Park Rapids to Staples 16in	
U 71	Wadena	Park Rapids to Staples 16in	
S 227	Wadena	Park Rapids to Staples 16in	
S 227	Wadena	(b) (7)(F), (b) (3)	
S 87	Wadena		
U 71	Wadena		
S 227	Wadena		
Blueberry River	Wadena	Park Rapids to Staples 16in	
Cat River	Wadena	Park Rapids to Staples 16in	
Redeye River	Wadena	Park Rapids to Staples 16in	
Blueberry River	Wadena	Park Rapids to Staples 16in	
Cat River	Wadena	Park Rapids to Staples 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			
Redeye River	Wadena	Park Rapids to Staples 16in	(b) (7)(F), (b) (3)
Redeye River	Wadena		
Blueberry River	Wadena		
Cat River	Wadena		
Redeye River	Wadena		
Kettle River	Wadena	Park Rapids to Staples 16in	
Leaf River	Wadena	Park Rapids to Staples 16in	
Partridge River	Wadena	Park Rapids to Staples 16in	
Kettle River	Wadena	Park Rapids to Staples 16in	
Leaf River	Wadena	Park Rapids to Staples 16in	
Partridge River	Wadena	Park Rapids to Staples 16in	
Leaf River	Wadena		
Partridge River	Wadena		
Kettle River	Wadena		
Leaf River	Wadena		
Partridge River	Wadena		
UNKNOWN	Washington	Hugo to Cottage Grove 16in	
BN Railroad	Washington	Hugo to Cottage Grove 16in	
C and NW Railroad	Washington	Hugo to Cottage Grove 16in	
CMSP and P Railroad	Washington	Hugo to Cottage Grove 16in	
UNKNOWN	Washington	Hugo to Cottage Grove 16in	
BN Railroad	Washington	Hugo to Cottage Grove 16in	
C and NW Railroad	Washington	Hugo to Cottage Grove	

		16in	(b) (7)(F), (b) (3)
CMSP and P Railroad	Washington	Hugo to Cottage Grove 16in	
UNKNOWN	Washington	Hugo to MP 238.1 16in	
BN Railroad	Washington	Hugo to MP 238.1 16in	
C and NW Railroad	Washington	Hugo to MP 238.1 16in	
BN Railroad	Washington	Cottage Grove to Pine Bend 16in	
BN Railroad	Washington	Pine Bend to Cottage Grove	
U 61	Washington	Hugo to Cottage Grove 16in	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Minnesota Zone			
S 36	Washington	Hugo to Cottage Grove 16in	(b) (7)(F), (b) (3)
S 36	Washington	Hugo to Cottage Grove 16in	
S 5	Washington	Hugo to Cottage Grove 16in	
S 96	Washington	Hugo to Cottage Grove 16in	
UNK	Washington	Hugo to Cottage Grove 16in	
I 94	Washington	Hugo to Cottage Grove 16in	
I 94	Washington	Hugo to Cottage Grove 16in	
U 10	Washington	Hugo to Cottage Grove 16in	
U 10	Washington	Hugo to Cottage Grove 16in	
UNK	Washington	Hugo to Cottage Grove 16in	
U 61	Washington	Hugo to Cottage Grove 16in	
S 36	Washington	Hugo to Cottage Grove 16in	
S 36	Washington	Hugo to Cottage Grove 16in	

S 5	Washington	Hugo to Cottage Grove 16in	(b) (7)(F), (b) (3)
S 96	Washington	Hugo to Cottage Grove 16in	
UNK	Washington	Hugo to Cottage Grove 16in	
I 94	Washington	Hugo to Cottage Grove 16in	
I 94	Washington	Hugo to Cottage Grove 16in	
U 10	Washington	Hugo to Cottage Grove 16in	
U 10	Washington	Hugo to Cottage Grove 16in	
UNK	Washington	Hugo to Cottage Grove 16in	
U 61	Washington	Hugo to MP 238.1 16in	
S 36	Washington	Hugo to MP 238.1 16in	
S 36	Washington	Hugo to MP 238.1 16in	
S 5	Washington	Hugo to MP 238.1 16in	
S 96	Washington	Hugo to MP 238.1 16in	
Mississippi River	Washington	Pine Bend to Cottage Grove	
Burlington Northern Railroad	Wright	(b) (7)(F), (b) (3)	
Burlington Northern Railroad	Wright		
U 12	Wright		

SECTION 7 Last revised: December 15, 2012

SUSTAINED RESPONSE ACTIONS

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7.1 Response Resources

7.1.1 Response Equipment

Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time

7.1.2 Response Equipment Inspection and Maintenance

7.1.3 Contracts, Contractor Equipment, and Labor

7.1.4 Command Post

Figure 7.1-2 - Command Post Checklist

7.1.5 Staging Area

Figure 7.1-3 - Staging Area Checklist

7.1.6 Communications Plan

Figure 7.1-4 - Communications Checklist

7.2 Public Affairs

7.3 Site Security Measures

Figure 7.3-1 - Site Security Checklist

Figure 7.3-2 - Facility Security

7.4 Waste Management

Figure 7.4-1 - Waste Management Flow Chart

Figure 7.4-2 - General Waste Containment and Disposal Checklist

7.4.1 Waste Storage

Figure 7.4-3 - Temporary Storage Methods

SECTION 7
SUSTAINED RESPONSE ACTIONS, CONTINUED

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7.4.2 Waste Transfer

7.4.3 Waste Disposal

Figure 7.4-4 - Facility Specific Disposal Vendors

7.1 RESPONSE RESOURCES

7.1.1 Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY
Boom	Containment Boom/ Acme	300 feet per trailer	6	1992	Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals
KPL	Response Trailer	3	18'	1993	Operational	Clear Brook, Little Falls & Cottage Grove Terminals
KPL	OB Boat	2	18'		Operational	Little Falls & Cottage Grove Terminals
Skimmers/Pumps	Skimmer/ Elastec Model TDS-118	1 per trailer	35 GPM, EDRC=1200 BPD	1992	Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals
Skimmers/Pumps	Pnematic Pump/Aero Model 666200-361-C	1 per trailer	2	1992	Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals
Sorbents	3M/ T-280	120 feet per trailer	6lb Boom	1992	Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals
Sorbents	3M/ T-151	14 Bales per trailer	200 pads/bale	1992	Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals

Temporary Storage	Portable Tank/Elastec	1 per trailer	1,500 gallon capcity		Operational	Response Trailer at Clearbrook, Little Falls & Cottage Grove Terminals

***Note:** Response equipment is tested and deployed as described in **FIGURE A.1-2**, **FIGURE A.1-4**, and **FIGURE A.1-5** of the Spill Response Plan.

FIGURE 7.1-1 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S EQUIPMENT LIST / RESPONSE TIME

* USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
Minnesota Limited Inc., Bemidji Office Big Lake, , MN	Non-OSRO Spill Response Equipment	4 hours
Minnesota Limited, Inc., Big Lake Office Big Lake, , MN	Non OSRO Spill Response Equipment	4 hours
*Clean Harbors Cannon Falls, Mn	Full Response Capabilities / Not qualified for DOT Covered Functions	4 hours
*Bay West5 Empire DriveSt Paul, WI 55103 St. Paul, MN	Rivers and Streams response capabilities	6 hours
*Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956 Sheboygan, WI	Full response capabilities	6 hours
*Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137 Bellefontaine , MO	Full response capabilities	12 hours

7.1.2 Response Equipment Inspection and Maintenance

Company response equipment is tested and inspected as noted below. The Operations Manager is responsible for ensuring that the following response equipment and testing procedures are implemented. These consist of:

Containment boom During boom deployment exercises, boom will be inspected for

signs of structural deficiencies. If tears in fabric or rotting is observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.

Miscellaneous equipment Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order. The equipment inspections and records are retained for a period of five years. Exercise requirements are listed in **APPENDIX A.1**. A Spill/Exercise Documentation form is in **FIGURE A.1-4**. **FIGURE A.1-5** provides a log for response equipment testing and deployment drills.

7.1.3 Contractors, Contractor Equipment, and Labor

- The Company's primary response contractors' names and phone numbers as well as contact information of other companies who can provide spill response services are provided in **FIGURE 3.1-6** or **FIGURE 3.1-7**.
- The Company has ensured by contract or formal agreements the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the Worst Case Discharge or the substantial threat of such discharge.
- Contractors deploy and inspect boom to meet PREP guidelines. Company requires that these exercises be completed annually.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors and equipment lists of contractors without USCG classification.

7.1.4 Command Post

In the event of a major spill or other emergency, both an off-site Emergency Operations Center (EOC) and a Command Post may be established. For a minor emergency, only a Command Post may be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

COMMAND POST CHECKLIST	
Positioned outside of the present and potential Hazard Zone.	☐
Positioned away from the general activities such as traffic, noise, and confusion associated with an incident.	☐
Have ability to provide security and to control access to the ICP as necessary.	☐
Adequate space for size of staff.	☐
24-hour accessibility.	☐
Personal hygiene facilities.	☐

Suitability of existing communications resources (phone/fax/radio).	☐
Suitability of private conference and briefing rooms.	☐
Location or building has capability to grow, as necessary.	☐
Notify other parties of Command Post location; provide maps/driving directions.	☐
Determine staging areas and incident base locations.	☐
Identify future need to move or upgrade facilities.	☐

Command Posts for this facility are located at: a place to be determined based on the location and severity of the event. This is subject to change as the situation progresses.

7.1.4 Command Post

In the event of a major spill or other emergency, both an off-site Emergency Operations Center (EOC) and a Command Post may be established. For a minor emergency, only a Command Post may be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

7.1.5 Staging Area

A Staging Area is a temporary location at an incident where personnel and equipment are kept while awaiting tactical assignments. Staging Areas should be located relatively close to the incident, yet located sufficiently away to provide a safe location for personnel and equipment to await assignments. In an emergency response, numerous staging areas may be required to support containment and cleanup operations.

In selecting a suitable staging area, the following items should be considered:

- Accessibility to impacted areas.
- Proximity to secure parking, airports, docks, pier, or boat launches.
- Accessibility to large trucks and trailers which may be used to transfer equipment.
- Be in a large open area in order to provide storage for equipment and not interfere with equipment loading and offloading operations.
- Have different access routes for incoming and outgoing resources from the direct traffic of the incident response, whenever possible.

7.1.5 Staging Area, Continued

- Be conducive for loading and offloading of personnel; consider having moorage available

if vessels are required to aid the loading/offloading of personnel.

- Consider the need to incorporate specialty equipment such as ambulance, fire equipment, police cars, etc.

FIGURE 7.1-3 - STAGING AREA CHECKLIST

STAGING AREA CHECKLIST	
Positioned outside of the present and potential Hazard Zone.	☐
Positioned away from the general activities such as traffic, noise, and confusion associated with an incident; whenever possible, identify different access routes.	☐
Have ability to provide security and to control access to the staging area as necessary.	☐
Adequate space for size, amount, and type of equipment being assigned to the area (e.g., boom trailers, skimmers, vacuum trucks, back hoes, frac tanks).	☐
24-hour accessibility, but establish control and assist with check-in/check-out process for equipment and personnel arriving and leaving the Staging Area.	☐
Personal hygiene facilities necessary and available.	☐
Communication process established for calling for and returning equipment; prevent resources from freelancing or “doing their own thing”.	☐
Suitability of existing communications resources (phone/fax/radio).	☐
Staging Area may need to provide a temporary means for fueling; ensure safety and environmental requirements are reviewed.	☐
Notify Command Post of Staging Area location; provide maps/driving directions.	☐
Provide area to form operational units, such as Task Forces or Strike Teams.	☐
Designated areas to avoid confusion between incoming and outgoing equipment versus equipment ready for deployment.	☐

Staging areas for this facility are located at: a place to be determined based on the location and severity of the event. This is subject to change as the situation progresses.

7.1.6 Communications Plan

Communications include:

- The "hardware" systems that transfer information.
- Planning for the use of all available communications frequencies and resources.
- The processes and procedures for transferring information.
- Each employee has an office phone, cellular phone and computer.
- Qualified Individuals have Blackberrys for cellular phone and e-mail communications.
- Fax machines at all manned stations.
- 2 - Portable radios in each response trailer at Clearbrook, Little Falls & Cottage Grove

Company communications for small incidents will be conducted via telephone lines, cellular

telephones, PDA's, two way radios, e-mail, and fax machines.

Additional communications equipment (two way radios, VHF portable radios with chargers and accessories, command post with UHF, VHF, single sideband, marine, aeronautical, telephone, and hard-line capability) may be purchased or leased from a communications company in the area. Use of communications equipment, whether purchased or leased, must comply with FCC requirements prior to operation. Communications with government agencies, state police, and contractors will be conducted via telephone lines or cellular phones. As deemed necessary, government agencies responding to an incident on-site will be incorporated into the communications plan. Refer to **FIGURE 7.1-4** for guidelines to setup communications.

The Communications Group Leader is responsible for ensuring that the Incident Command and emergency responders have reliable and effective means of communication by establishing processes and procedures for transferring information. Several communication networks may be considered depending upon the size and complexity of the incident. These may include:

- **Command Net** - Established to link supervisory personnel from Incident Commander down to and including Division and Group supervisors.
- **Tactical Nets** - Established in a variety of ways, e.g., by agency, department, geographical area, or function. Tactical nets may be established for each Branch, or for Divisions and Groups, depending upon hardware and frequency availability and specific incident needs.
- **Support Nets** - Established on larger incidents to handle logistics traffic and resource status changes.
- **Ground-to-Air** - Established to coordinate ground-to-air traffic.
- **Air-to-Air** - Assigned for coordination between aircraft assigned to an incident

This may also involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

The Communications Plan (if necessary, written at the time of an incident) will identify system, network, channel, telephone numbers, radio frequencies, and assignments to the responders.

FIGURE 7.1-4 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	
Develop a Communications Plan; consider communication levels needed.	☐
Phone lines available, consider lines per staff element - contact local provider.	☐
Fax lines available, consider lines per group or unit requirements - contact local provider.	☐
Cell phone coverage providing means to maintain communications.	☐
Company and resource phone list available and being maintained.	
Recharging stations for cellular phones.	☐
VHF radio communications: • Establish frequencies • Assign call signs	☐

• Distribute radios • Establish communications schedule	
Recharging stations for VHF radios.	☐
Determine need for VHF repeaters.	☐
Copy machine available.	☐
Internet access available; necessary?	☐
Responders have capability to communicate with aircraft.	☐

Note: Actions on this checklist may not be applicable or may be continuous activities.

7.2 PUBLIC AFFAIRS

Company Spokesperson

The Incident Commander shall designate a company spokesperson at the scene and identify the spokesperson to Management and Public Affairs. Such person shall retain spokesperson's duties until relieved of those duties by the Incident Commander. The designated company spokesperson's duties shall include:

- Interaction with the company's Public Affairs Group about the incident and the progress of the Company's response;
- Interaction with the Incident Commander regarding requests for information from media and/or public;
- Interaction with media and/or public, including those who may be directly affected (through evacuation or otherwise) by the incident and/or the Company's response to the incident;
- Dissemination of truthful, complete, and appropriate information in response to requests and/or needs of media and/or public.

Unless designated by the Incident Commander, the Company spokesperson shall not be the principal contact between the company and responding or other appropriate governmental agencies.

The designated Company spokesperson shall have been trained on this section of the Integrated Contingency Plan and shall have received other training regarding the responsibilities of a Company spokesperson prior to his/her appointment as Company spokesperson. Any person who has not received such training shall not be qualified to serve as Company spokesperson.

The designated spokesperson shall notify appropriate personnel from the responding company, contractual responder, and necessary governmental agencies that he/she has been designated by the Incident Commander as the on-scene Company spokesperson and that as the designated spokesperson, he/she is the one and only spokesperson for the Company until advised otherwise. The spokesperson shall also advise responding company and contractual personnel that only the designated on-scene spokesperson should speak with the media and/or public.

Message Verification

Prior to providing any information regarding an incident to the media and/or public in any

form, the Company spokesperson must clear the message both factually and contextually with the Incident Commander. If practical and feasible, the Company spokesperson should also consult with the Legal Department and Public Affairs prior to providing any information to the media and/or public.

If consultation with Public Affairs is not feasible prior to the required release of information, then the Incident Commander and spokesperson shall use the approved media statement example listed below. **This statement is only to be used if a briefing with Legal and Public Affairs is not available.**

Media Statement

This statement is to be used only in the following situations:

- **By the on-scene Company spokesperson designated by the Incident Commander**
- **When Legal Department and Public Affairs consultation is unavailable**

We had an event (*describe incident type/location*). At this time we're working to manage the (*release, fire, etc., OR it is under control*). While we are still checking in with all our employees and others in the area, we believe (*acknowledge whether there are injuries or not*). We have notified local officials, including (*identify responding agencies*) and they are (*offering help or assisting*) as needed. Along with these agencies, we are monitoring the situation closely and will advise of any needed actions (*or, describe advised actions, if any*). As I'm sure you can understand, I must now return to my duties here. We'll have updates as information becomes available through (*identify response spokesperson if known, internal or outside*). Thank you for your patience.

Interviews

The Company spokesperson should refrain from granting on-camera interviews, where practical. If the spokesperson must provide an on-camera interview without a representative of Public Affairs present, then the spokesperson should consult with the Company's Public Affairs Group in preparation for the interview.

7.3 SITE SECURITY MEASURES

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

7.4 WASTE MANAGEMENT

The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objectives of ensuring:

- Worker safety
- Waste minimization
- Minimization of environmental impacts
- Proper management of the recovered materials compliant with regulatory requirements

During the emergency phase of a response, it is important to quickly engage the company waste specialists (Environmental Specialist) or activate a Disposal Group to address potential waste issues.

Depending on the size and complexity of the response, the following action items may be

conducted initially during a spill response:

- Development of a Site Safety and Health Plan (**SECTION 5.4**) addressing the proper PPE and waste handling procedures
- Development of a Disposal Plan (**SECTION 5.6**) in accordance with any federal, state, and/or local regulations. Facility-specific disposal locations for different types of materials are listed in **FIGURE 7.4.4**.

Potential waste management issues to consider:

- Type of waste being generated and collected
- Organization of waste collection, segregation, and storage
- Available storage to hold waste being generated
- Handling and storage requirements of recovered product
- Labeling and inspection of temporary storage areas and waste containers
- Continuous tracking of recoverable materials versus non-recoverable to better estimate amount of waste that could be generated over the short and long-term
- Review requirements for secondary containment for waste collection containers
- Regulatory review of applicable laws to ensure compliance and (if appropriate) provide agency notification or obtain permits associated with short and long term storage of generated waste
- Regulatory review of applicable laws to ensure compliance and (if appropriate) obtain permits associated with the transportation of generated waste
- Registered transportation resources along with approved treatment, storage, or disposal facilities
- Disposal of all waste in a safe and approved manner
- Documentation of all waste handling, testing, inspection, and disposal activities

Minnesota Zone 7 - 16

Activities associated with waste minimization during cleanup and recovery are:

- Reusing materials when possible
- Recycling or reclaiming waste
- Segregating waste (hazardous versus non-hazardous or heavily impacted versus slightly impacted)
- Treating waste, in accordance with the regulations and permits, to reduce hazards or reducing amount of waste generated

Solid wastes such as sorbents, PPE, debris, and equipment will typically be transported from the collection site to a designated facility for:

- Storage
- Waste segregation
- Packaging
- Transportation

A general flow chart for waste management guidelines is provided in **FIGURE 7.4-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.4-2**.

FIGURE 7.4-1 - WASTE MANAGEMENT FLOW CHART

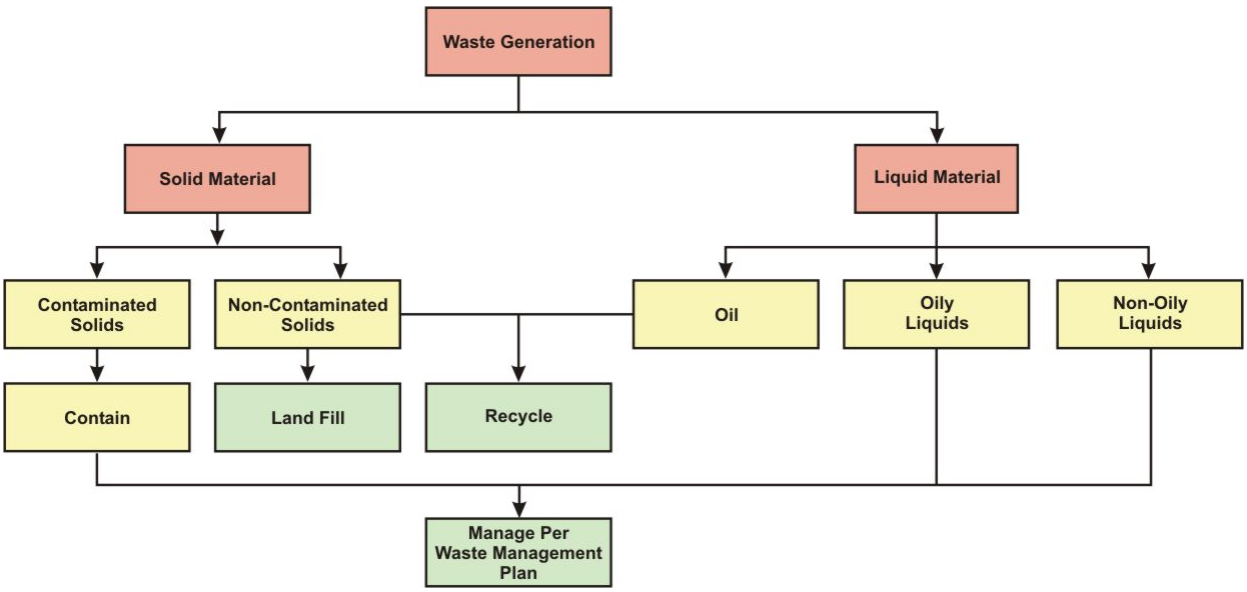


FIGURE 7.4-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	
Has the appropriate waste manager been contacted?	☐
Has each container been labeled?	☐
Waste handling process implement are based on the material being recovered (e.g., whether a waste or reusable product)?	☐
Has recovered material been containerized and secured?	☐
Has each of the discrete waste streams been identified?	☐
Has a representative sample of each waste stream requiring analysis been collected?	☐
Has the sample been sent to a laboratory for the appropriate analysis, (i.e. hazardous waste determination)?	☐

Has the appropriate waste classification and waste code number(s) for the individual waste streams been received?	☐
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	☐
Have the services of a registered hazardous waste transporter been contracted, if waste is hazardous?	☐
The transporter(s) being used to transport hazardous or nonhazardous waste are properly registered as required by Federal, State, or Local requirements?	☐
Local requirements?	☐
Is the waste being taken to an approved disposal site?	☐
Is the manifest/Bill of Lading properly Completed?	☐
Consider if permits are required?	☐

7.4.1 Waste Storage

During an oil spill, the volume of oil that can be recovered depends on the storage capacity available. Typical short-term (temporary) storage methods are provided in FIGURE 7.4-3. If storage containers such as drums are used, the container should be clearly marked and labeled to indicate the type of material or waste contained. All on-site accumulation or storage activities shall be conducted by permitted facilities in accordance with applicable state and EPA requirements.

Use of an off-site storage may depend on the approval of State and Local authorities. Consider the following elements affecting the choice of a potential storage site:

- Geology
- Soil
- Surface water
- Covered materials
- Climatic factor
- Emissions
- Odor concerns
- Access
- Ground water
- Flooding
- Slope
- Capacity
- Land use
- Security
- Public contact

FIGURE 7.4-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	CAPACITY
Drums	X	X	X	X			0.2-0.5 yd^3

Bags			X	X			1.0-2.0 yd^3
Boxes			X	X			1-5 yd^3
Roll top rolloff	X		X	X	X	X	15-25 yd^3
Vacuum box	X	X					15-25 yd^3
Frac tank	X	X					500-20,000 gal
Poly tank	X	X					200-4,000 gal
Vacuum truck	X	X	X				2,000-5,000 gal
Tank trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+ gal
Berm, 4 ft			X	X	X	X	1 yd^3
Bladders	X	X					25-1,500 gal

7.4.2 Waste Transfer

In most oil spill response operations, it may be necessary to transfer recovered oil and oil debris from one point to another several times before the oil and oily debris are ultimately disposed of at a state approved disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

- Directly into the storage tank of a vacuum device,
- Directly into impermeable bags that, in turn, are placed in impermeable containers,
- From a vacuum device storage tank to a truck,
- From containers to trucks,
- From a tank truck to a processing system (i.e., oil/water separator),
- From a processing system to a recovery system and or incinerator,
- From a skimming vessel or flexible bladder to a barge,
- From a barge to a tank truck,
- Directly into the storage tank on a dredge,
- From portable or vessel mounted skimmers into flexible bladder tanks, the storage tanks of the skimming vessel itself, or a barge.

There are two general classes of transfer systems that could be employed for effective oily waste transfer operations. The following is a brief description of some transfer systems:

Vacuum Systems
Vacuum systems, such as air conveyors, vacuum trucks, and portable vacuum units, may be used to transfer viscous oils and debris but they usually pick up a very high water/oil ratio.

Wheeled Vehicles
Wheeled vehicles may be used to transfer liquid waste of oily debris to storage or disposal sites. These vehicles are readily available but have a limited rate (i.e., 100 bbls) and require good site access. All waste transfer activities shall be conducted by licensed transporter and carriers in accordance with applicable EPA and DOT requirements.

7.4.3 Waste Disposal

Waste must be disposed of in accordance with Federal and State requirements. Each incident should be reviewed carefully to ensure that appropriate disposal techniques are employed.

The following is a brief description of some disposal techniques available for recovered oil and oily debris.

Recycling
Recycling involves processing discarded materials for another use.

Incineration
This technique entails the destruction of the recovered oil by high temperature thermal oxidation reactions. There are licensed incineration facilities as well as portable incinerators that may be brought to a spill site. Incineration may require the approval of the local Air Pollution Control Authority.

In Situ Burning/Open Burning
Burning techniques entail igniting oil or oiled debris allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by Federal, State, and Local laws.

As a general rule, in situ burning would be appropriate only when atmospheric conditions will allow the smoke to rise several hundred feet and rapidly dissipate. Smoke from burning oil will normally rise until its temperature drops to equal the ambient temperature. Afterwards, it will travel in a horizontal direction under the influence of prevailing winds.

Landfill Disposal
This technique entails burying the recovered oil in an approved landfill in accordance with regulatory procedures. Landfill disposal of free liquids is prohibited by Federal Law in the United States. All disposal activities shall be conducted by permitted disposal facilities in accordance with applicable state and EPA requirements.

FIGURE 7.4-4 - FACILITY SPECIFIC DISPOSAL VENDORS

MATERIAL	DISPOSAL FACILITY	LOCATION
	KPL M260.010 Waste Management	KPL M260.010 Waste Management Program Manual Section 6

Recovered Product	Program Manual outlines the processes for managing compliance requirements triggered by the generation of Waste at KPL Owned and / or Operated assets.	Treatment, Storage, and Disposal Facility (TSDF) outlines the process for selecting and vetting TSDF's for KPL Owned and/or operated assets.
Contaminated Soil	Same as Recovered Product.	Same as Recovered Product.
Contaminated Equipment	Same as Recovered Product.	Same as Recovered Product.
Personnel Protective Equipment	Same as Recovered Product.	Same as Recovered Product.
Decontamination Solutions	Same as Recovered Product.	Same as Recovered Product.
Adsorbents and Spent Chemicals	Same as Recovered Product.	Same as Recovered Product.

SECTION 8 Last revised: February 2006

DEMOBILIZATION / POST-INCIDENT REVIEW

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8.1 Closure and Termination of the Response

8.2 Demobilization

Figure 8.2-1 - Demobilization Checklist

8.3 Post-Incident Review

8.3.1 Final Spill Cleanup Report

8.1 CLOSURE AND TERMINATION OF THE RESPONSE

In these stages, the cleanup may have reached a level of resolve satisfactory to the ICS or UCS (Unified Incident Command comprising of Federal, State, and Local agencies). However, considering the size and complexity of the event, it is possible for the cleanup to reach closure, but termination may require follow-up actions.

Closure and termination issues to consider:

- The IMT (ICS / UCS) determine each area is clean before halting cleanup operations.
- Demobilization Plan, entering final stages prioritizing the removal of equipment and personnel.
- Equipment may need both maintenance and decontamination before being demobilized.
- Facilities (staging area, Command Post, etc.) are being shut down anticipating termination of operations.
- Determine what documentation should be maintained, where, and for how long.
- Safety Plans and safety equipment are being adjusted; heightened awareness is required as the event approaches closure and termination.
- If employed, utilize the IAP to document and demonstrate agreement between the ICS / UCS (RP and Agencies) and any conditions established for the closure or termination of the event.
- Document activities that will continue after the cleanup ends; examples include incident debriefing, bioremediation, NRDA studies, claims, and legal actions.
- Consider expressing gratitude to the community, police department, fire department, and emergency crews for their work during the response.

8.2 DEMOBILIZATION

Developing a Demobilization Plan may considerably improve the efficiency and effectiveness of the demobilization process (**SECTION 5.8**). A Demobilization Checklist is provided in **FIGURE 8.2-1**.

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

DEMOBILIZATION CHECKLIST	
Assign personnel to identify surplus resources and probable release times.	☐
Work with Operational and Planning Group leaders to establish demobilization priorities.	☐
Develop decontamination procedures.	☐

Initiate equipment repair and maintenance.	☐
Develop a Disposal Plan.	☐
Identify shipping needs.	☐
Identify personnel travel needs.	☐
Develop impact assessment and statements.	☐
Obtain concurrence of Planning and Operations Group Leaders before release of personnel or equipment.	☐

8.3 POST-INCIDENT REVIEW

A Post-Incident review will be conducted for significant Incidents. The review shall be scaled to fit the seriousness and complexity of the incident and conducted in a timely manner. The purpose of the review is to thoroughly and objectively examine the incident based on the known facts and to determine a potential root cause using a systematic process to identify the cause of the incident.

The review must be conducted with the overall objectives of ensuring:

- Information Collection
- Team review, scaled to the complexity of the event
- Root Cause Analysis, (one member of the team must be knowledgeable in RCA methods)
- Identified and assigned action items
- Analysis and corrective action acceptance

Based on the size, seriousness, and complexity of the event, the Post-Incident Review may include or schedule a separate review to evaluate the Company's ability to:

- Follow notification procedures
- Employ staff mobilization procedures
- Operate within the response management system described in the Plan
- Follow response methods described in the Plan
- Contact and effectively utilize response equipment or contractors listed in the Plan
- Document the response actions taken

The purpose of the review is to review the efficiency and effectiveness of the response as well as identify actual or potential deficiencies in the Plan (**FIGURE A.1-4**). Appropriate changes to programs, procedures, and operations will be made based on the results of the review.

The Compliance Manager or designee is responsible for reviewing and incorporating post-drill evaluation improvements into the Plan when these improvements materially affect the Plan.

In the event of a PHMSA reportable incident, complete the Post-Accident Review Form (KPL0120).

8.3.1 Final Spill Cleanup Report

A final incident report may be prepared by the Incident Commander or designee after completion of spill cleanup activities for internal use. The report may be written in the narrative form, captured by a company form, and/or stored in a company database. It may include PREP documentation (**APPENDIX A.1**) or other agency documents, plus other information as listed below (as appropriate):

- Time, location, and date of discharge
- Type of material discharged
- Quantity discharged (indicate volume, color, length and width of slick, and rate of release if continuous)
- Source of spill (tank, flowline, etc.) in which the oil was originally contained, path of discharge, and impact area
- Detailed description of potential cause of the discharge and actions taken to control or stop the discharge
- Description of damage to the environment
- Steps taken to clean up the spilled oil along with dates and times steps were taken
- The equipment used to remove the spilled oil; dates and number of hours equipment was used
- The number of persons employed in the removal of oil from each location, including their identity, employer, and the number of hours worked at that location
- Actions by the Company or contractors to mitigate damage to the environment
- Measures taken by the Company or contractors to prevent future spills
- The Federal and State agencies to which the Company or contractors reported the discharge; show the agency, its location, the date and time of notification, and the official contacted
- Description of the effectiveness of equipment and cleanup techniques and recommendations for improvement
- The names, addresses, and titles of people who played a significant role in responding to the event
- A section identifying problems and deficiencies noted during the response event; a follow-up section should include recommended procedure modifications to make a future response more effective and efficient

Minnesota Zone

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APPENDICES

A. **TRAINING / EXERCISES**

B. **CONTRACTOR RESPONSE EQUIPMENT**

C. **HAZARD EVALUATION AND RISK ANALYSIS**

D. **CROSS-REFERENCES**

E. **ACRONYMS AND DEFINITIONS**

F. **ADDITIONAL INFORMATION**

APPENDIX A Last revised: February 5, 2013

TRAINING / EXERCISES

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A.1 Exercise Requirements and Schedules

Figure A.1-1 - Exercise Requirements

Figure A.1-2 - PREP Response Plan Core Components

Figure A.1-3 - Qualified Individual Notification Exercise

Figure A.1-4 - Spill / Exercise Documentation Form

Figure A.1-5 - Equipment Testing and Deployment Exercise Form

Figure A.1-6 - Incident Management Team Staffing Exercise Form

A.2 Training Program

Figure A.2-1 - Training Requirements

Figure A.2-2 - PREP Training Program Matrix

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

The Company participates in the National Preparedness for Response Exercise Program (PREP). **FIGURE A.1-1** provides a description of the various required PREP Exercise requirements (not all exercises are necessarily required for each facility).

As prescribed in PREP, the company will test their response plan in its entirety every three years. As allowed by PREP, the company has identified individual plan components (**FIGURE A.1-2**) to be exercised in portions within the triennial cycle rather than conducting one major exercise every three years. The components (**FIGURE A.1-2**) correspond with PREP "Exercise" objectives to ensure the plan is adequate to respond to a spill event.

During each triennial cycle, components of the Plan (**FIGURE A.1-2**) are be exercised at least once. Responding to actual event can be credited for an exercise.

The Compliance Manager or designee is responsible for the following aspects:

- Scheduling
- Maintaining records
- Implementing
- Evaluation of the Company's training and exercise program
- Post-drill evaluation improvements

- **FIGURE A.1-3** provides a documentation form which may be used for a Qualified Individual Notification exercise. **FIGURE A.1-4** provides a Spill/Exercise Documentation form. **FIGURE A.1-5** provides an Equipment Testing and Deployment Exercise documentation form. **FIGURE A.1-6** provides an Incident Management Team Staffing Exercise documentation form. Please note, other comparable company forms may be used instead of these specific forms.

FIGURE A.1-1 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI Notification	• Conducted quarterly (one per year must be performed during non-business hours • The facility initiates mock spill notification to QI • The Qualified Individual documents time/date of notification, name, and phone number of individual contacted • Document using **FIGURE A.1-3** or comparable form
Emergency Procedures	• Optional exercise for EPA regulated facilities • Review of facility procedures established to mitigate or prevent any discharge or substantial threat of a discharge from operational activities • An emergency procedures conducted unannounced would satisfy the facilities requirement for the annual unannounced

Spill Management Teams / Table Top Exercise	
IMT (Incident Management Team)	• Conducted annually • Tests IMT's (SMT) response activities/responsibilities • Documents Plan's effectiveness • Must exercise worst case discharge scenario once every three years • Must test all Plan components at least once every three years • Document using **FIGURE A.1-4** or comparable form
Corporate Incident Management Team (If Applicable)	• Conducted annually • Conduct one IMT (spill management exercise or table top) on the core response management procedures • Ensure familiarization with each response plan they are responsible for • Document using **FIGURE A.1-4** or comparable form
Mutual aid SMT (If Applicable)	• Conducted annually • Conduct one IMT (spill management exercise or table top) on the plan holder (or industry type) response management procedures • One or more of the plan holder organization must participate • Ensure familiarization with each response plan they are responsible for • Document using **FIGURE A.1-4** or comparable form
Equipment Deployment Exercise: **Note:** Where OSRO and Company owned equipment are cited, both type of equipment exercises are incorporated.	

Company Owned	• Facilities with company owned and operated equipment:
	  • Semi-annually deploy the:
	  • Minimum amount of equipment for deployment as described in PREP (1,000 ft of each tye of boom and one each type of skimming system), or
	  • Amount of Equipment necessary to respond to an average most probable at the facility, which ever is less
	• Pipelines with operator owned and operated equipment:
	  • Annually deploy the:
	  • Minimum amount of equipment for deployment as described in PREP (1,000 ft of each tye of boom and one each type of skimming system), or
	  • Amount of Equipment necessary to respond to an average most probable at the facility, which ever is less
	• Document using **FIGURE A.1-5** or comparable form

FIGURE A.1-1 - EXERCISE REQUIREMENTS, CONTINUED

EXERCISE TYPE	EXERCISE CHARACTERISTICS
OSRO Owned (Oil Spill Removal Organization)	• Annually for facilities and pipelines, • Company to acquire documentation from the OSRO demonstrating the completion of exercise requirements
Co-op	• OSRO based Co-ops to follow OSRO deployment requirements • Facility equipment and personnel Co-op considered an OSRO in PREP and follow the OSRO deployment requirements for facilities • Co-op personnel responsible for deploying response equipment to be involved in a training program that prepares tem for operating the response equipment
Unannounced (Internal)	• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, • If selected, company may take credit for participation in government initiated unannounced drill in lieu of drill required by PREP guidelines • Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise • Document using **FIGURE A.1-4** or comparable form
Area	• An industry plan holder that participates in an Area Exercise would not be required to participate in another Area Exercise for a minimum of six years
OTHER EXERCISE CONSIDERATIONS	
Drill Program Evaluation Procedures	• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later
Credit for Spill Response	• Credit may be taken for internal exercises in response to actual spills • Spill response must be evaluated • Determination for credit made on which exercise were completed during the spill response. • Determination should be based on whether the response would meet the objectives of the exercise listed in PREP • Credit for Unannounced should be evaluated • Document in accordance with appropriate Exercise documentation form

Records of Drills	• Company will maintain exercise records for five years following completion of each exercise • Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.)

FIGURE A.1-2 - PREP RESPONSE PLAN CORE COMPONENTS

CORE COMPONENTS	DESCRIPTION
1. Notifications	Test the notifications procedures identified in the Area Contingency Plan (ACP) and the Spill Response Plan.
2. Staff mobilization	Demonstrate the ability to assemble the spill response organization identified in the ACP and the Spill Response Plan.
3. Ability to operate within the response management system described in the Plan: • Unified Command • Response management system	Demonstrate the ability of the spill response organization to work within a unified command. Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.
4. Discharge control	Demonstrate the ability of the spill response organization to control and stop the discharge at the source.
5. Assessment	Demonstrate the ability of the spill response organization to provide initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.
6. Containment	Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.
7. Recovery	Demonstrate the ability of the spill response organization to recover the discharged product.
8. Protection	Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the ACP and the respective industry response plan.
9. Disposal	Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.

10. Communications	Demonstrate the ability to establish an effective communications system for the spill response organization.
11. Transportation	Demonstrate the ability to establish multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary support of all personnel associated with response.
13. Equipment maintenance and support	Demonstrate the ability to maintain and support all equipment associated with the response.
14. Procurement	Demonstrate the ability to establish and effective procurement system.
15. Documentation	Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

FIGURE A.1-3 - QUALIFIED INDIVIDUAL NOTIFICATION EXERCISE

1. Date(s) QI Exercise performed:				
2. Exercise Name:				
☐ QI Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill				
Exercised frequency:				
☐ Quarter ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th				
3. Description of Notification Exercise / Event:				
a. Location (Facility, Pipeline, Zones):				
b. Time initiated:				
c. Time ended:				
d. Notification Procedure:				
4. Notification results:				
Person performing exercise:	Method of contact: Telephone, Pager, Radio, other			
Qualified Individual Name	**Time Notified**	**Time Responded**	**Method of Contact**	

5. Exercise objective met (contacted made between the facility and qualified individual(s))? _Yes___No
   If no, Lessons learned must be completed.

6. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures

Print Name:	Signature:
Position:	

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM

1. Date(s) performed:
2. Exercise Name:

Type of Exercise ☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill

Exercise, credit for:

☐ Emergency Procedures ☐ Spill Management Team ☐ Tabletop

Exercise, frequency:

☐ Quarter (☐ 1st ☐ 2nd ☐ 3rd ☐ 4th) ☐ Semi-Annual ☐ Annual

Response plan discharge scenario used:

☐ Average most probable

☐ Maximum most probable ☐ Worst case		
3. Description of Exercise / Event:		
a. Location:		
b. Time initiated:		
c. Time ended:		
d. Product:		
e. How discovered:		
f. Quantity released :		
g. Affected area(s):		
h. Injuries or Hazards:		
i. Weather:		
4. **Plan Objectives** exercised (may be exercised at different times):		
a. Spill Management Team's Knowledge of Oil-Spill Response Plan		
	Yes	**No**
General Order of Response described in the Plan:		
• Discovery and Assessment (Spill Detection) Phase	☐	☐
• Detection methods identified	☐	☐
• Emergency Type (Event “Class”) identified	☐	☐
• Spill assessment (classifying discharge size & course of action) identified	☐	☐
Security and Response Phases		
• Initial Response	☐	☐
• General site assessment, detail to safety, environment, & public	☐	☐
• Elimination of ignition sources	☐	☐
• Isolation / Confirmation Source was stopped	☐	☐
• Establish Incident Command / field command post (ICS Structure)	☐	☐
• Briefing Meeting, (incident description, objectives, resources needed)	☐	☐
• Develop Site Safety Plan (including evacuations of necessary)	☐	☐
• Established Work Zones and Perimeter Security	☐	☐

• Initial Incident reports completed (company forms or others e.g. ICS 201)	☐	☐

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

4. **Plan Objectives** exercised (may be exercised at different times), Continued:		
a. Spill Management Team's Knowledge of Oil-Spill Response Plan, Continued		
	Yes	**No**
• Sustained Response	☐	☐
• Objectives and priorities established with responsibilities assigned	☐	☐
• ICS Center established; transitioned from initial response activities	☐	☐
• IAP – Incident Action Plan, (Short and Long Range tactical objectives)	☐	☐
• Identify / provide clean-up and support resources and services	☐	☐
• Monitor cost; provide accounting, procurement, time recording	☐	☐
• Documentation of event to be recorded and / or maintained	☐	☐
• Coordinate Federal State and Local entities into ICS/ UCS units	☐	☐
• Containment and response methods established	☐	☐
• Closure / Termination Phases	☐	☐
• Closure plan / checklist to finalize ongoing clean-up and removal activities	☐	☐
• Demobilization plan for demobilizing resources	☐	☐
• Develop IAP (Incident Action Plan) for any follow-up actions	☐	☐
• Conduct a post incident review & document (e.g. post incident review form)	☐	☐
b. Proper Notification:	☐	☐
• Internal notifications completed (attach any available logs)	☐	☐

• Qualified Individual contacted and responded (attached OI Drill form)	☐	☐
• External (Agency) Notifications completed (attach any available logs) ▪ Federal Agencies (e.g. NRC, USCG, DOT) ▪ Agency _____ Date / Time _____, NRC #: _____, ▪ Agency _____ Date / Time _____, NRC #: _____, ▪ State (e.g. Texas General Land Office / Report Number) ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Local (e.g. LEPC, Sheriff, 911) ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____,	☐	☐
c. Communication systems:	☐	☐
Establish Primary/Secondary Communication System?	☐	☐
☐ Primary: (☐ Cellular Phone ☐ Two Way Radio ☐ Land Telephone Line ☐) ☐ Secondary: (☐ Cellular Phone ☐ Two Way Radio ☐ Land Telephoen Line ☐) ☐ Other:		

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

d. Ability to Access Contracted Oil Spill Removal Organizations (OSROs):	☐	☐
Were OSRO identified and contacted?	☐	☐
Who contacted (Name of individual at OSRO):		
When contacted:		
Response time projection for deployment:		

Type and amount of equipment requested:		
e. Ability to Coordinate Response with On-Scene Coordinator, and applicable Agencies:	☐	☐
Was regulatory on-scene coordinator(s) contacted?	☐	☐
List person and agency represented:		
f. Ability to Access Sensitive Site & Resource Information in the Area Contingency Plan:	☐	☐
Was Area Contingency Plan available in the exercise?	☐	☐
Were environmental sensitive environments identified in the ACP?	☐	☐
Was spill response equipment identified in the ACP?	☐	☐

Identify which of the 15 core components of your response plan were exercised:

Organizational Design components:

☐ Notifications ☐ Staff Mobilization

☐ Ability to operate within the response management system described in the plan

Operational Response components:

☐ Discharge control ☐ Assessment of discharge

☐ Containment of the discharge ☐ Recovery of spilled material

☐ Protection of sensitive areas ☐ Disposal of recovered material and contaminated debris

Response support components:

☐ Communications ☐ Transportation

☐ Personnel support ☐ Equipment maintenance

☐ Procurement ☐ Documentation

5. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures

Print Name:	Signature:
Position:	

FIGURE A.1-5 - EQUIPMENT TESTING AND DEPLOYMENT EXERCISE FORM

1. Date(s) performed:
2. Exercise Name:
Type of Equipment Deployment Exercise:
☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill

EQUIPMENT DEPLOYMENT EXERCISE	
Equipment deployed is	☐ Company owned ☐ OSRO owned ☐ Both
Deployment of equipment was	☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill
If facility - owned, was Equipment deployed sufficient for average most probable release?	☐ yes ☐ no ☐ na
If OSRO - owned, was Equipment deployed a representative sample (at least 1000 ft boom and at least on type of skimmer)?	☐ yes ☐ no ☐ na
Was equipment deployed in its intended operating environment?	☐ yes ☐ no ☐ na
Are facility personnel responsible for response operations involved in a comprehensive training program?	☐ yes ☐ no ☐ na
Is facility response equipment involved in a comprehensive maintenance program	☐ yes ☐ no ☐ na
Date of equipment deployment:	

ACTIVITY	**INFORMATION**
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies listed for equipment deployed (as listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	
OSRO Certification (if applicable)	

FIGURE A.1-5 - EQUIPMENT TESTING AND DEPLOYMENT EXERCISE FORM, CONTINUED

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	

Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

2. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures
Print Name:	Signature:	
Position:		

FIGURE A.1-6 - INCIDENT MANAGEMENT TEAM STAFFING EXERCISE FORM

Company:	Date:
Exercise Name:	Exercise Type:

* Duties Must include: IC, Ops. Logistics, Planning Admin. Section Chiefs, Safety, Public Affairs, Liaison, etc.
Note: This is an optional form which can be used form staffing documentation in a simulated exercise.

ACTIVITY INFORMATION (Duties*)	Name	Time Contacted	Time to Respond	Comments

STAFF MOBILIZATION ACTIVITY	SUMMARY
Evaluation: *(Able to assemble the spill response organization identified in the responder plan and the ACP for the scenario?)*	
Changes to be Implemented	
Time Table for Implementation	
Print Name:	Signature:
Position:	

A.2 TRAINING PROGRAM

FIGURE A.2-1 provides training requirements for spill responders. **FIGURE A.2-2** provides the program matrix.

Training records for company personnel will be maintained per company policy.

FIGURE A.2-1 - TRAINING REQUIREMENTS

TRAINING TYPE	TRAINING CHARACTERISTICS
Training in use of spill response plan	• Company employees will be trained to properly report and respond to spills. • Appropriate company employees are trained and drilled on the Plan.
OSHA training requirements	• Company responders designated in Plan will have 24 hours of initial spill response training (Haz Mat Technician level) with annual refresher. • Contract responders will be required to meet OSHA requirements under 29 CFR 1910.120

Training for casual laborers or volunteers	• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training
Wildlife	• Only appropriately trained and approved wildlife handlers, as found in the specialized support services section of this Plan, will be used to treat oiled wildlife
Training documentation and record maintenance	• Training records will be maintained in accordance with the Company Records Retention Schedule.
Facility Personnel	• Are trained to enable them to respond effectively to hazardous waste emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems.

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	FACILITY PERSONNEL
Captain of the Port (COTP) Zones or Environmental Protection Agency (EPA) Regions in which the facility is located	x	x	x
Notification procedures and requirements for facility owners or operators; internal response organizations; federal and state agencies; and contracted oil spill removal organizations (OSROs) and the information required for those organizations	x	x	x
Communication system used for the notifications	x	x	x
Information on the products stored, used, or transferred by the facility, including familiarity with the material safety data sheets (MSDS), special handling procedures, health and safety hazards, spill and fire fighting procedures	x	x	x
Procedures the facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from facility operational activities associated with internal or external cargo transfers, storage, or use	x		
Facility personnel responsibilities and procedures for use of facility equipment	x	x	x

which may be available to mitigate or prevent an oil discharge			
Operational capabilities of the contracted OSRO?s to respond small, medium, and large discharges	x	x	x
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization	x	x	x
The organization structure that will be used to manage the response actions including: • Command and control • Public information • Safety • Liaison with government agencies • Spill response operations • Planning • Logistics support • Finance	x	x	x
The responsibilities and duties of each Incident Management Team (IMT) within the organization structure	x	x	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90)	x	x	x
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness	x		
The Area Contingency Plan (ACP) for the area in which the facility is located	x	x	x
The National Contingency Plan (NCP)	x	x	x
Roles and responsibilities of federal and state agencies in pollution response	x	x	x

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	FACILITY PERSONNEL
Available response resources identified in the Plan	x	x	
Contracting and ordering procedures to	x	x	

acquire OSRO resources identified in the Plan			
OSHA requirements for worker health and safety (29 CFR 1910.120)	x	x	x
Incident Command System/Unified Command System	x	x	
Public affairs	x	x	
Crisis management	x	x	
Procedures for obtaining approval for dispersant use or insitu burning of the spill	x		
Oil spill trajectory analyses	x		
Sensitive biological areas	x	x	
This training procedure as described in the Plan for members of the IMT		x	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		x	
Basic information on spill operations and oil spill clean-up technology including: • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, insitu burning, bioremediation • Waste storage and disposal considerations		x	
Hazard recognition and evaluation		x	
Site safety and security procedures		x	
Personnel management, as applicable to designated job responsibilities		x	
Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities		x	x
Specific procedures to shut down effected operations			x
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: • Tank overfill • Tank rupture • Piping or pipeline rupture			x

• Piping or pipeline leak, both under pressure or not under pressure, if applicable • Explosion or fire • Equipment failure • Failure of secondary containment system			
QI's name and how to contact him or her			x

APPENDIX B Last revised: July 7, 2011

COOPERATIVE AND CONTRACTOR DOCUMENTS

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B.1 Cooperatives and Contractors

B.1.1 OSRO Classification

Figure B.1-1 - Evidence of Contracts

Figure B.1-2 - Equipment Lists

Figure B.1-3 - Drill Deployment Exercises

Minnesota Zone B - 2

B.1 COOPERATIVES AND CONTRACTORS

The Company has contracted with Oil Spill Removal Organizations (OSROs) to provide personnel and equipment in the event of a spill. The classification, response capabilities, and equipment are described below.

B.1.1 OSRO Classification

The OSRO classification process was developed by the U.S. Coast Guard (USCG) to provide guidelines to enable USCG and plan preparers to evaluate an OSRO?s potential to respond to oil spills. Plan holders that utilize USCG classified OSRO services are not required to list response resources in their plans.

The following is a listing of the USCG classified OSROs that may respond to incidents for areas listed in this Plan.

<table>
<tr><th>COMPANY / CONTRACTOR</th><th>APPLICABLE COTP ZONE (S)</th><th>USCG CLASSIFICATIONS</th><th>RESPONSE TIME</th></tr>
<tr><td>Clean Harbors
211 Holiday Avenue
Cannon Falls
Mn
55009</td><td>Upper Mississippi</td><td>
<table>
<tr><th></th><th colspan="4">Facilities</th><th colspan="4">Vessels</th></tr>
<tr><th></th><th>MM</th><th>W1</th><th>W2</th><th>W3</th><th>MM</th><th>W1</th><th>W2</th><th>W3</th></tr>
<tr><td>River/Canal</td><td>✓</td><td></td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Inland</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Open Ocean</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Offshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Nearshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Great Lakes</td><td></td><td></td><td>✓</td><td>✓</td><td></td><td></td><td>✓</td><td>✓</td></tr>
</table>
</td><td>4 hours</td></tr>
<tr><td>Bay West5
Empire DriveSt Paul, WI 55103
5 Empire Drive
St. Paul
MN
55103</td><td>Upper Mississippi</td><td>
<table>
<tr><th></th><th colspan="4">Facilities</th><th colspan="4">Vessels</th></tr>
<tr><th></th><th>MM</th><th>W1</th><th>W2</th><th>W3</th><th>MM</th><th>W1</th><th>W2</th><th>W3</th></tr>
<tr><td>River/Canal</td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>Inland</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Open Ocean</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Offshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Nearshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Great Lakes</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td>6 hours</td></tr>
<tr><td>Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956
2905 Paine</td><td>Chicago</td><td>
<table>
<tr><th></th><th colspan="4">Facilities</th><th colspan="4">Vessels</th></tr>
<tr><th></th><th>MM</th><th>W1</th><th>W2</th><th>W3</th><th>MM</th><th>W1</th><th>W2</th><th>W3</th></tr>
<tr><td>River/Canal</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Inland</td><td>✓</td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td>Open Ocean</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Offshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td>6 hours</td></tr>
</table>

<table>
<tr>
<td>Ave.
Sheboygan
WI
53081</td>
<td></td>
<td>
<table>
<tr><td>Nearshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Great Lakes</td><td>✓</td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td>✓</td><td>✓</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137
1188 Pershall Rd
Bellefontaine
MO
63137</td>
<td>Upper Mississippi</td>
<td>
<table>
<tr><td></td><td colspan="4">Facilities</td><td colspan="4">Vessels</td></tr>
<tr><td></td><td>MM</td><td>W1</td><td>W2</td><td>W3</td><td>MM</td><td>W1</td><td>W2</td><td>W3</td></tr>
<tr><td>River/Canal</td><td>✓</td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td>Inland</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Open Ocean</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Offshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Nearshore</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Great Lakes</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td>
<td>12 hours</td>
</tr>
</table>

Minnesota Zone B - 3

The following contractors are retained by the Company but are not USCG classified OSROs within this Area, as follows:

- Minnesota Limited Inc., Bemidji Office
  18640 200th Street P.O. Box 410
  Big Lake, ,MN
  55309
- Minnesota Limited, Inc., Big Lake Office
  18640 200th Street P.O. Box 410
  Big Lake, ,MN
  55309

FIGURE 7.1-1 provides both OSRO and non-OSRO summarized equipment lists and response times.

FIGURE B.1-1 provides evidence of contracts with OSROs and equipment lists for contractors without USCG classification.

Minnesota Zone B - 4

FIGURE B.1-1 - EVIDENCE OF CONTRACTS

- **Clean Harbors, Cannon Falls, Mn**
- **Minnesota Limited Inc., Bemidji Office, Big Lake, , MN**
- **Minnesota Limited, Inc., Big Lake Office, Big Lake, , MN**
- **Bay West5 Empire DriveSt Paul, WI 55103, St. Paul, MN**
- **Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956, Sheboygan, WI**

- **Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137, Bellefontaine , MO**

Minnesota Zone B - 5

FIGURE B.1-2 - EQUIPMENT LISTS

- **Clean Harbors, Cannon Falls, Mn**
- Minnesota Limited Inc., Bemidji Office, Big Lake, , MN
- Minnesota Limited, Inc., Big Lake Office, Big Lake, , MN
- **Bay West5 Empire DriveSt Paul, WI 55103, St. Paul, MN**
- **Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956, Sheboygan, WI**
- **Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137, Bellefontaine , MO**

FIGURE B.1-3 - DRILL DEPLOYMENT EXERICSES

- **Clean Harbors, Cannon Falls, Mn**
- Minnesota Limited Inc., Bemidji Office, Big Lake, , MN
- Minnesota Limited, Inc., Big Lake Office, Big Lake, , MN
- **Bay West5 Empire DriveSt Paul, WI 55103, St. Paul, MN**
- **Veolia ES Special Services, Inc.785 County Road CB Suite 100Neenah, WI 54956, Sheboygan, WI**
- **Heritage Environmental Services, LLC1188 Hershal RoadSt. Louis, MO 63137, Bellefontaine , MO**

APPENDIX C Last revised: January 30, 2013

HAZARD EVALUATION AND RISK ANALYSIS

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C.1 **Spill Detection**

C.2 Worst Case Discharge (WCD) Scenario Discussion

C.3 Planning Volume Calculations

C.4 Spill Volume Calculation DOT

C.5 Pipeline - Abnormal Conditions

C.6 Product Characteristics and Hazards

Figure C.6-1 - Summary of Commodity Characteristics

C.1 SPILL DETECTION

Detection

Detection of a release may occur in a number of ways including:

- Automated or manual detection by a leak detection method such as:
  - Computational Pipeline Monitoring system
  - Line Balance
  - Real-time transient model
  - Pressure/Flow monitoring
- Visual inspection
- Acoustic emission detectors
- Fixed air monitor

Alarm Response

(b) (7)(F), (b) (3)

[redacted]

Minnesota Zone C - 3

C.1 SPILL DETECTION, CONTINUED

(b) (7)(F), (b) (3)

[redacted]

Visual detection

Aerial patrol flights will be made on a regular basis. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers, and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored.

Discharges to the land or surface waters may also be detected by Company or Contractor personnel during regular operations and inspections.

Pipeline shutdown

If any of these situations are outside the expected values, abnormal conditions are considered to exist. If abnormal conditions exist, Pipeline Control will take the appropriate actions to ensure that a release does not occur. If a discharge has occurred, Pipeline Control will take actions to limit the magnitude. In either case, appropriate actions taken by Company personnel could include, but are not limited to:

- Shut down effected line segment if there is an indication of a leak
- Isolate line segment
- Depressurize line
- Start internal and external notifications
- Mobilize additional personnel as required

Minnesota Zone C - 4

C.2 WORST CASE DISCHARGE (WCD) SCENARIO DISCUSSION

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7** and **APPENDIX B**.

APPENDIX C.4 provides Worst Case Discharge calculations. Discussion of this scenario is as follows:

Upon discovery of a spill, the following procedures would be followed:

1. The First Responder would notify Supervisory Personnel and notifications would be initiated in accordance with **FIGURE 3.1-1**.

2. The Area Supervisor/Manager of Operations would assume the role of Incident Commander until relieved and would initiate response actions and notifications in accordance with **SECTION 2**. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:

    - Conduct safety assessment in accordance with **FIGURE 2.1-1** and evacuate personnel as needed in accordance with **SECTION 2.2**
    - Direct facility responders to shut down ignition sources
    - Ensure completion of spill report form in accordance with **FIGURE 3.1-3**
    - Ensure regulatory agencies are notified (**FIGURE 3.1-5**)

3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Incident Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Incident Management Team in accordance with activation procedures described in **SECTION 4.2**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTION 2.1.3**.

5. The Incident Commander would then utilize checklists in **SECTION 4.6** as a reminder of ICS position responsibilities. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

6. The Incident Management Team would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):

    - Site Safety and Health (**SECTION 5.4**)
    - Site Security (**SECTION 5.7**)
    - Incident Action (**SECTION 5.3.2**)
    - Decontamination (**SECTION 5.5**)
    - Disposal (**SECTION 5.6**)
    - Demobilization **(SECTION 5.8)**

7. The response would continue until an appropriate level of cleanup is obtained.

C.3 PLANNING VOLUME CALCULATIONS

Once the Worst Case Discharge volume has been calculated, response resources must be identified to meet the requirements of 49 CFR 194.105(b). Calculations to determine sufficient amount of response equipment necessary to respond to a Worst Case Discharge is described

below. A demonstration of the planning volume calculations is provided below.

C.4 SPILL VOLUME CALCULATION

DOT/PHMSA portion of pipeline/facilities

The Worst Case Discharge (WCD) for the DOT portion of the pipeline and facilities, is defined in 49 CFR 194.105(b) as the largest volume of the following:

1. The pipeline's maximum shutdown response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or

3. If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

Under PHMSA's current policy, operators are allowed to reduce the Worst Case Discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for breakout tanks and presents supporting information in the response plan. An operator can reduce the Worst Case Discharge volume based on breakout tanks in the response zones as follows:

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%
Tank built, rebuilt, and repaired according to API Std 620/650/653	10%
Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	5%
Testing/cathodic protection designed according to API Std 650/651/653	5%
Tertiary containment/drainage/treatment per NFPA 30	5%*
Maximum allowable credit or reduction	75%

* Note: The facilities do not have tertiary containment.

The Worst Case Discharge for each response zone was based on the largest volume of the three criteria given above.

The Company has determined the Worst Case Discharge volume to be a catastrophic line failure of the largest line section with the greatest drainage capacity in each response zone or 25% of the volume of the largest tank in each zone.

C.4 SPILL VOLUME CALCULATION, CONTINUED

The line sections with the highest throughput and largest drainage volume between block valves on pump stations were chosen to calculate the pipeline Worst Case Discharge. Although the entire discharge volume of each line was used for the Worst Case Discharge, in an actual spill event, it would take days to drain the line completely. The line would be sealed early in the response effort.

All of the breakout tanks in the pipeline system are within adequate secondary containment, therefore, the discharge volumes for the largest tank was determined by adjusting the total tank volume downward by 75% per the company guidelines.

Considering the volume of release from a line break compared to that of historic discharge in each zone and to the volumes released from a tank failure, the tank failure was found to represent the Worst Case Discharge scenario.

The maximum historic discharge is not applicable for WCD covered by this plan. Given below are the tank and pipeline WCD calculations for this plan.

The Worst Case Discharge for each pipeline segment is the largest breakout tank. These tank volumes are as follows:

LOCATION	VOLUME (BBLS)
(b) (7)(F), (b) (3)	

C.4 SPILL VOLUME CALCULATION, CONTINUED

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

C.5 PIPELINE - ABNORMAL CONDITIONS

Abnormal Operations? under 49 CFR 195.402(d) may be a "substantial threat" that could pose a threat to Worst Case Discharge. Procedures to identify Abnormal Operations and actions to take for preventing and mitigating such events and conditions, are described in the Operating, Maintenance, and Emergency Procedures for Hazardous Liquids Manual.

C.6 PRODUCT CHARACTERISTICS AND HAZARDS

This Facility may store various types of commodities including but not limited to:

- Crude Oil
- Diesel (#1 & #2)
- Gasoline
- Jet A
- Propane

MSDS can be obtained by the facility in the Employee Right To Know Stations, additionally MSDS may also be available electronically via intra and internet.

FIGURE C.6-1 describes primary oils handled.

FIGURE C.6-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Crude Oil	Crude	3	3	C, H2S	0	May contain benzene, a carcinogen, or hydrogen sulfide, which is harmful if inhaled; flash

						point varies widely
Diesel (#1 & #2)	Diesel	1	2	C	0	Long term, repeated exposure may cause skin cancer.
Gasoline	Gasoline	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Jet A	Appropriate product name	3	1	0	2	Breathing high concentrations may be harmful. May cause central nervous system depressions or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.
Propane	Appropriate product	1	1	n/a	4	Contact with liquefied materials may cause frostbite. Short term

	name					contact may result in tissue destruction and severe burns.

Health Hazard	**4 = Extremely Hazardous** **3 = Hazardous** **2 = Warning** **1 = Slightly Hazardous** **0 = No Unusual Hazard**	**Fire Hazard (Flash Point)**	**4 = Below 73? F, 22? C** **3 = Below 100? F, 37? C** **2 = Below 200? F, 93? C** **1 = Above 200? F, 93? C** **0 = Will not burn**
Special Hazard	**A = Asphyxiant** **C = Contains Carcinogen** **W = Reacts with Water** **Y = Radiation Hazard** **COR = Corrosive** **OX = Oxidizer** **H_2S = Hydrogen Sulfide** **P = Contents under Pressure** **T = Hot Material**	**Reactivity Hazard**	**4 = May Detonate at Room Temperature** **3 = May Detonate with Heat or Shock** **2 = Violent Chemical Change with High Temperature and Pressure** **1 = Not Stable if Heated** **0 = Stable**

APPENDIX D
CROSS-REFERENCES

Last revised: January 2005

Figure D-1 - DOT / PHMSA Cross-Reference

Figure D-2 - OSHA Cross-Reference

Figure D-3 - EPA / RCRA Cross-Reference

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Information Summary	
• For the core plan:	
• Name and address of operator	Figure 1-2
• For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (?194.103), listing and description of Response Zones, including county(s) and state(s)	Figure 1-2
• For each Response Zone appendix:	
• Information summary for core plan	Section 1
• QI names and telephone numbers, available on 24-hr basis	Figure 1-2
• Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	Figure 1-2
• List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	Figure 1-2
• Basis for operator?s determination of significant and substantial harm	Figure 1-2
• The type of oil and volume of the worst case discharge	Appendix C
• Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	Section 1.2, Appendix B
Notification Procedures	
• Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	Section 3
• Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	Section 3.1

Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	Section 3.1, Figure 3.1-4
• Procedures for notifying Qualified Individuals	Figure 3.1-1, Section 4.5, Figure 4.5-1
• Primary and secondary communication methods by which notifications can be made	Section 7.1.6

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Information to be provided in the initial and each follow-up notification, including the following: • Name of pipeline • Time of discharge • Location of discharge • Name of oil recovered • Reason for discharge (e.g. material failure, excavation damage, corrosion) • Estimated volume of oil discharged • Weather conditions on scene • Actions taken or planned by persons on scene	Figure 3.1-3
Spill Detection and On-Scene Spill Mitigation Procedures	
• Methods of initial discharge detection	Appendix C.1
• Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	Section 2
• List of equipment that may be needed in response activities based on land and navigable waters including: • Transfer hoses and pumps • Portable pumps and ancillary equipment • Facilities available to transport and receive oil from a leaking pipeline	Section 7.1.1, Appendix B
• Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis	Figure 3.1-6, Appendix B
• Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response	Figure 3.1-4, Figure 3.1-6,

activities on a 24-hour basis	Appendix B
Response Activities	
• Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	Section 2, Section 4.5, Appendix B
• Qualified Individual?s responsibilities and authority, including notification of the response resources identified in the response plan	Section 4.5
• Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions	Section 4.4, Section 4.5
• Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	Appendix B
• For each organization identified under paragraph (d), a listing of: ◦ Equipment and supplies available ◦ Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response	Appendix B

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
List of Contacts	
• List of persons the Plan requires the operator to contact	Figure 3.1-1
• Qualified individuals for the operator?s areas of operation	Figure 1-2
• Applicable insurance representatives or surveyors for the operator?s areas of operation	Figure 3.1-7
• Persons or organizations to notify for activation of response resources	Figure 3.1-1
Training Procedures	
• Description of training procedures and programs of the operations	Appendix A.2

Drill Procedures	
• Announced and unannounced drills	Appendix A.1

• Types of drills and their frequencies; for example:
  • Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly
  • Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly
  • Shore-based spill management team (SMT) tabletop drills conducted yearly
  • Oil spill removal organization field equipment deployment drills conducted yearly
  • A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years
	Appendix A.1

Response Plan review and update procedures	
• Procedures to meet ?194.121	Section 1.2
• Procedures to review plan after a worst case discharge and to evaluate and record the plan?s effectiveness	Section 1.2, Appendix C
Response zone appendices	
Each response zone appendix would provide the following information:	
• Name and telephone number of the qualified individual	Figure 1-2
• Notification procedures	Section 3
• Spill detection and mitigation procedures	Section 2.1, Appendix C
• Name, address, and telephone number of oil spill response organization	Figure 3.1-6, Appendix B

• Response activities and response resources including:
  • Equipment and supplies necessary to meet ?194.115
  • Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response
	Appendix A, Appendix B

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities	Figure 3.1-5
• Worst case discharge volume	Appendix C
• Method used to determine the worst case discharge volume, with calculations	Appendix C

• A map that clearly shows:
  • Location of worst case discharge
  • Distance between each line section in the Response Zone:
  • Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section
  • Each potentially affected environmentally sensitive area within a radius of one mile of the line section
	Figure 1-3, Section 6.6

• Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified	Figure 1-2

• For every oil transported by each pipeline in the response zone, emergency response data that:
  • Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods
  • Meet 29 CFR 1910.1200 or 49 CFR 172.602
	Figure C.6-1

FIGURE D-2 - OSHA CROSS-REFERENCE

EAP REQUIREMENTS (29 CFR 1910.38 [a] [2])	LOCATION
• Emergency escape procedures and emergency escape route assignments	Section 2, Figure 1-4
• Procedures to be followed by employees who remain to operate critical plant operations before they evacuate	N/A
• Procedures to account for all employees after emergency	Section 2

evacuation has been completed	
• Rescue and medical duties for those employees who are to perform them	Section 2
• The preferred means of reporting fires and other emergencies	Section 2, Figure 3.1-1
• Names of regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan	Figure 3.1-4, Section 4.6

ERP REQUIREMENTS (29 CFR 1910.120 [l] [2])	LOCATION
• Pre-emergency planning	Appendix C
• Personnel roles, lines of authority, and communication	Section 4.4, Section 4.6, Section 7.1.6
• Emergency recognition and prevention	Section 2
• Safe distances and places of refuge	Section 2
• Site security and control	Section 5.7, Section 7.3
• Decontamination procedures which are not covered by the site safety and health plan	Section 5.5
• Emergency medical treatment and first aid	Section 2
• Emergency alerting and response procedures	Section 3
• Critique of response and follow-up	Section 8.3
• PPE and emergency equipment	Section 7, Appendix B

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE

EPA / RCRA REQUIREMENTS (40 CFR PART 265.16)		LOCATION
§ 265.16	**Applicability**	
a	(1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or	Figure A.2-1

	operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.	
	(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.	Figure A.2-1
	(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable: (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; (ii) Key parameters for automatic waste feed cut-off systems; (iii) Communications or alarm systems; (iv) Response to fires or explosions; (v) Response to ground-water contamination incidents; and (vi) Shutdown of operations.	Appendix A.1, Appendix A.2
	(4) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.	Appendix A.1, Appendix A.2
b	Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.	Figure A.2-1
c	Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.	Figure A.2-1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.16)		LOCATION
§ 265.16	**Applicability**	
d	The owner or operator must maintain the following documents and records at the facility: (1) The job title for each position at the facility related to hazardous waste management, and the name of the	 Figure 3.1-4

	employee filling each job; (2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position; Facility Manager – (typically the terminal or station manager) responsible for the overall hazardous and non-hazardous waste management functions at the facility. Facility Hazardous Waste Technician – responsible for hazardous waste management functions at the facility as directed by the Facility Environmental Manager; typically performs physical hands-on waste activities including moving, storage and labeling of containers, collecting samples, performing weekly waste container inspections, and oversight of offsite waste shipments. (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;(4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.	Figure D-3 Figure A.2-1
e	Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.	Figure A.2-1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.30 - 265.37)		LOCATION
§ 265.30	**Applicability**	
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as §265.1 provides otherwise.	

§ 265.31	**Maintenance and operation of facility.**	
	Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.	
§ 265.32	**Required equipment.**	
	All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	
a	An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;	Section 7.1.6
b	A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;	Section 7.1.6
c	Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and	Section 7.1.1, Figure C-8
d	Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.	N/A
§ 265.33	**Testing and maintenance of equipment.**	
	All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.	Appendix A.1
§ 265.34	**Access to communications or alarm system.**	
a	Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under §265.32.	Not Applicable

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.30 - 265.37)	LOCATION

§ 265.34	**Access to communications or alarm system.**	
b	If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under §265.32.	Section 7.1.6
§ 265.35	**Required aisle space.**	
	The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.	Figure 2.1-1
§ 265.37	**Arrangements with local authorities.**	
a	The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:	
	(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;	Section 1.1
	(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;	Section 1.1
	(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and	Appendix B
	(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.	Section 1.1
b	Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.	Section 1.1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.50	**Applicability**	
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 265.1 provides otherwise.	Section 1.1
§ 265.51	Purpose and Implementation of Contingency Plan	
a	Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.	Section 1.1
b	The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.	Section 1.1
§ 265.52	Content of Contingency Plan	
a	The contingency plan must describe the actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	Section 2
b	If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.	Section 7.4
c	The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 265.37.	Figure 3.1-3
d	The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.	Figure 1-2
e	The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept	Section 7.1

	up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.52	Content of Contingency Plan, Continued	
f	The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	Section 2.2
§ 265.53	Copies of Contingency Plan	
	A copy of the contingency plan and all revisions to the plan must be:	-----
a	Maintained at the facility, and	Section 1.2
b	Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.	Section 1.2
§ 265.54	Amendment of Contingency Plan	
	The contingency plan must be reviewed, and immediately amended, if necessary, whenever:	-----
a	Applicable regulations are revised;	Section 1.2
b	The plan fails in an emergency;	Section 1.2
c	The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;	Section 1.2
d	The list of emergency coordinators changes; or	Section 1.2
e	The list of emergency equipment changes.	Section 1.2
§ 265.55	Emergency Coordinator	
	At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all	Figure 1-2, Section 4.5, Appendix A

	operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. *[Comment: The emergency coordinator's responsibilities are more fully spelled out in 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility].*	

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.56	Emergency Procedures	
a	Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:	Section 2.1.3, Figure 2.1-1, Section 4.5
a(1)	Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	Section 2.1.3, Figure 2.1-1, Section 4.5
a(2)	Notify appropriate State or local agencies with designated response roles if their help is needed.	Section 2.1.3, Figure 2.1-1, Section 4.5
b	Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.	Section 2.1.3, Figure 2.1-1, Section 4.5
c	Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).	Section 2.1.3, Figure 2.1-1, Section 4.5
d	If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside of the facility, he must report his findings as follows:	Section 2.1.3, Figure 2.1-1, Section 4.5
d(1)	**If his assessment indicates that evacuation of local areas may be advisable, he must**	Section 2.1.3, Figure 2.1-1, Section 4.5

	immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and	
d(2)	He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under Part 1510 of this Title), or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:	Section 2.1.3, Figure 2.1-1, Section 4.5, Figure 3.1-2
d(2)(i)	Name and telephone number of reporter:	Figure 3.1-2, Figure 3.1-3
d(2)(ii)	Name and address of facility;	Figure 3.1-2, Figure 3.1-3
d(2)(iii)	Time and type of incident (e.g., release, fire);	Figure 3.1-2, Figure 3.1-3
d(2)(iv)	Name and quantity of material(s) involved, to the extent known;	Figure 3.1-2, Figure 3.1-3
d(2)(v)	The extent of injuries, if any; and	Figure 3.1-2, Figure 3.1-3
d(2)(vi)	The possible hazards to human health, or the environment, outside the facility.	Figure 3.1-2, Figure 3.1-3

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.56	**Emergency Procedures (Cont'd)**	
e	During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	Section 2, Figure 2.1-1
f	If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate.	Section 2, Figure 2.1-1
g	Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a	Section 7.4, Section 5.5

	release, fire, or explosion at the facility. *[Comment: Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter].*	
h	The emergency coordinator must ensure that, in the affected areas(s) of the facility:	-----
h(1)	No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	Section 7.4, Section 5.5
h(2)	All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	Section 5.4, Section 7.1-2
i	The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.	Figure 3.1-3
j	The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:	Section 8.3
j(1)	Name, address, and telephone number of the owner or operator;	Section 8.3
j(2)	Name, address, and telephone number of the facility;	Section 8.3
j(3)	Date, time, and type of incident (e.g., fire, explosion);	Section 8.3

APPENDIX E Last revised: January 2005

ACRONYMS AND DEFINITIONS

E.1 Acronyms

E.2 Definitions

E.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOI)
BPD	Barrels Per Day
BPH	Barrels Per Hour
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
GIS	Geographic Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HMIS	Hazardous Material Information System
IC	Incident Commander
ICS	Incident Command System
JIC	Joint Information Center

LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee

LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MSDS	Material Safety Data Sheets
MTR	Marine Transportation Related
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIIMS	National Interagency Incident Management System
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRDA	National Resource Damage Assessment
NRT	National Response Team
OBA	Oxygen Breathing Apparatus
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator/Commander
OSHA	Occupational Safety and Health Administration (USDL)
PHMSA	Pipeline and Hazardous Materials Safety Administration (DOT)
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act of 1976
RQ	Reportable Quantity
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition (System)
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SETS	Safety Environment and Training Services
SI	Surface Impoundment
SIC	Standard Industrial Classification (Code)
SMT	Spill Management Team
SOSC	State On-Scene Coordinator

SPCC	Spill Prevention, Control, and Countermeasures (Plan)
SSC	Scientific Support Coordinator (NOAA)
UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers

USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
USDOI	U. S. Department of the Interior
USDOJ	U. S. Department of Justice
USDOT	U. S. Department of Transportation
USFWS	U. S. Fish and Wildlife Service (USDOI)
USGS	U. S. Geological Survey (USDOI)

E.2 DEFINITIONS

Adverse Weather
The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather-related visibility, and currents with the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Aqueous Film Forming Foam
A fluoro-carbon surfactant that acts as an effective vapor securing agent due to its effect on the surface tension of the water. Its physical properties enable it to float and spread across surfaces of a hydrocarbon fuel with more density than protein foam.

Average Most Probable Discharge **(USCG)**
A discharge of the lesser of 50 barrels (2100 gallons) or one percent of the volume of the worst case discharge.

Barrel
Measure of space occupied by 42 U. S. gallons at 60 degrees Fahrenheit.

Bleve
A boiling liquid-expanding vapor explosion; failure of a liquefied flammable gas container caused by fire exposure. Pronounced "blevey." Boilover
Occurs when the heat from a fire in a tank travels down to the bottom of the tank causing water that is already there to boil and push part of the tank's contents over the side. Carbon Dioxide

A heavy, colorless, odorless, asphyxiating gas, that does not normally support combustion. It is one and one-half times heavier than air and when directed at the base of a fire its action is to dilute the fuel vapors to a lean mixture to extinguish the fire.

Class A Fire
A fire involving common combustible materials which can be extinguished by the use of water or water solutions. Materials in this category include wood and wood-based materials, cloth, paper, rubber and certain plastics.

Class B Fire
A fire involving flammable or combustible liquids, flammable gases, greases and similar products. Extinguishment is accomplished by cutting off the supply of oxygen to the fire or by preventing flammable vapors from being given off.

Class C Fire
A fire involving energized electrical equipment, conductors or appliances. Nonconducting extinguishing agents must be used for the protection of firefighters.

Class D Fire
A fire involving combustible metals, for example, sodium, potassium, magnesium, titanium and aluminum. Extinguishment is accomplished through the use of heat-absorbing extinguishing agents such as certain dry powders that do not react with the burning metals.

Cold (Support) Zone

An area free of contaminants so that Personal Protection Equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Command Post
A site located at a safe distance from the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communication Equipment
Equipment that will be utilized during response operations to maintain communication between employees, contractors, federal/state/local agencies.

Containment Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contamination Reduction Zone
Same as the warm zone, a buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Contingency Plan
A document used by: (1) federal, state, and local agencies to guide planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means
Includes:

- A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under U.S.C.G. Regulations within stipulated response times in the specified geographic areas

- Certification by the facility owner or operator that the specified personnel and equipment described under USCG Regulations are owned, operated, or under the direct control of the facility owner or operator, and are available within stipulated times in the specified geographic areas

- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment described under USCG Regulations that are available to respond to a discharge within stipulated times in the specified geographic areas

- A document which:

    - Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas
    - Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response
    - Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections, drills
    - Is incorporated by reference in the Response Plan

- For a facility that could reasonably be expected to cause substantial harm to the environment, with the consent of the response contractor or oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas.

Demand Breathing Apparatus
A type of self-contained breathing apparatus that provides air or oxygen from a supply carried by the user.

Dispersants
Those chemical agents that emulsify, disperse, or solublize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Environmentally Sensitive Areas
Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or

conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusion Zone
Same as hot zone, the area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Explosive Range
Flammable range; the range of the mixture of air and flammable gas or flammable vapor of liquids that must be present in the proper proportions for the mixture to be ignited. The range has upper and lower limits; any mixture above the upper explosive limit or below the lower explosive limit will not burn.

Facility
Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or workover rigs, barge mounted drilling or workover rigs, and portable fueling facilities located offshore or on or adjacent to coastal waters or any place where a discharge of oil from the facility could enter coastal waters or threaten to enter the coastal waters.

Federal Fund
The oil spill liability trust fund established under OPA.

First Responders, First Response Agency
A public health or safety agency (i.e., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Flashover
The ignition of combustibles in an area heated by convection, radiation, or a combination of the two. The action may be a sudden ignition in a particular location followed by rapid spread or a "flash" of the entire area.

Flash Point
The temperature at which a liquid fuel gives off sufficient vapor to form an ignitable mixture near its surface.

Foam
A blanket of bubbles that extinguishes fire mainly by smothering. The blanket prevents flammable vapors from leaving the surface of the fire and prevents oxygen from reaching the fuel. The water in the foam also has a cooling effect.

Hazardous Material
Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance
Any substance designed as such by the Administrator of EPA pursuant to the Comprehensive

Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act.

Hazardous Waste
Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resources Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

Higher Volume Port Area
Ports of:

- Boston, MA
- New York, NY
- Delaware Bay and River to Philadelphia, PA
- St. Croix, VI
- Pascagoula, MS
- Mississippi River from Southwest Pass, LA to Baton Rouge, LA
- Louisiana Offshore Oil Port (LOOP), LA
- Lake Charles, LA
- Sabine-Nachez River, TX
- Galveston Bay and Houston Ship Channel, TX
- Corpus Christi, TX
- Los Angeles/Long Beach Harbor, CA
- San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisun Bay to Antioch, CA
- Straits of Juan de Fuca and Puget Sound, WA
- Prince William Sound, AK

Hot (Exclusion) Zone
The area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Hypothermia
A dangerously high fever that can damage nerve centers. This condition can result from exposure to excessive heat over an extended period of time.

Ignition Temperature
The lowest temperature at which a fuel will burn without continued application of an ignition source.

Incident Commander (IC)
The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Incident Command System
A method by which the response to an extraordinary event, including a spill, is categorized into functional components and responsibility for each component assigned to the appropriate individual or agency.

Interim Storage Site
A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Lead Agency
The government agency that assumes the lead for directing the spill response.

Lead Federal Agency
The agency which coordinates the federal response to incidents on navigable waters. The lead Federal agencies are:

- **U. S. Coast Guard (USCG):** Oil and chemically hazardous materials incidents on navigable waters
- **Environmental Protection Agency (EPA):** Oil and chemically hazardous materials incidents on most inland waters and in the inland zone

Lead State Agency
The agency which coordinates state support to Federal and/or Local governments or assumes the lead in the absence of a Federal spill response.

Lower Flammable Limit
Minimum flammable concentration of a particular gas in the air.

Marine Transportation-Related Facility (MTR Facility)
An onshore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable
The planning values derived from the planning criteria used to evaluate the response resources described in the response plan to provide the on-water recovery capability and the shoreline protection and clean-up capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge (USCG)
A discharge of the lesser of 2,500 barrels or ten percent of the volume of a worst case discharge.

Medium Discharge **(EPA)**
Same as maximum most probable discharge.

National Contingency Plan
The plan prepared under the Federal Water Pollution Control Act (33 United States Code '1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code '9601 et seq), as revised from time to time.

Nearshore Area
The area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation (COLREG) lines) defined in '80.740 - 80.850 of Title 33 of the

CFR.

Non-Persistent or Group I Oil
A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

- At least 50% of which by volume, distill at a temperature of 340EC (645EF)
- At least 95% of which volume, distill at a temperature of 370EC (700EF)

Non-Petroleum Oil
Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Offshore Area
The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico it is the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in '80-740 - 80.850 of Title 33 of the CFR extending seaward to 50 nautical miles.

Oil or Oils
Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

Oil Spill Removal Organization (OSRO)
An entity that provides oil spill response resources, and includes any for profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Operating Area
The rivers and canals, inland, nearshore, Great Lakes, or offshore geographic location(s) in which a facility is handling, storing, or transporting oil.

Operating Environment
Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Overhaul
A procedure following a fire whereby the area is examined for hidden fire and fire extension and the fire area is cleaned up.

Owner or Operator
Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil
A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as

follows:

- Group II - specific gravity less than .85
- Group III - specific gravity between .85 and less than .95
- Group IV - specific gravity .95 to and including 1.0
- Group V - specific gravity greater than 1.0

Primary Response Contractor(s)
An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual(s)
An English-speaking representative(s) of the facility identified in the plan, located in the United States, available on a 24-hour basis, familiar with implementation of the facility response plan, and trained in his or her responsibilities under the plan. This person must have full written authority to implement the facility's response plan. This includes:

- Activating and engaging in contracting with identified oil spill removal organization(s)
- Acting as a liaison with the predesignated of Federal On-Scene Coordinator (FOCS)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

Regional Response Team
The Federal Response Organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Reid Vapor Pressure Method
Method used by the American Society of Testing Materials to test vapor pressure. It is a measure of the volatility, or tendency to vaporize, of a liquid.

Responsible Party
Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Rivers and Canals
A body of water confined within the inland area that has a projected depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Skimmers
Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Slopover
An event that occurs when water is introduced into a tank of very hot liquid, causing the liquid

to froth and spatter. Small Discharge (EPA)
Same as average most probable discharge.

Sorbents
Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill Management Team
The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spontaneous Ignition
A fire that occurs without a flame, spark, hot surface, or other outside source of ignition.

Staging Areas
Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC)
A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Static Electricity
Charges of electricity accumulated on opposing and usually moving surfaces having negative and positive charges, respectively. A hazard exists where the static potential is sufficient to discharge a spark in the presence of flammable vapors or combustible dusts.

Support Zone
Same as cold zone, an area free of contaminants so that personal protection equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Tornado Warning
A tornado has been sighted.

Tornado Watch
Conditions are favorable for tornados to form.

Unified Command
The method by which local, state, and federal agencies will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident
- Determine their overall objectives for management of an incident
- Select a strategy to achieve agreed upon objectives
- Deploy resources to achieve agreed-upon objectives

Warm (Contamination Reduction) Zone
A buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Waste
Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

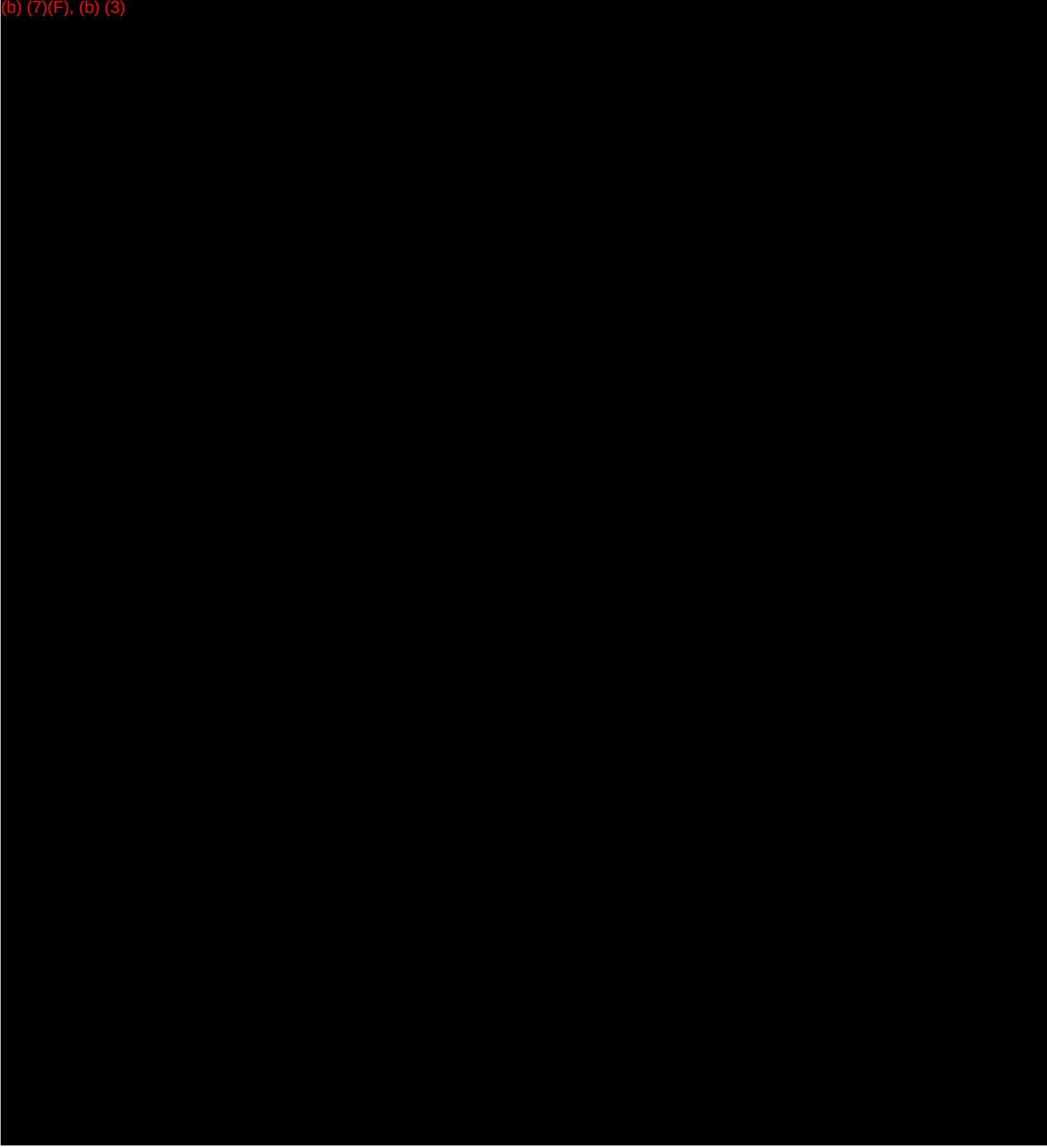
Wildlife Rescue
Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

APPENDIX F Last revised: Thursday, November 11, 2010

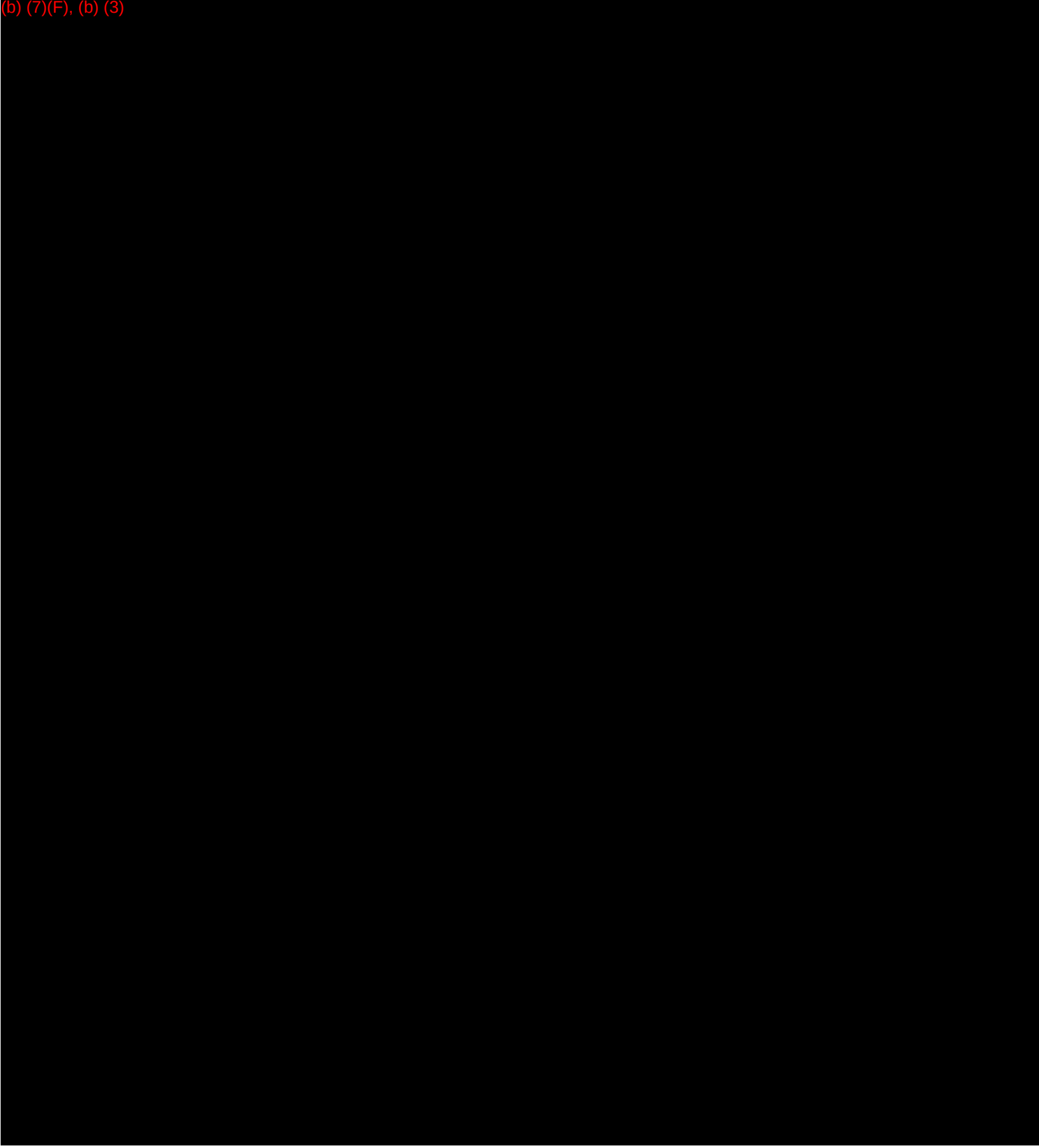
ADDITIONAL INFORMATION

LINK FILES

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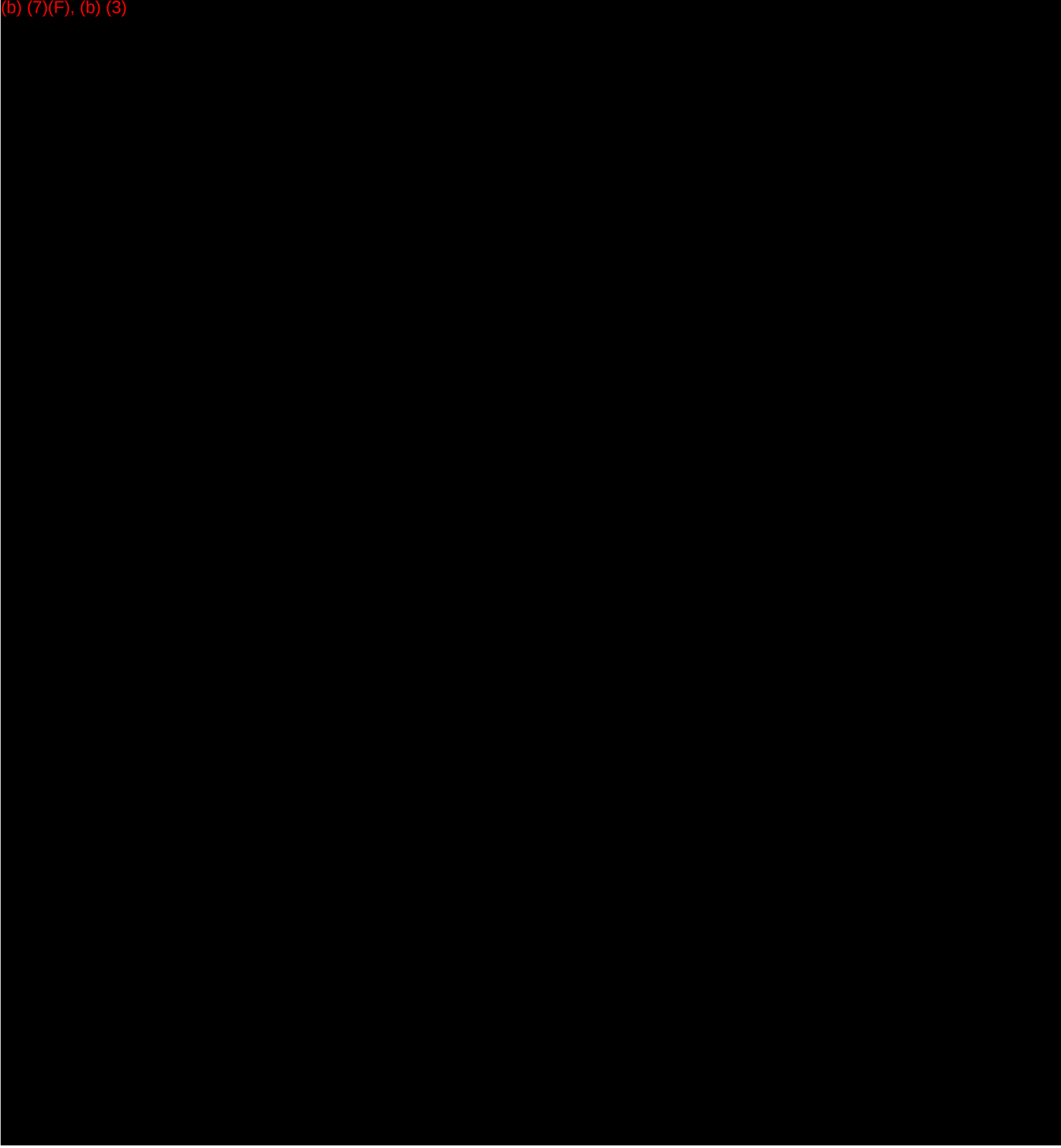
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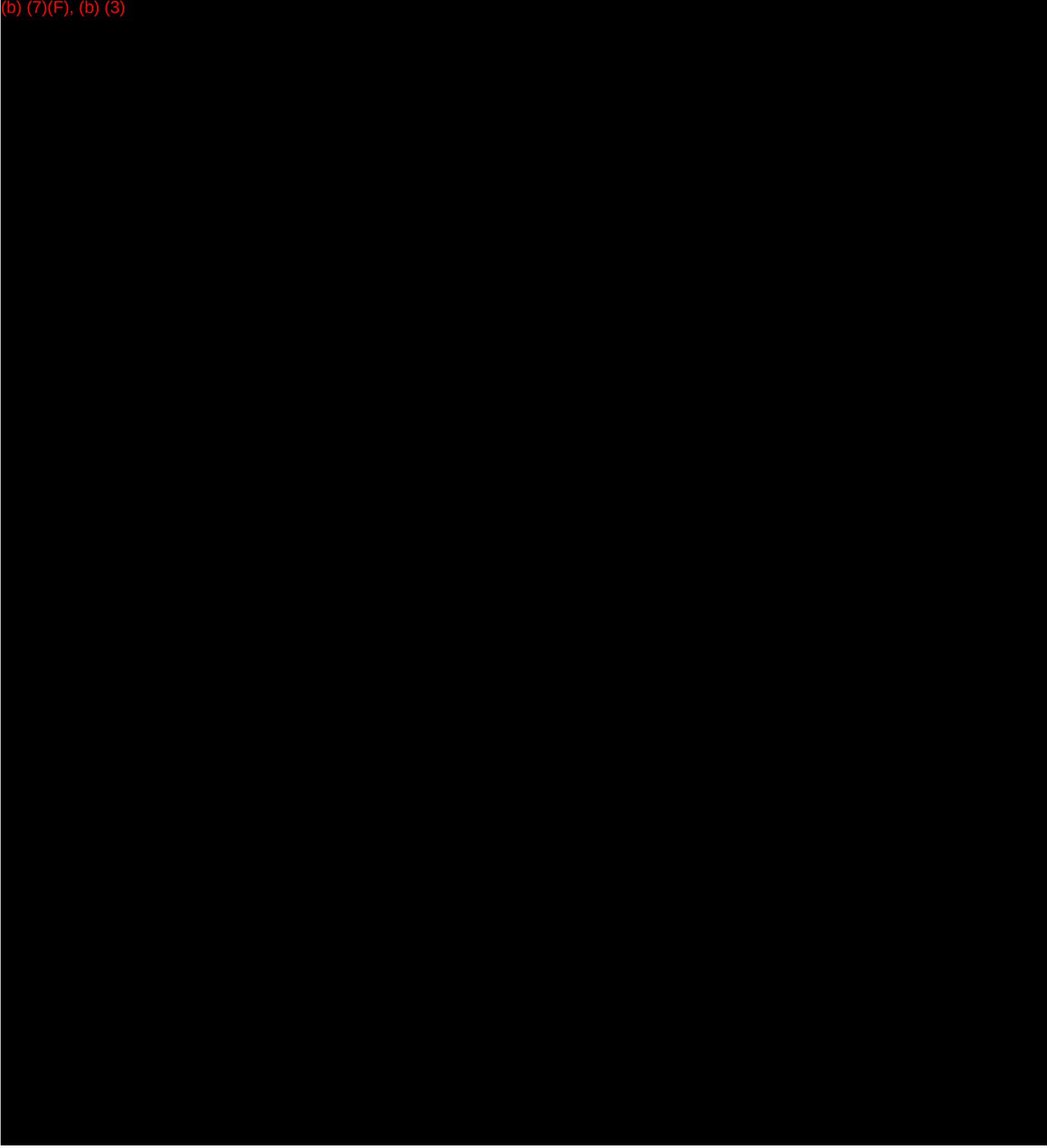
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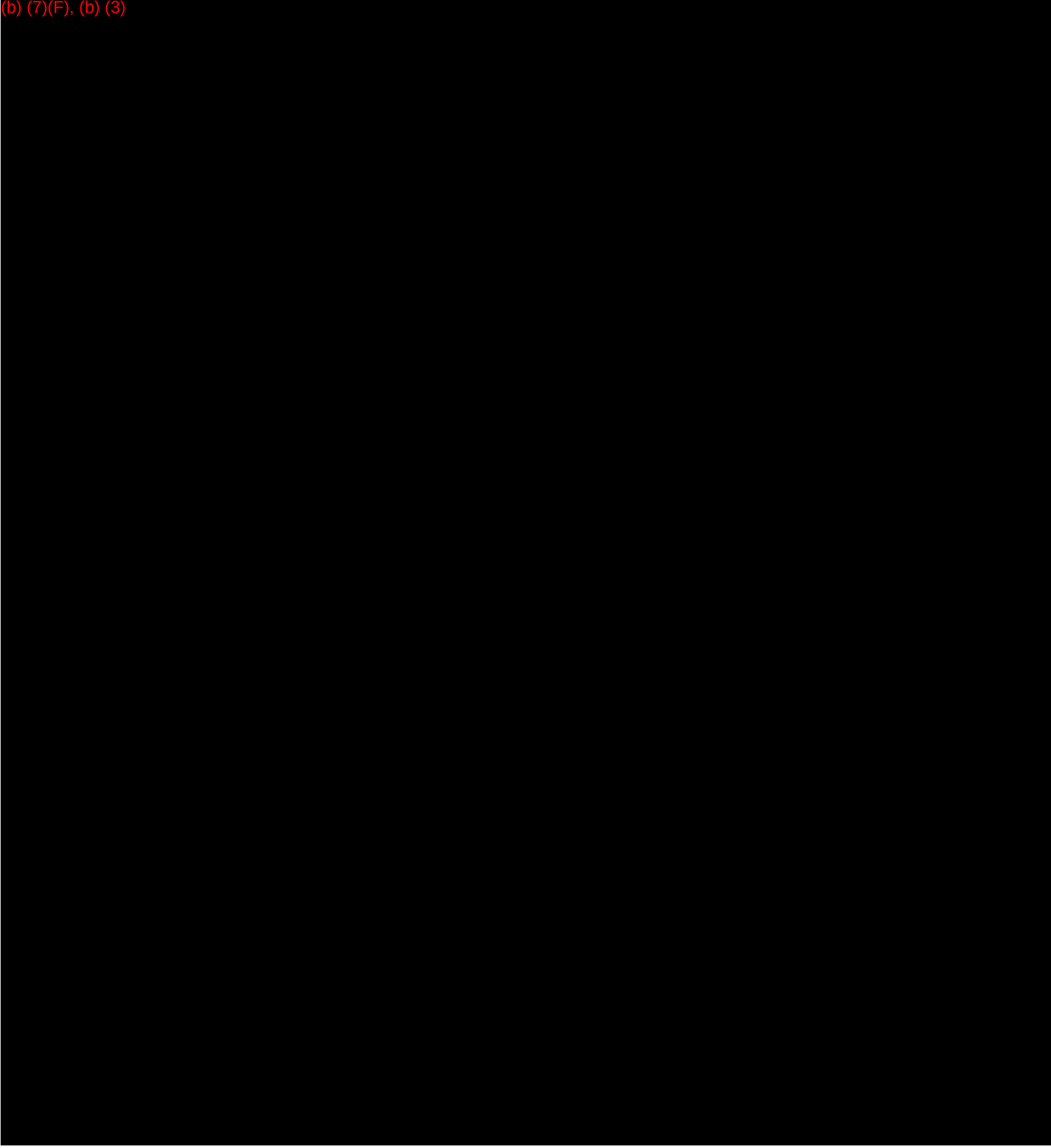
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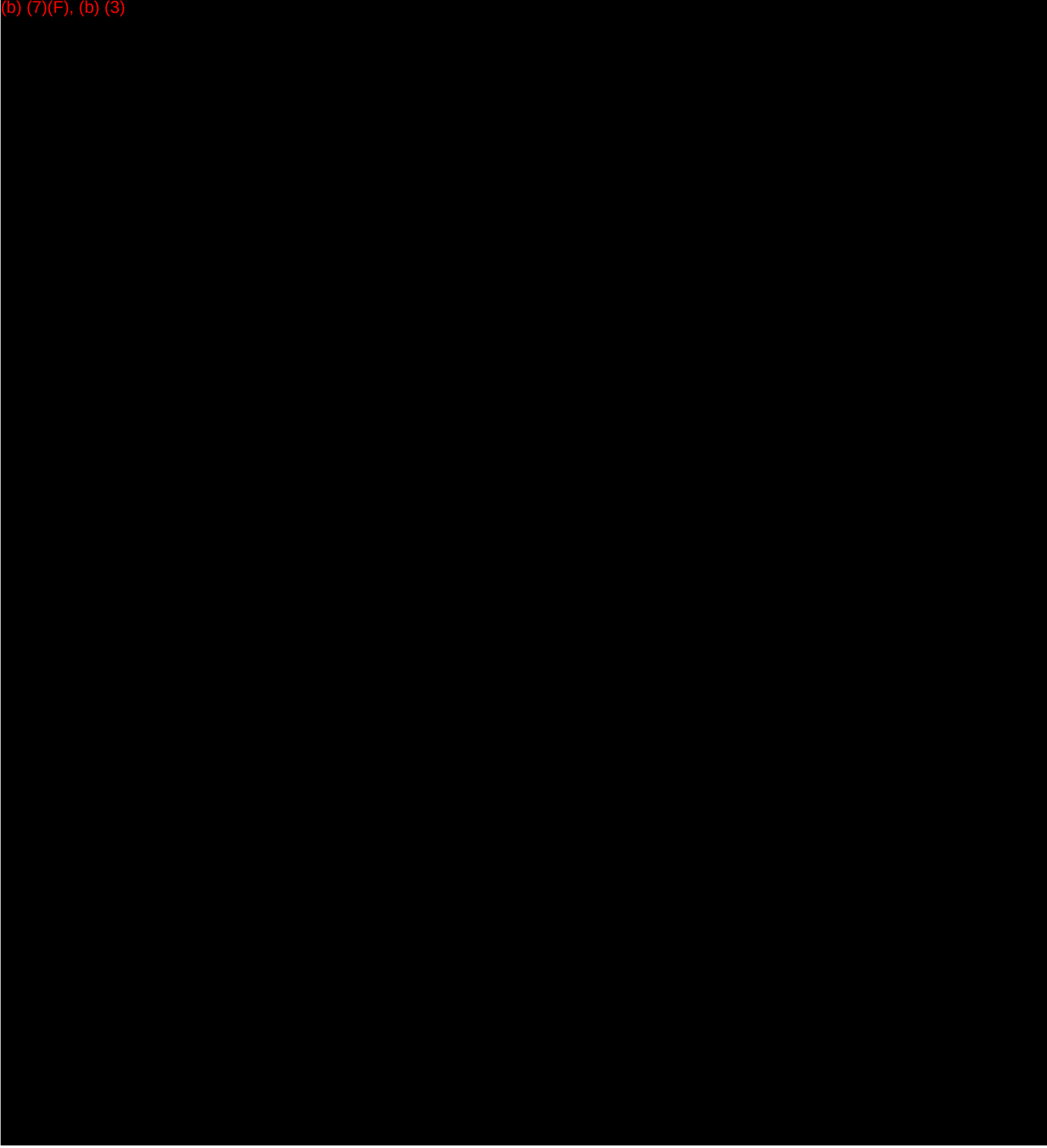
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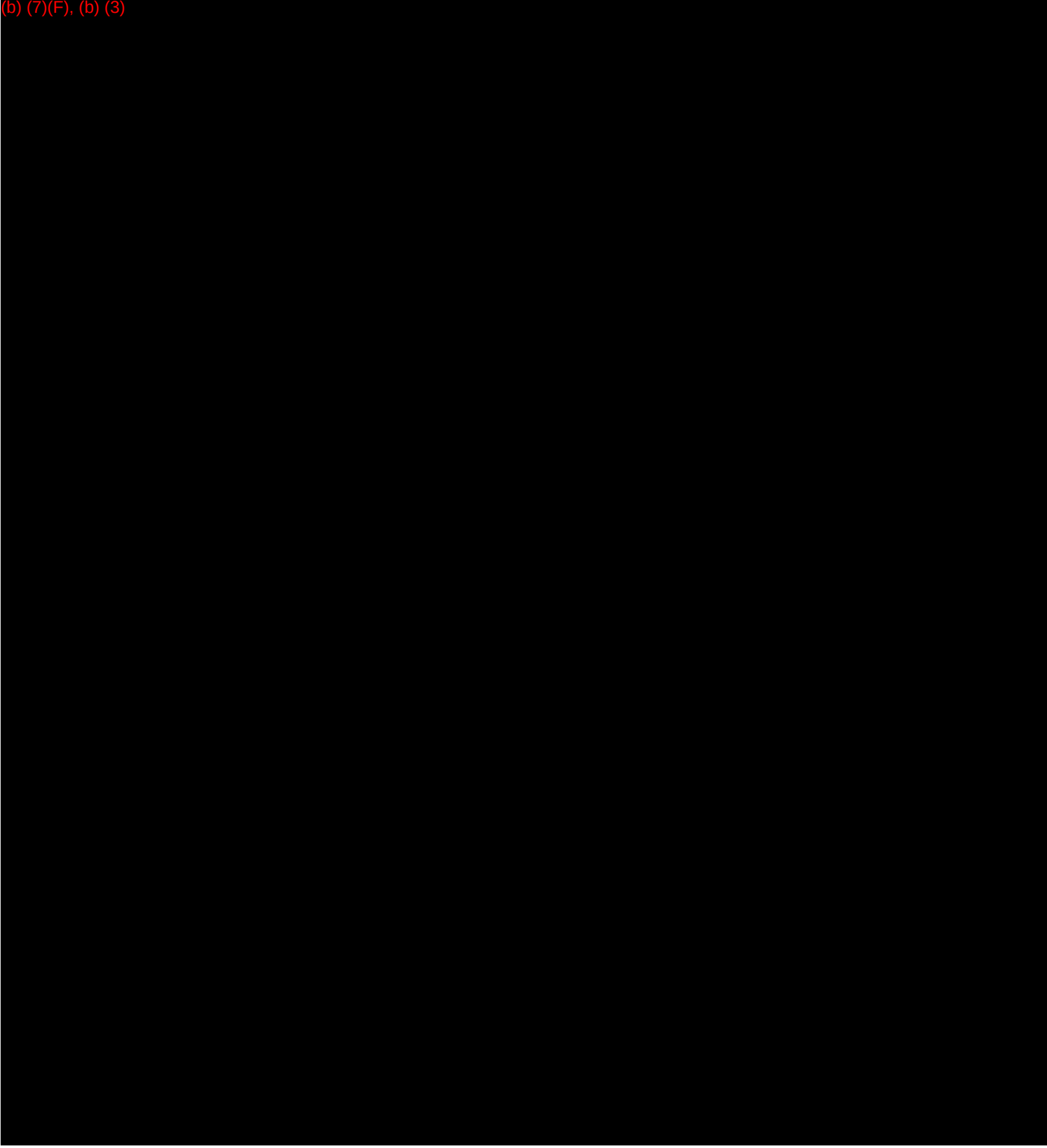
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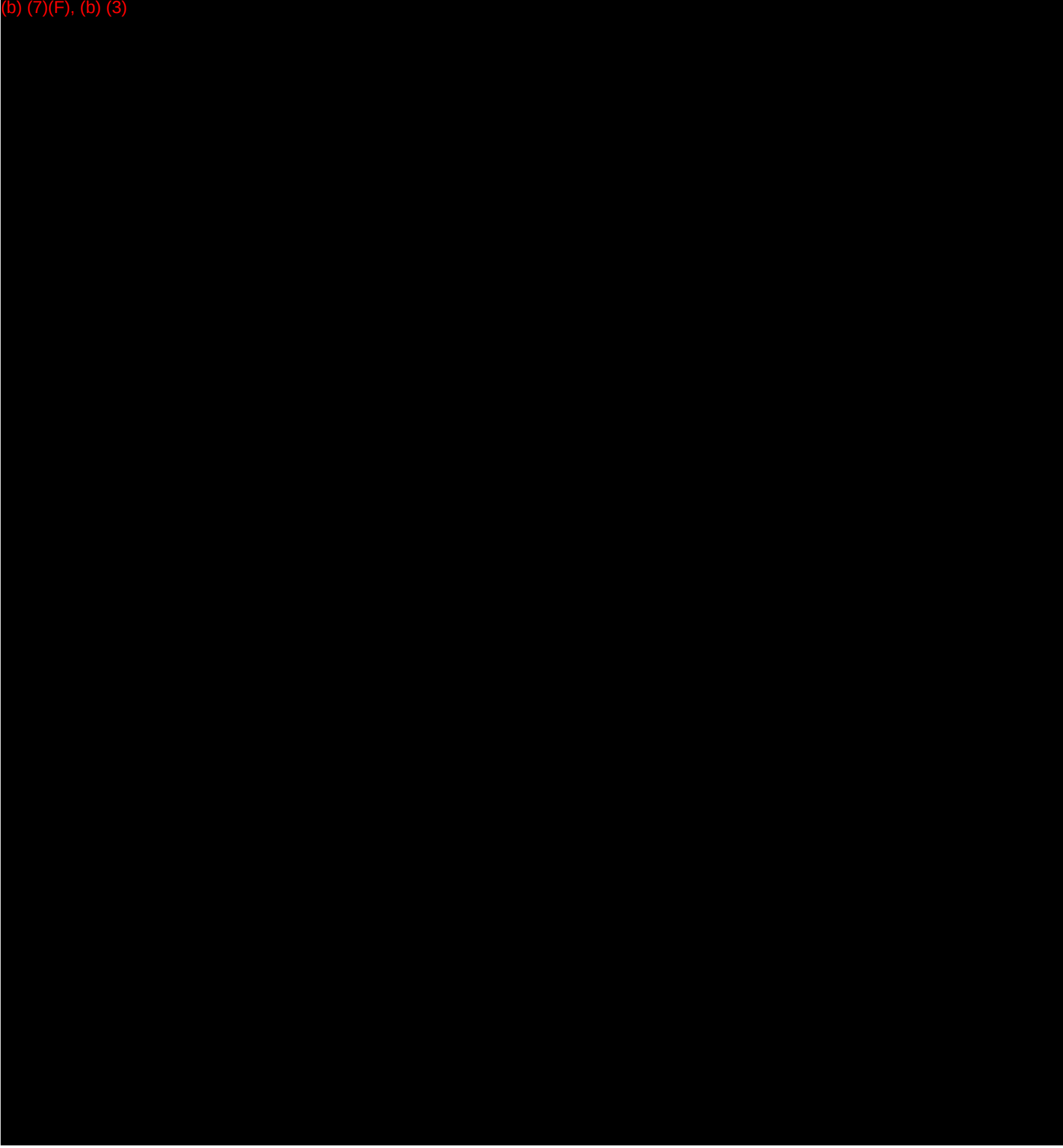


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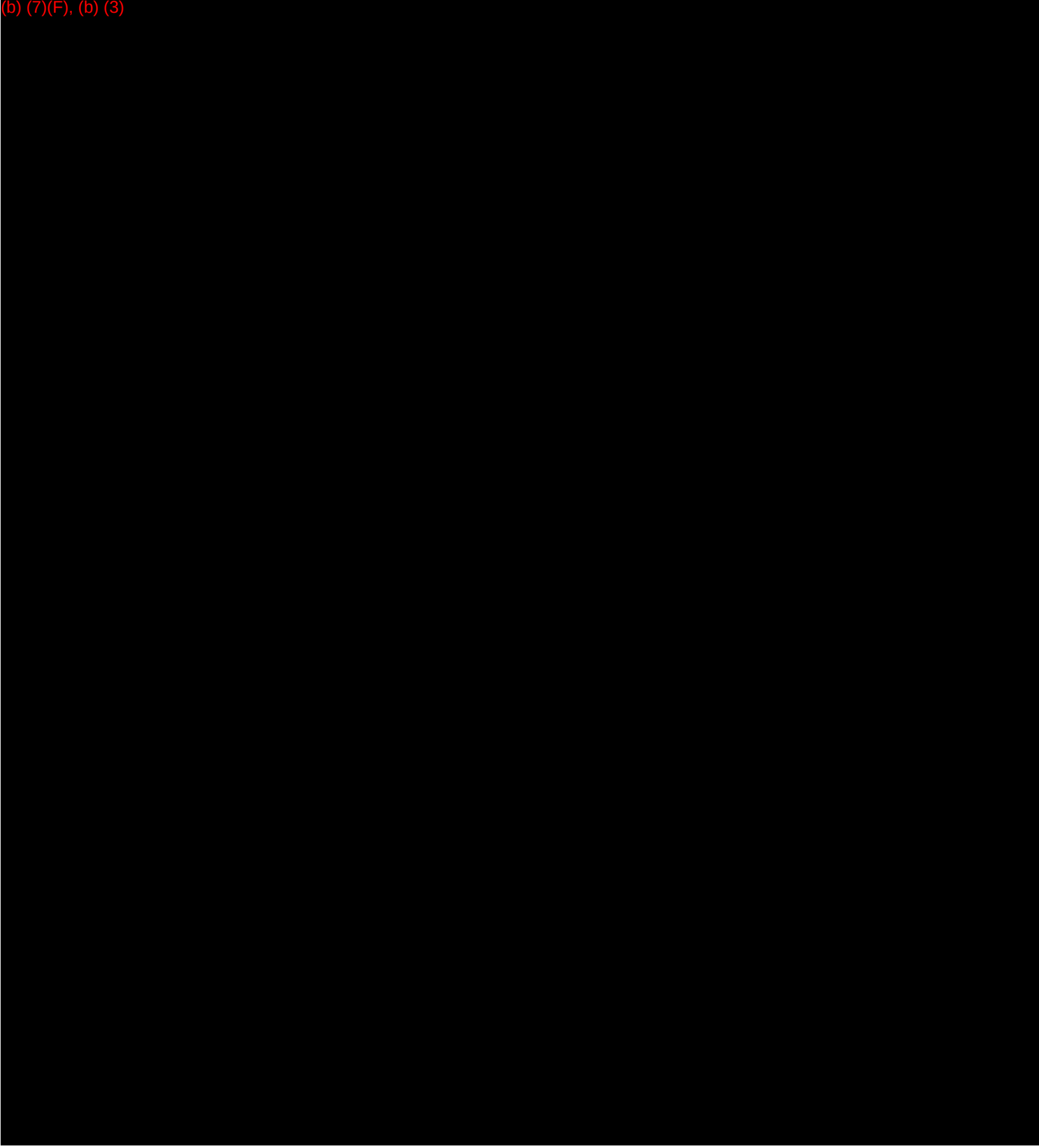
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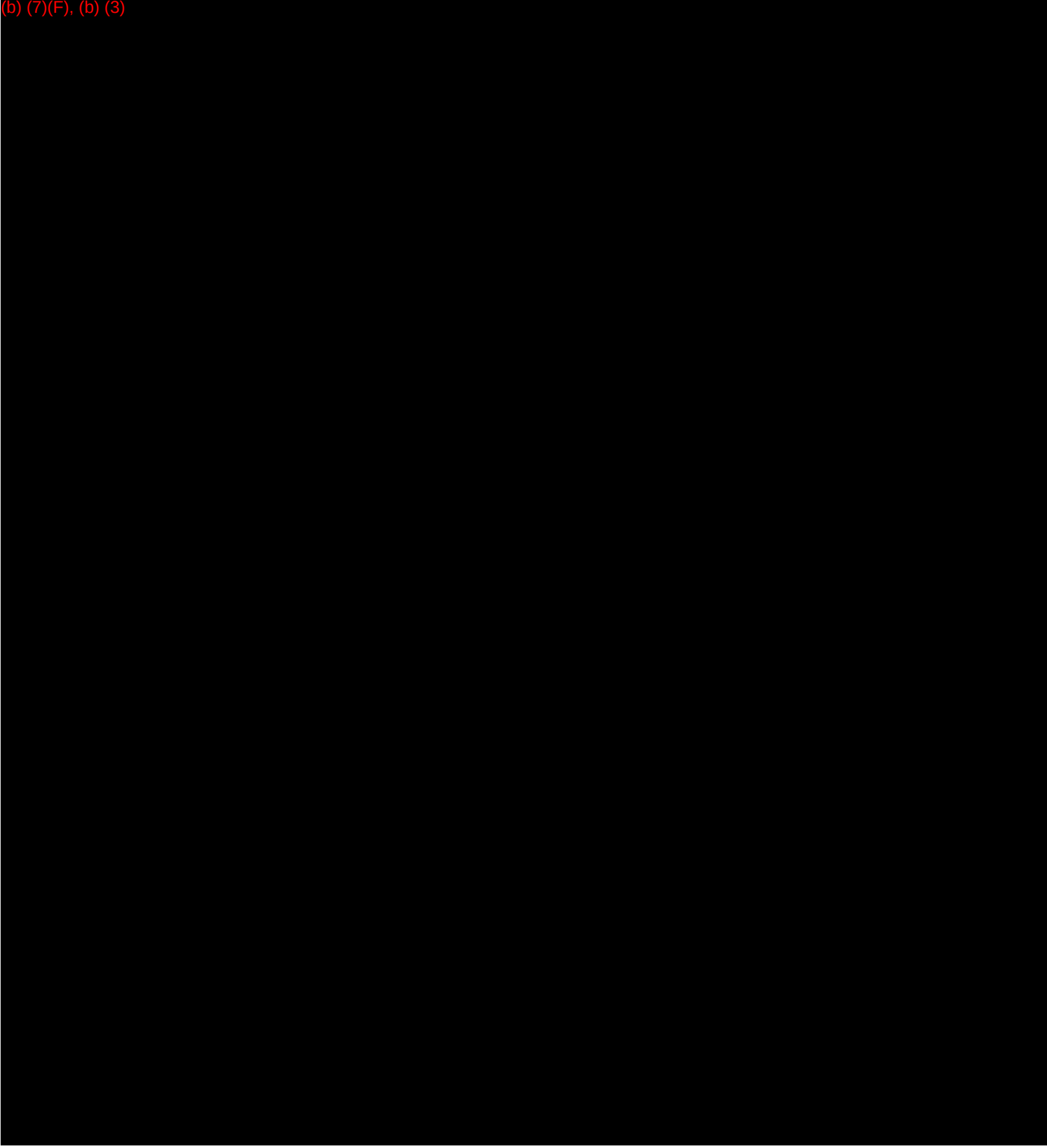
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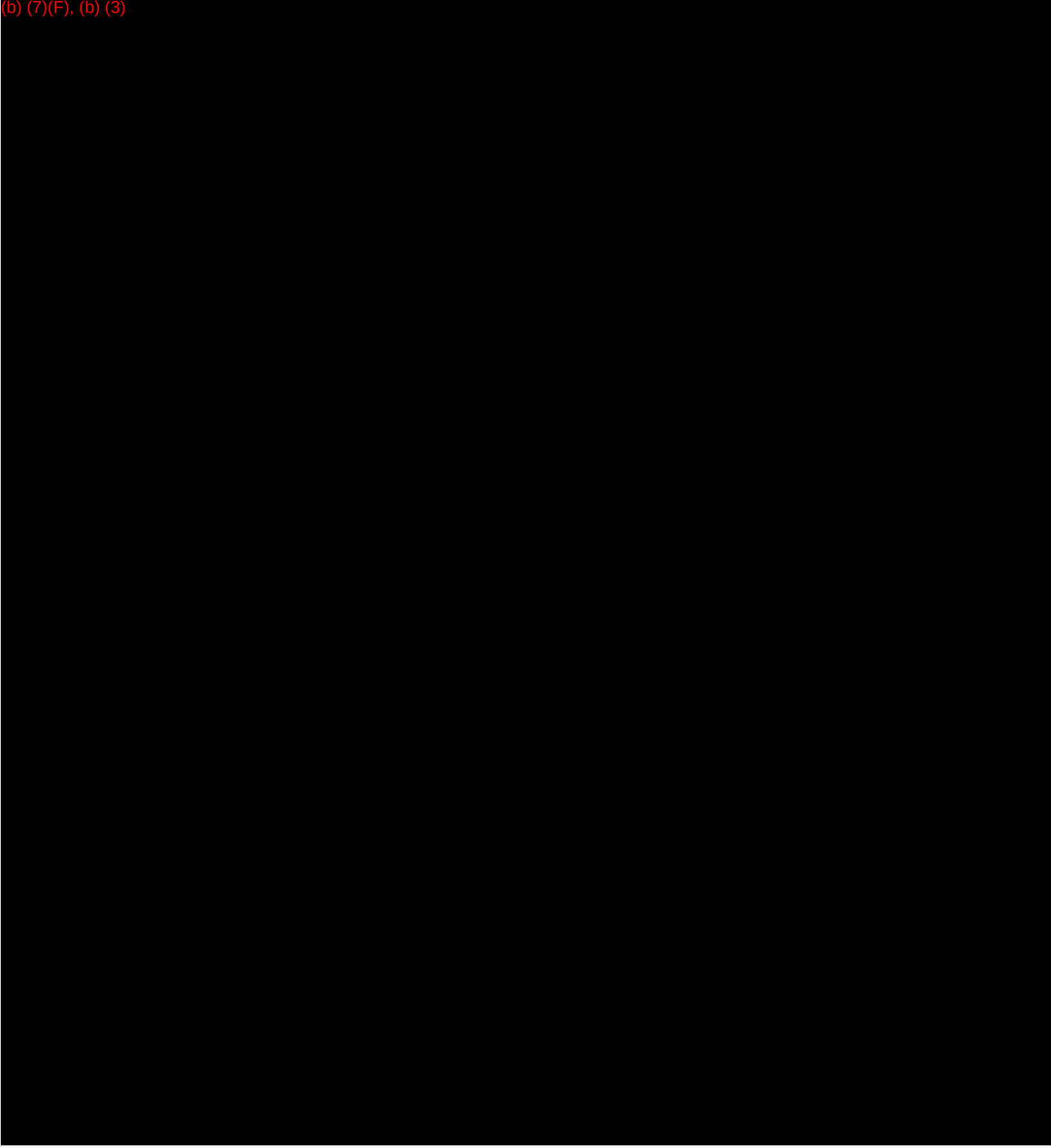


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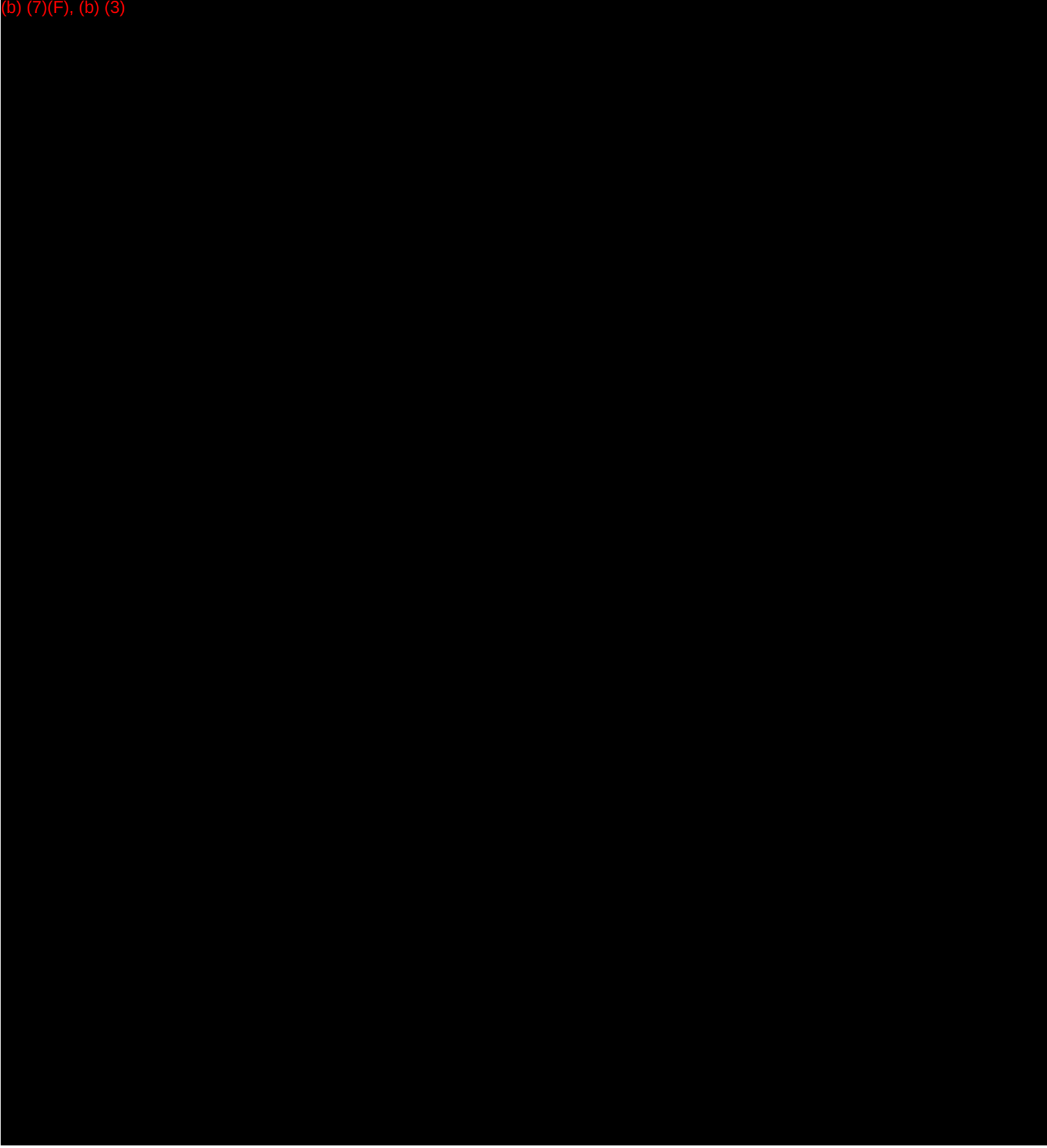
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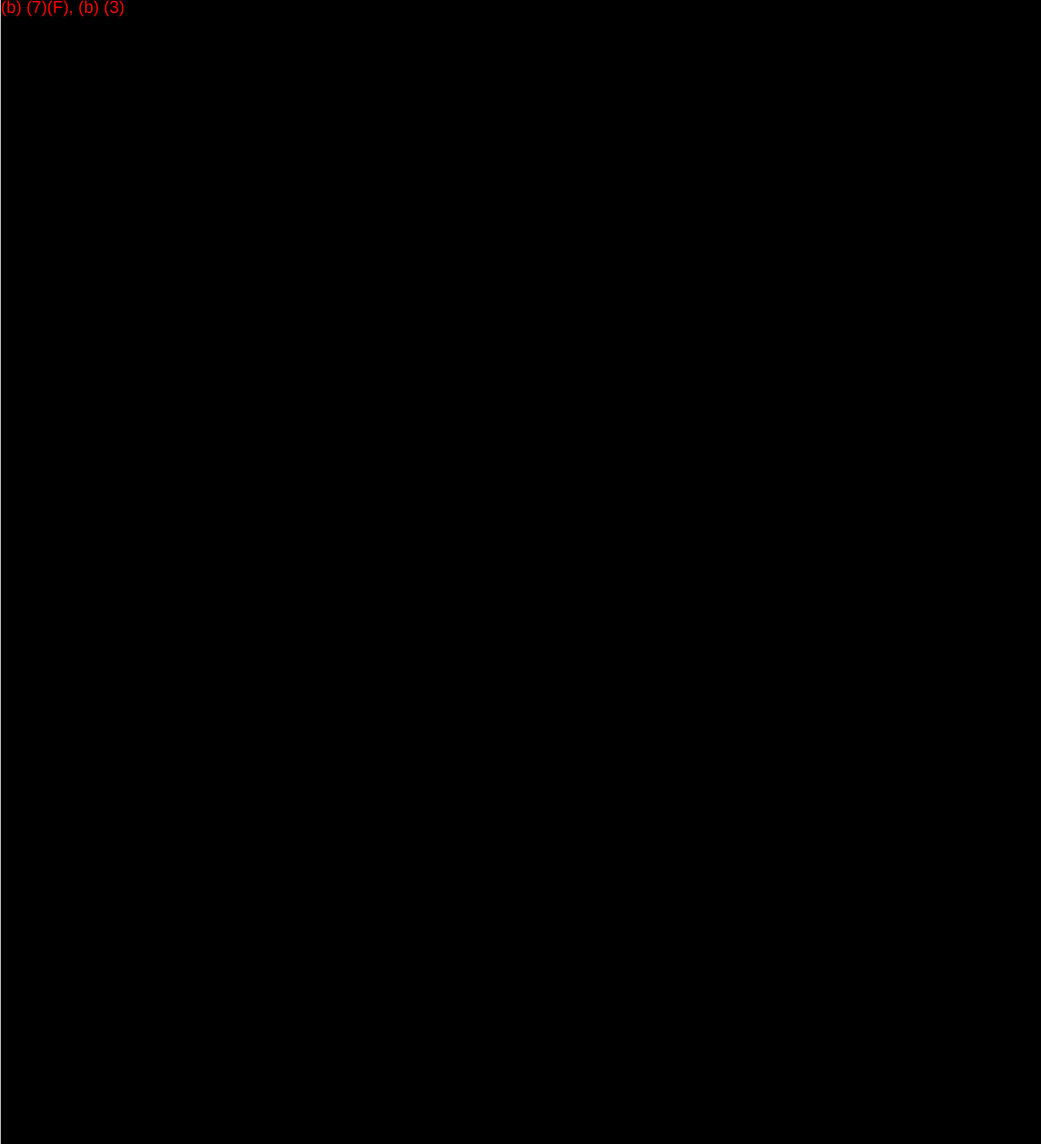
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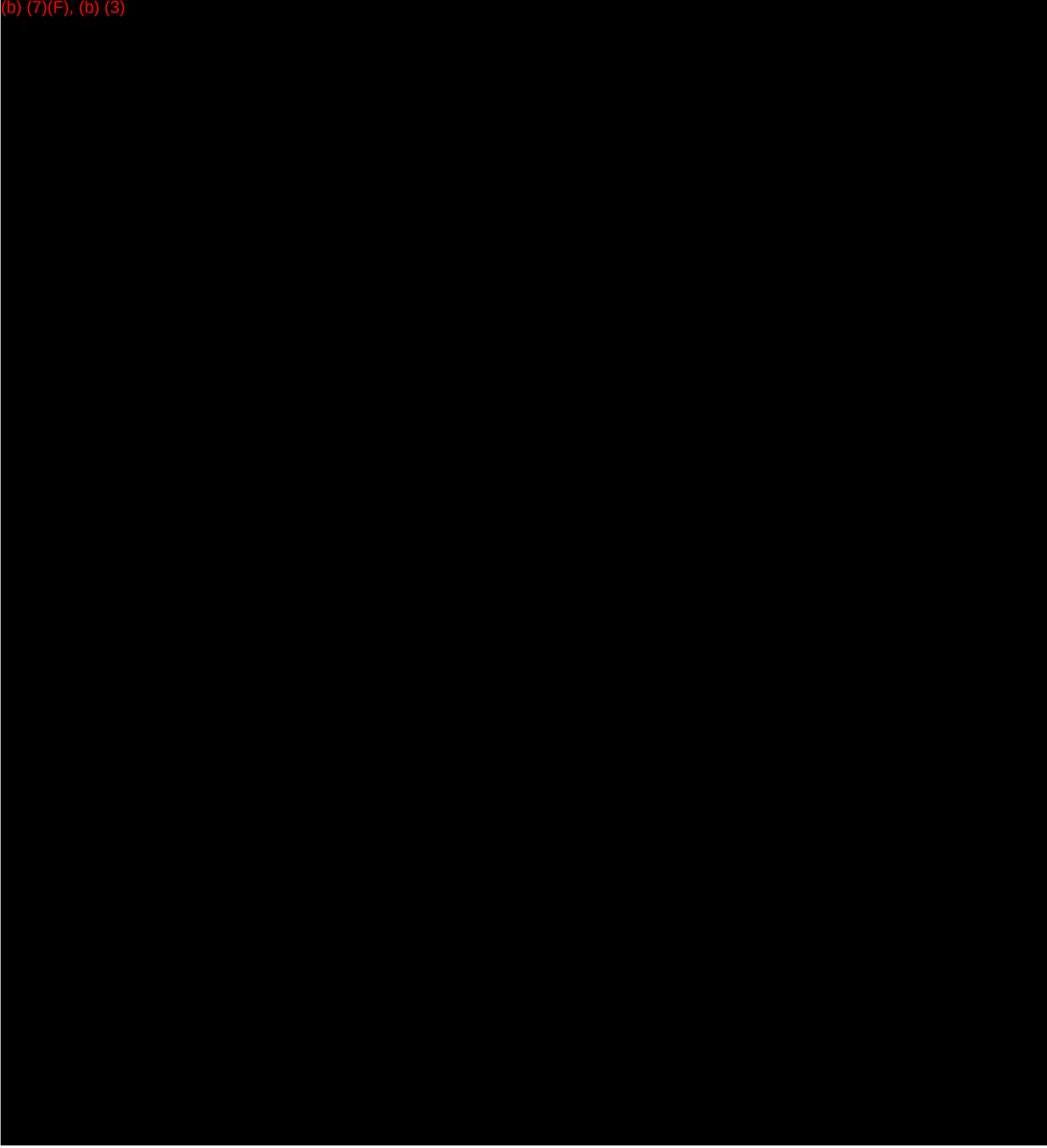
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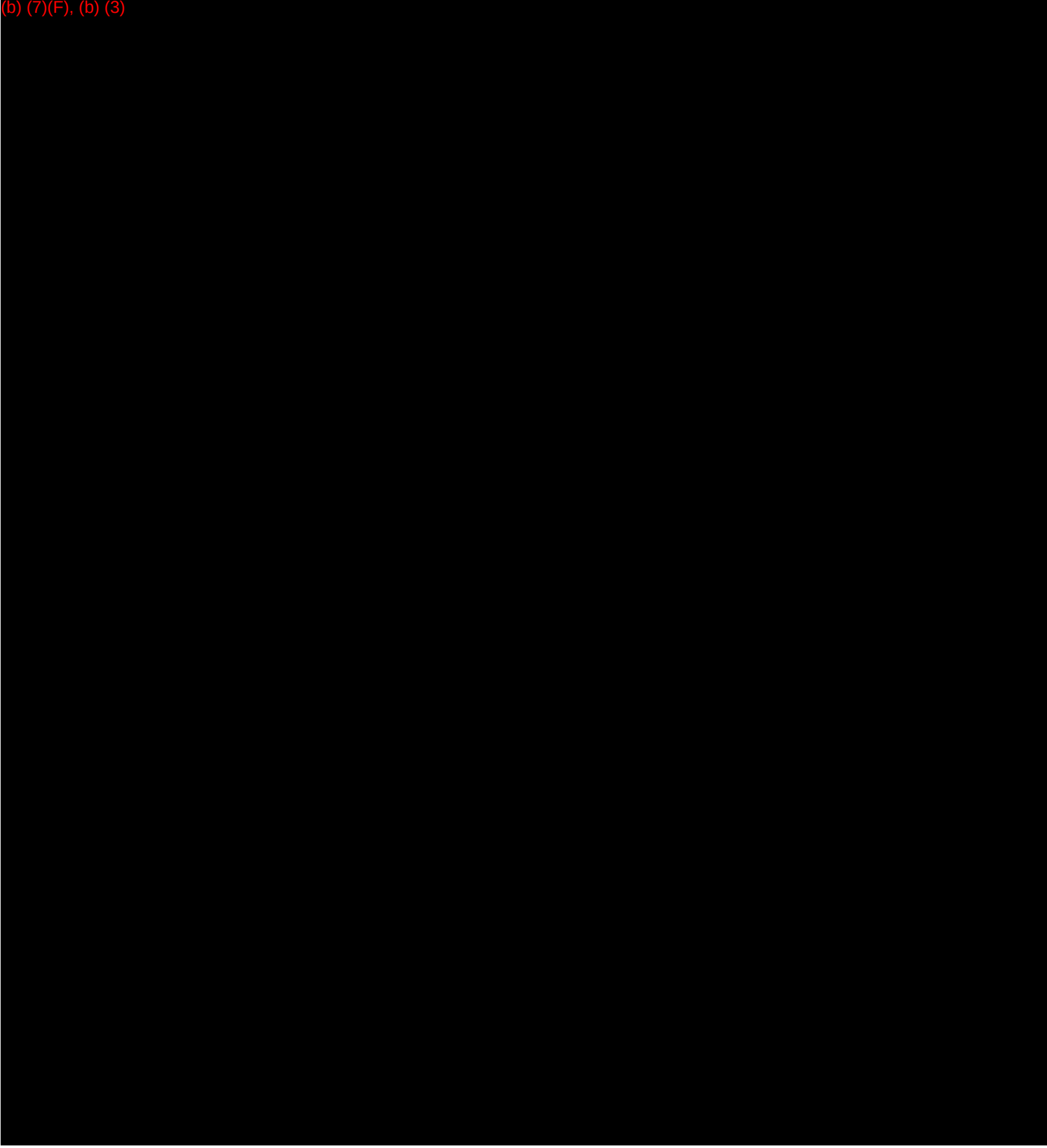
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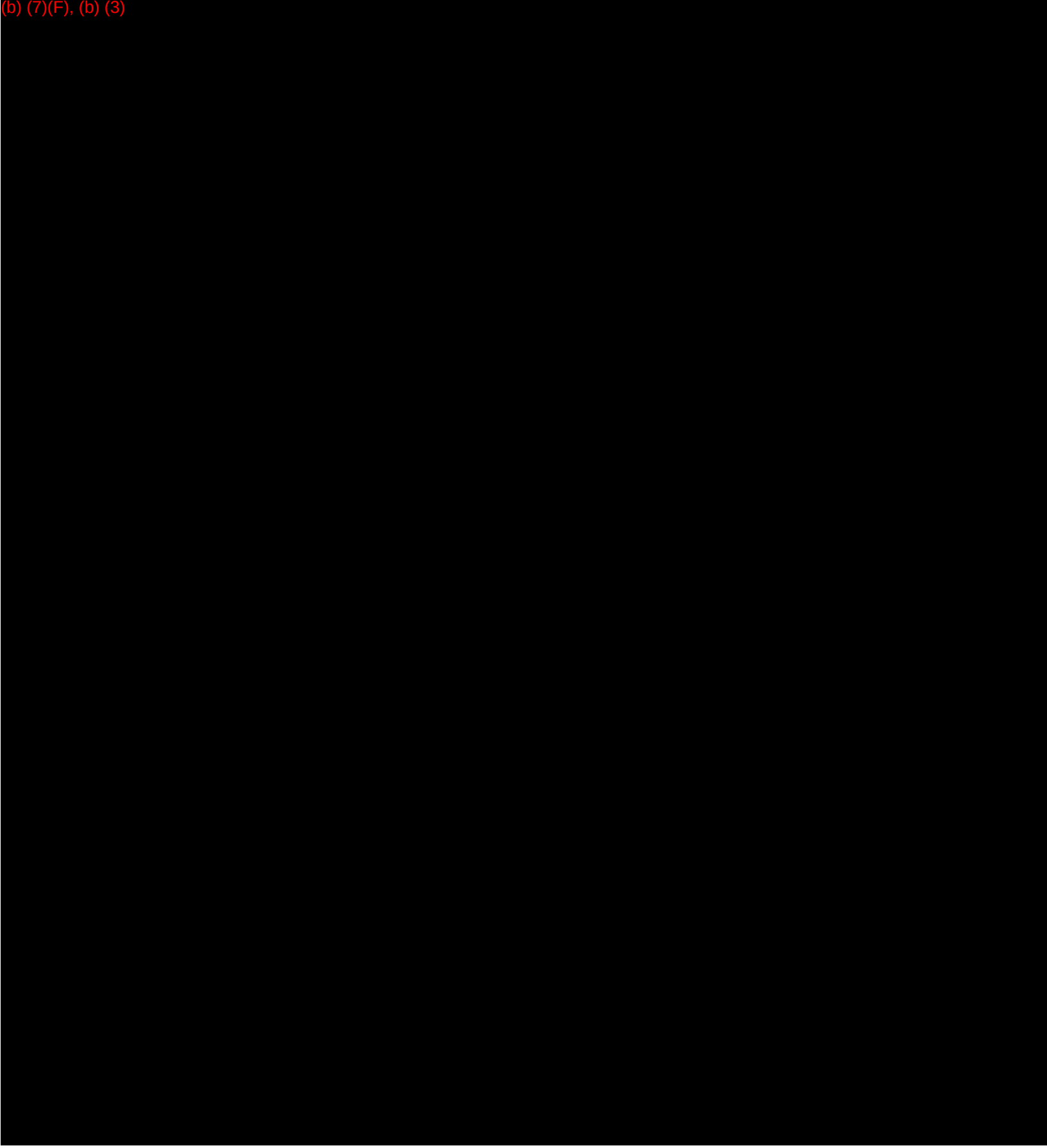
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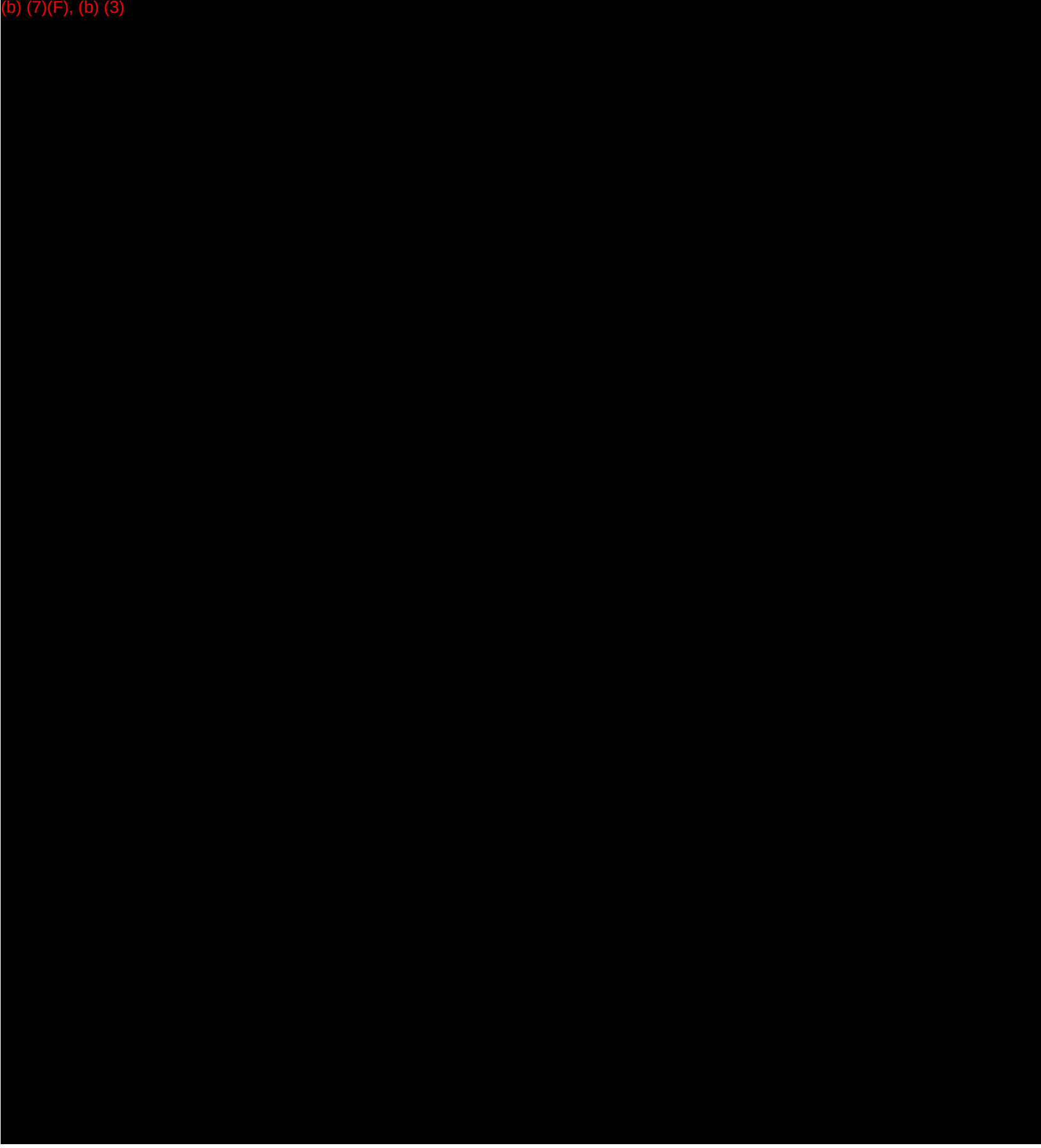


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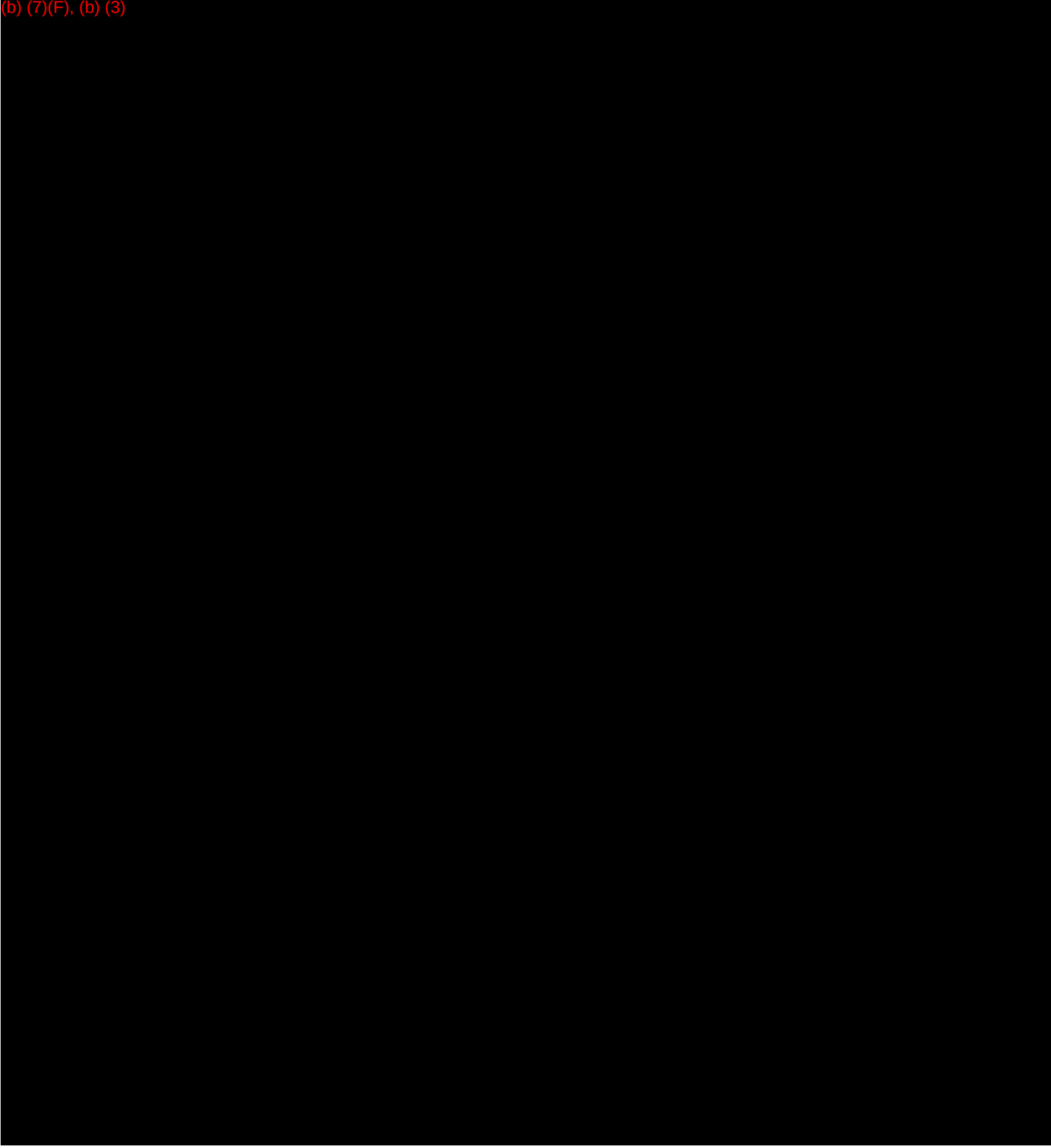
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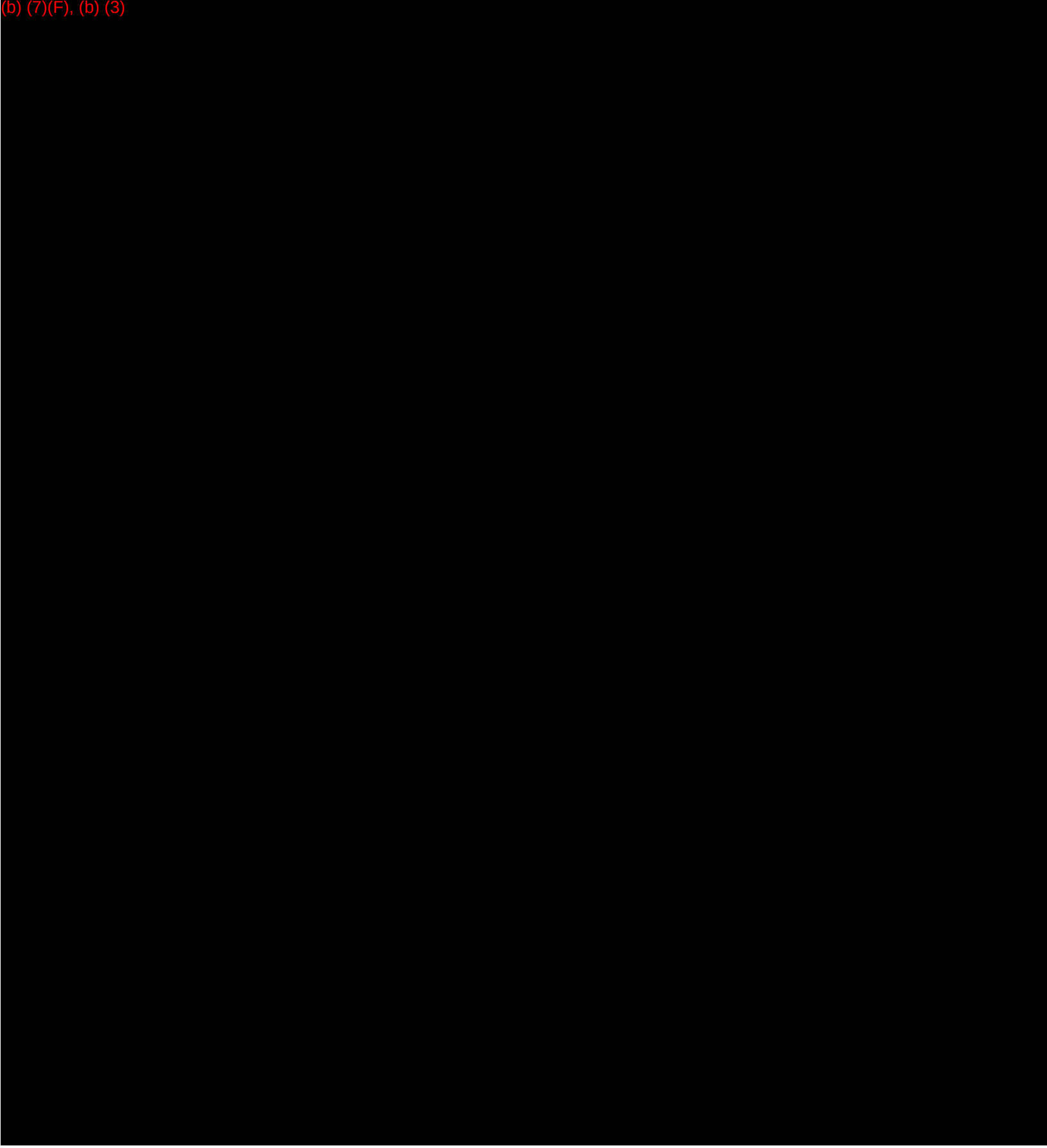
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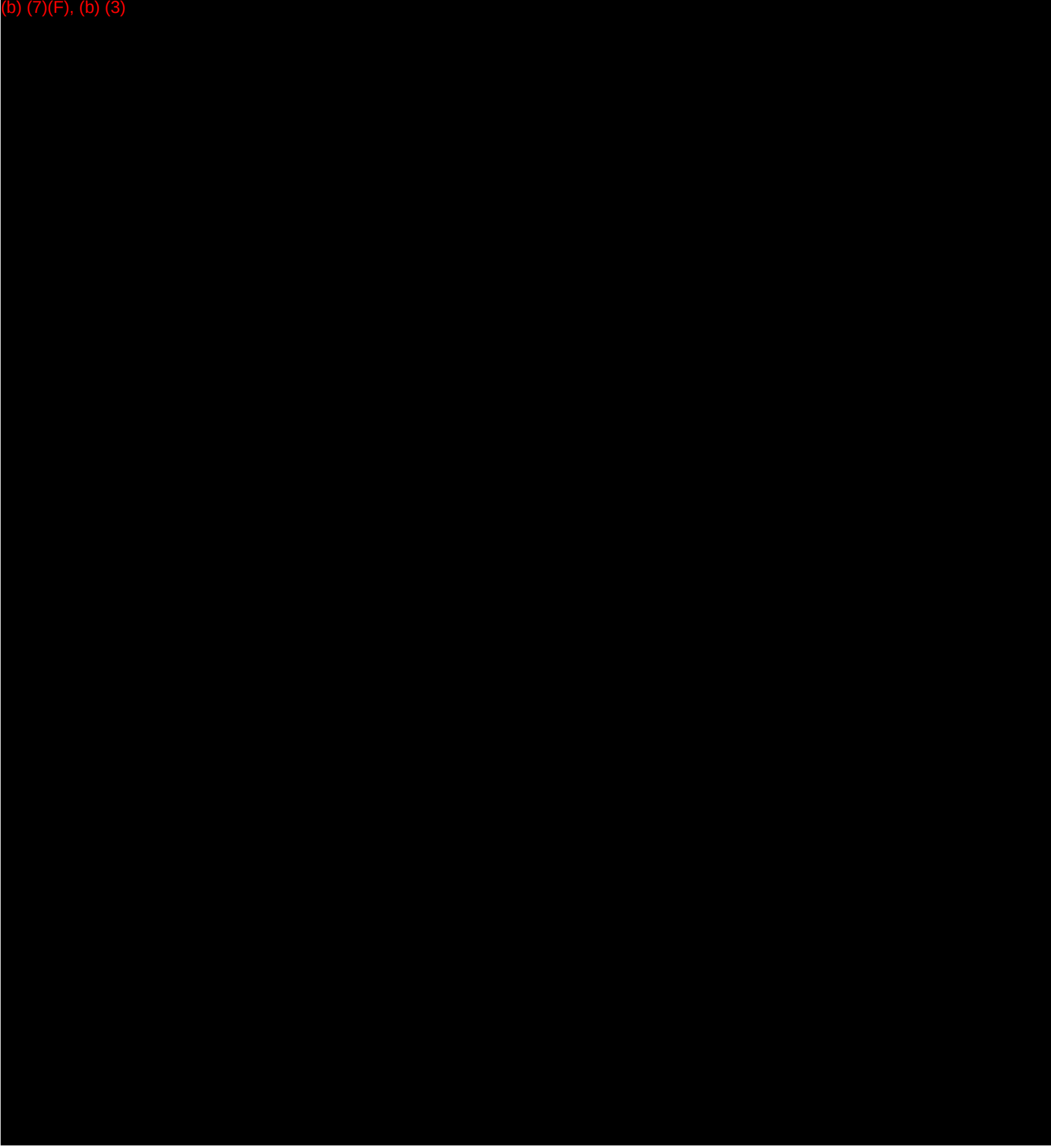
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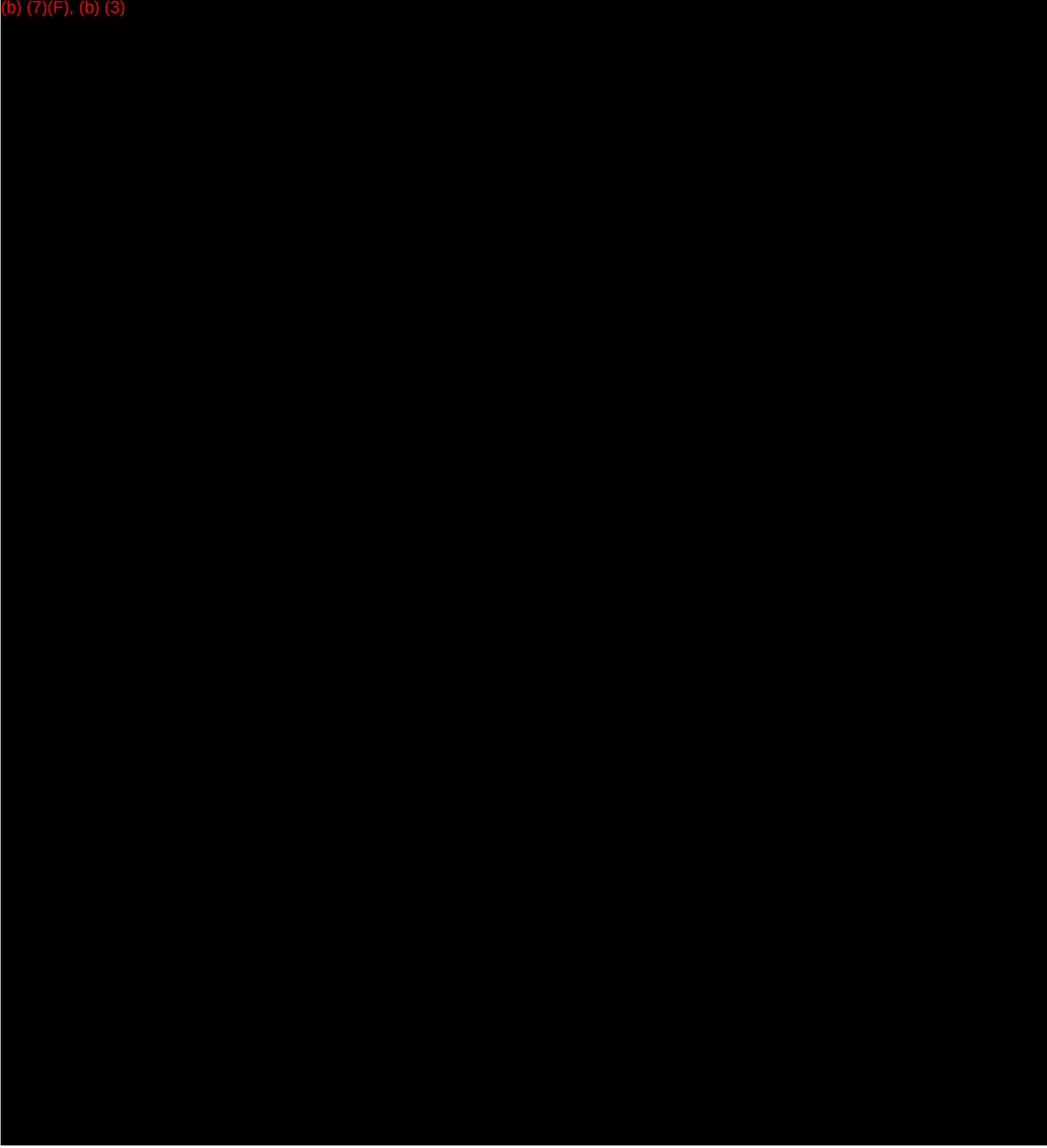
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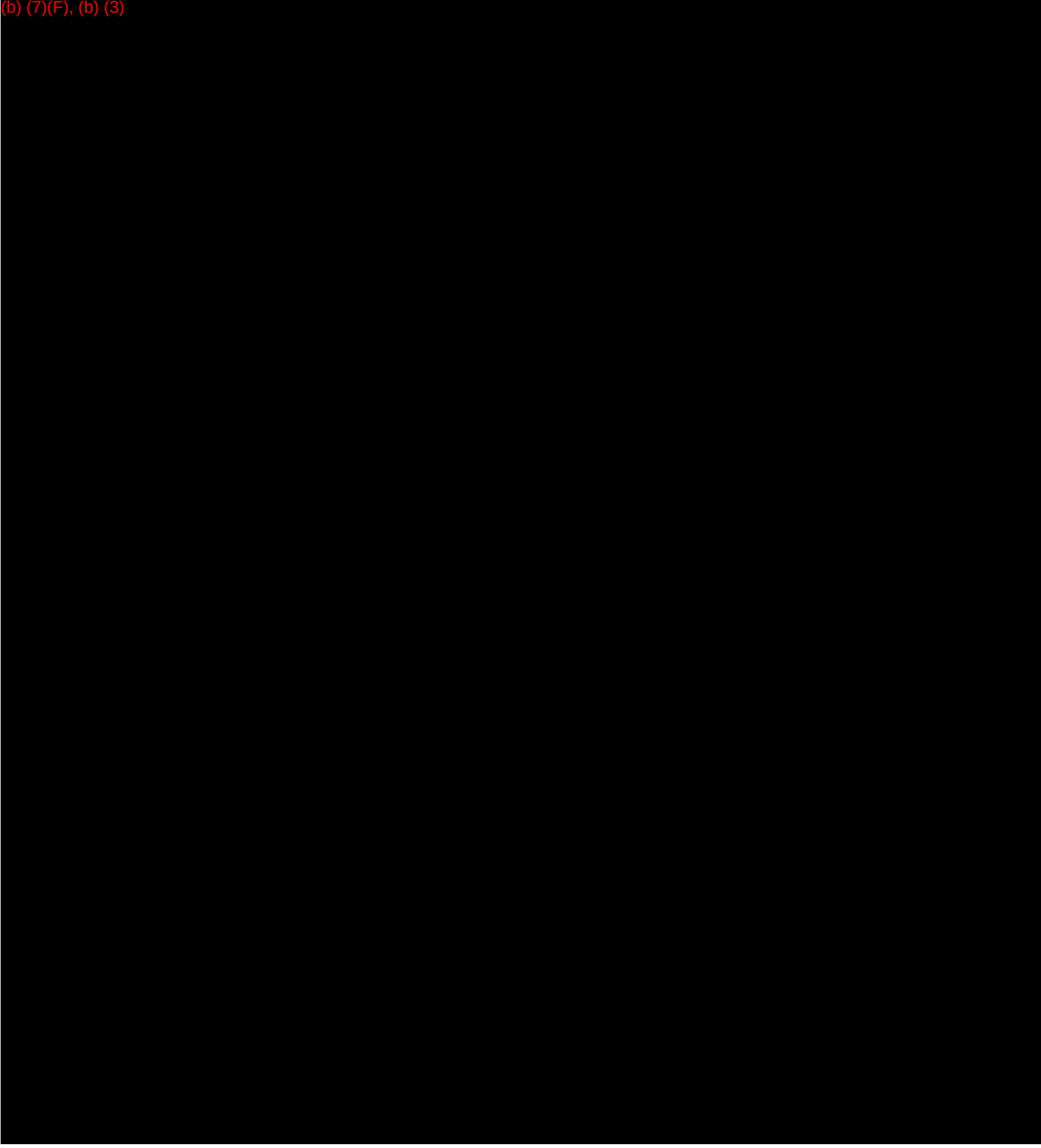
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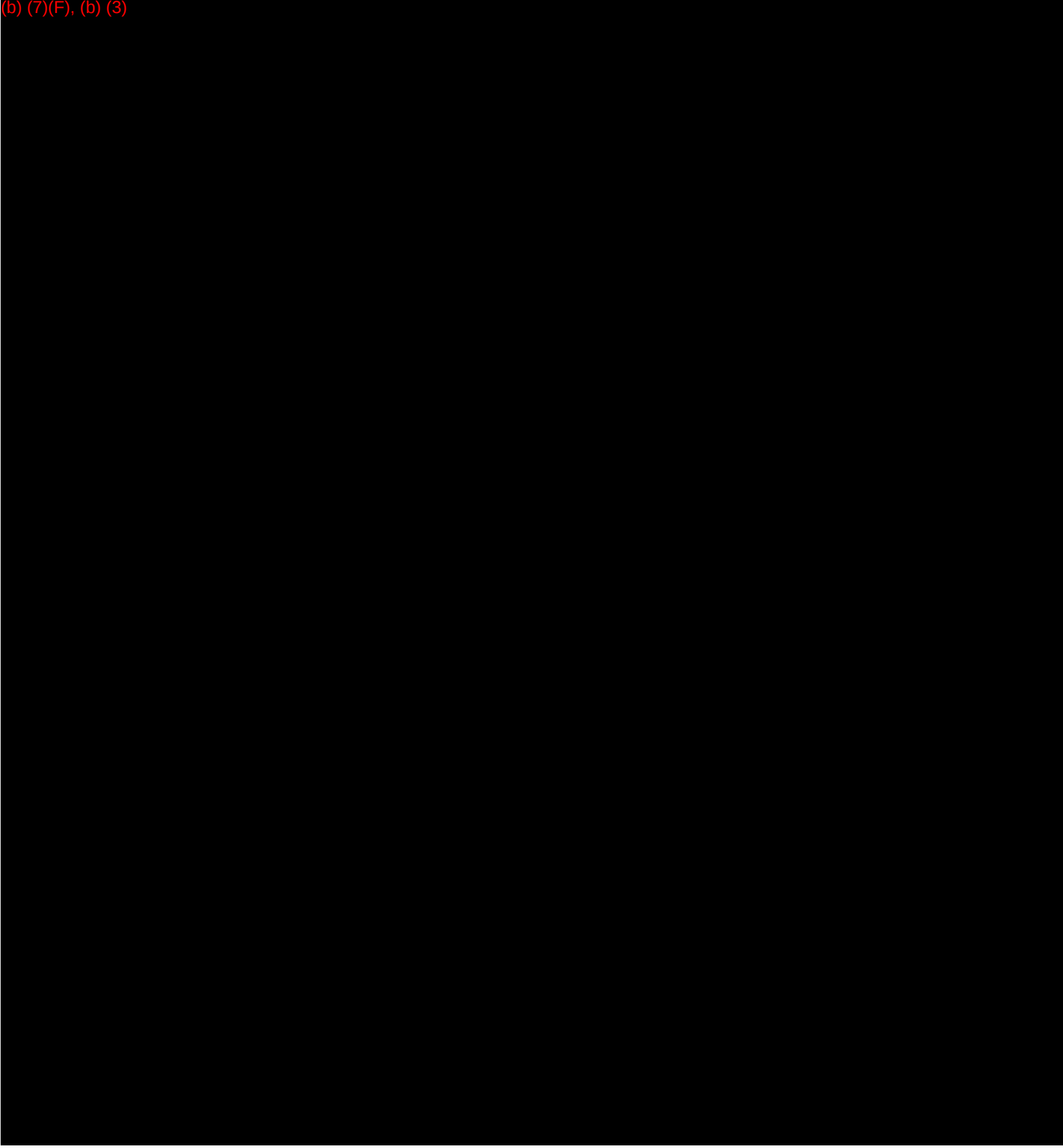
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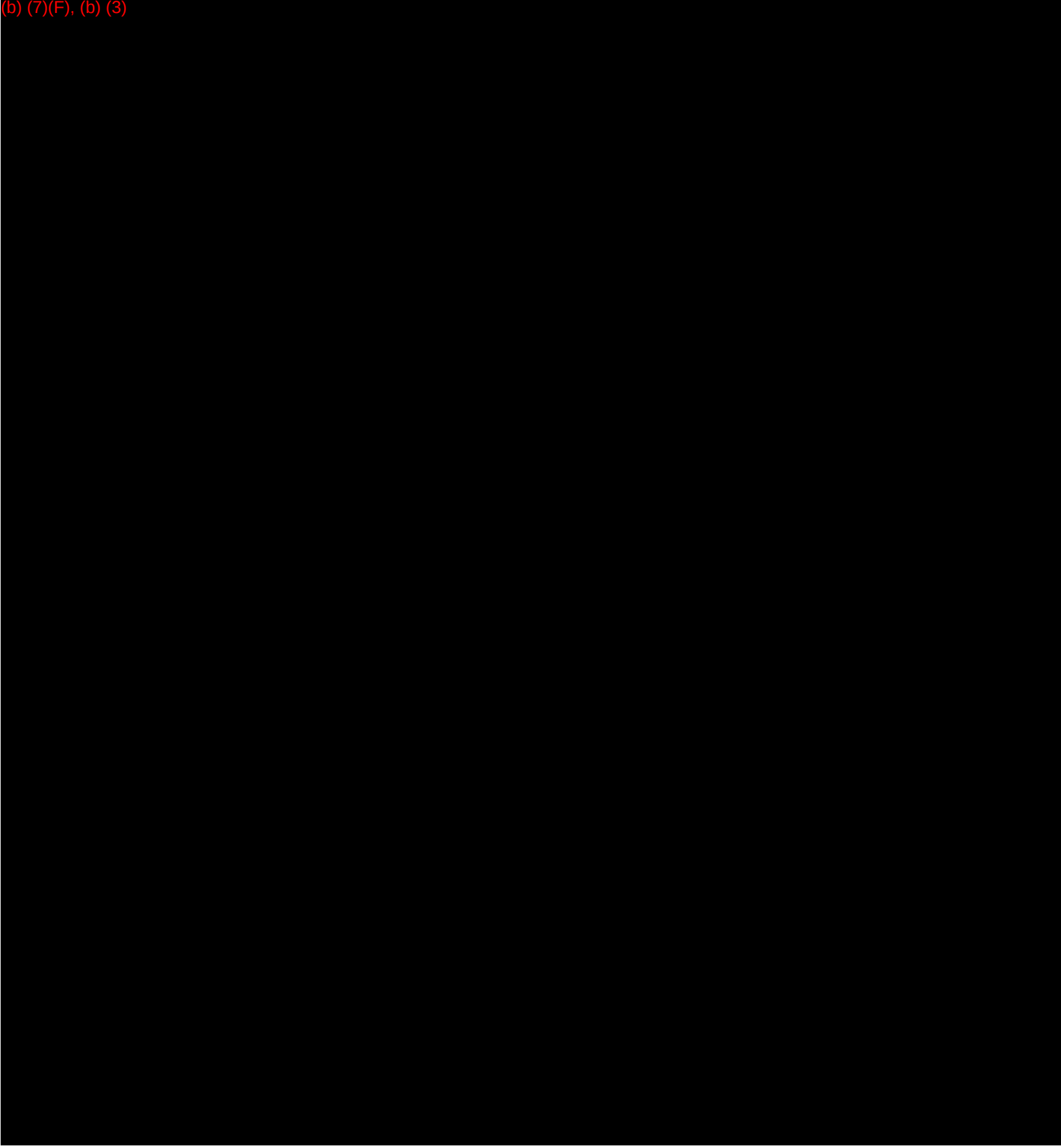
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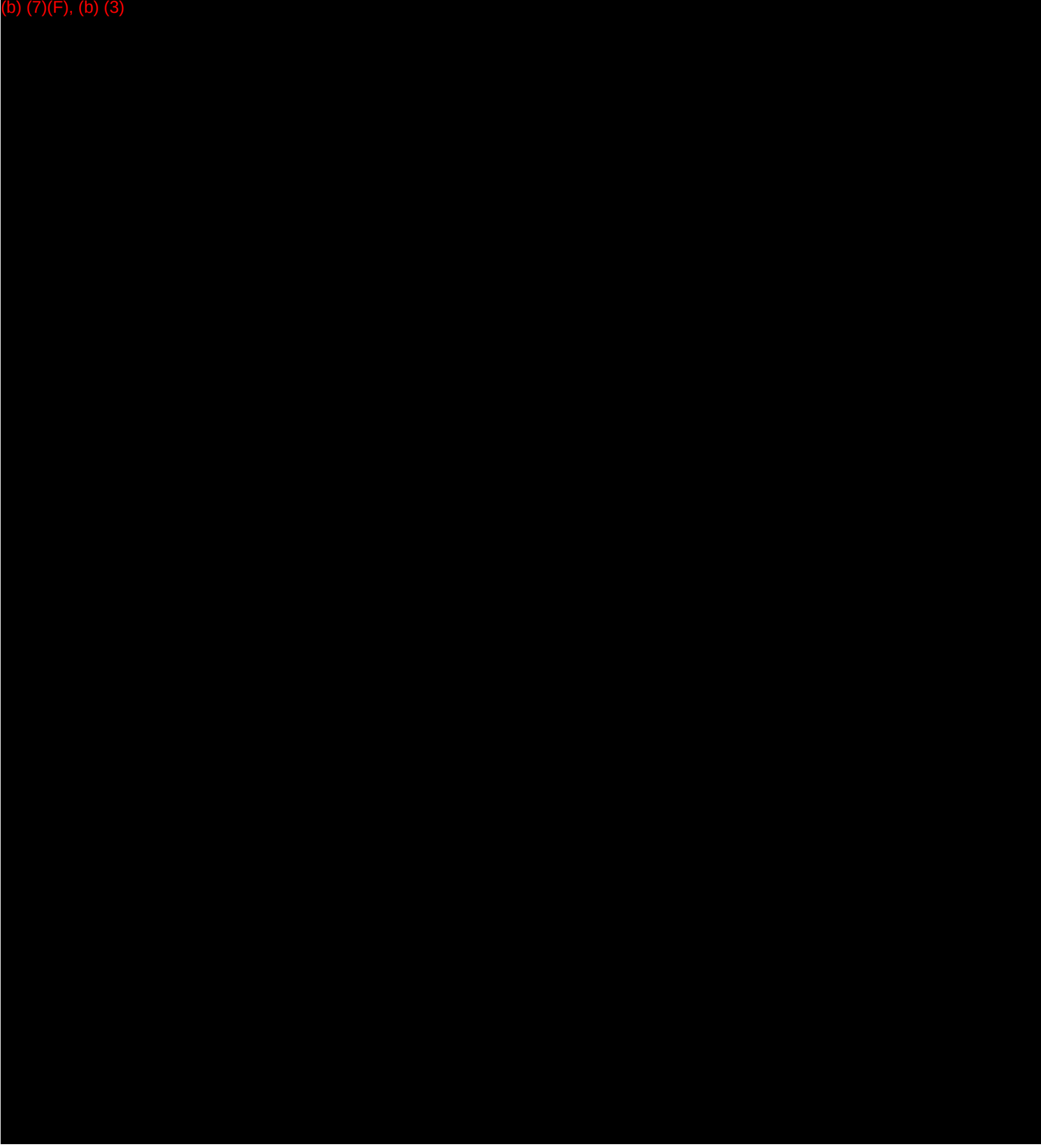
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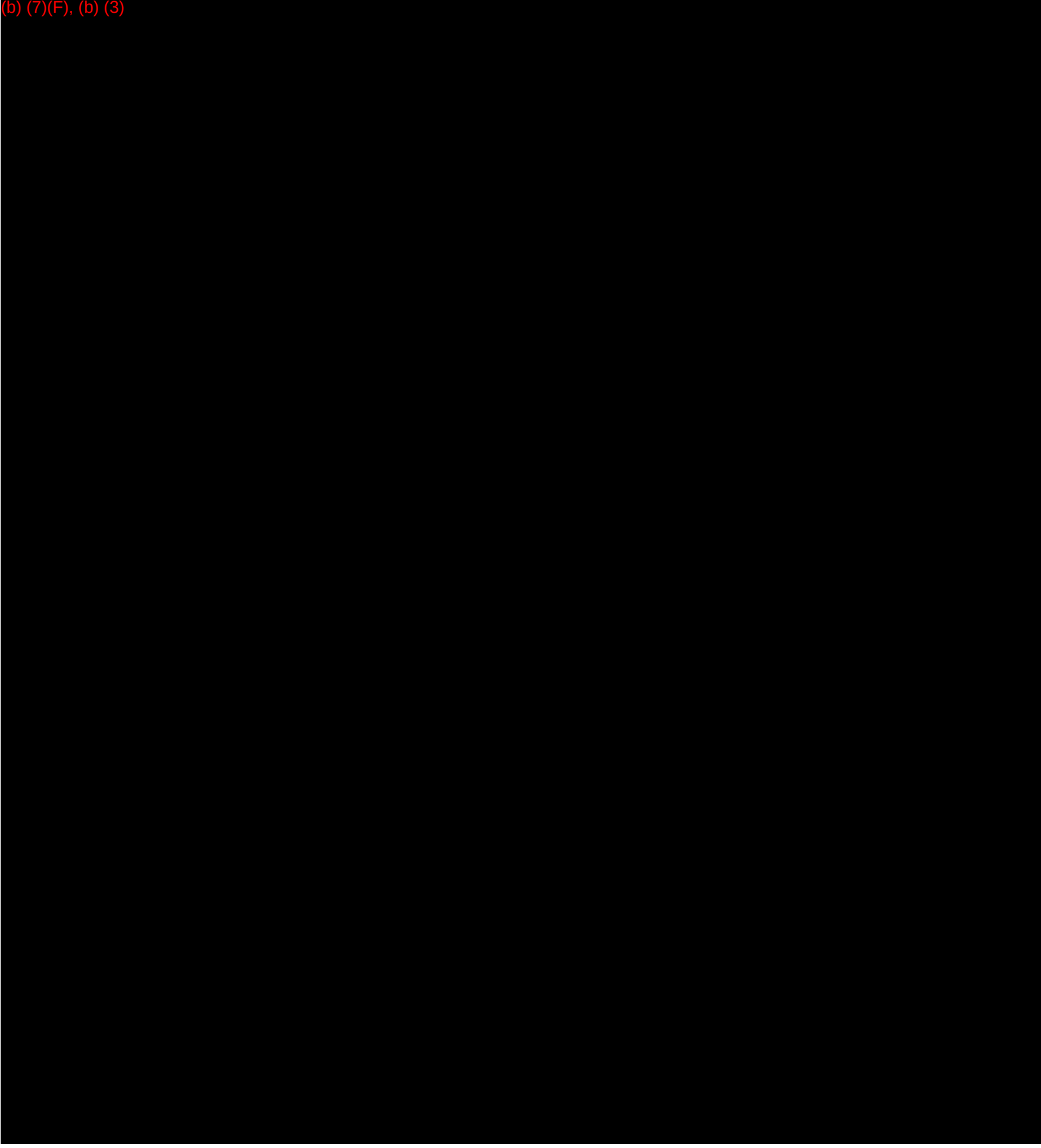
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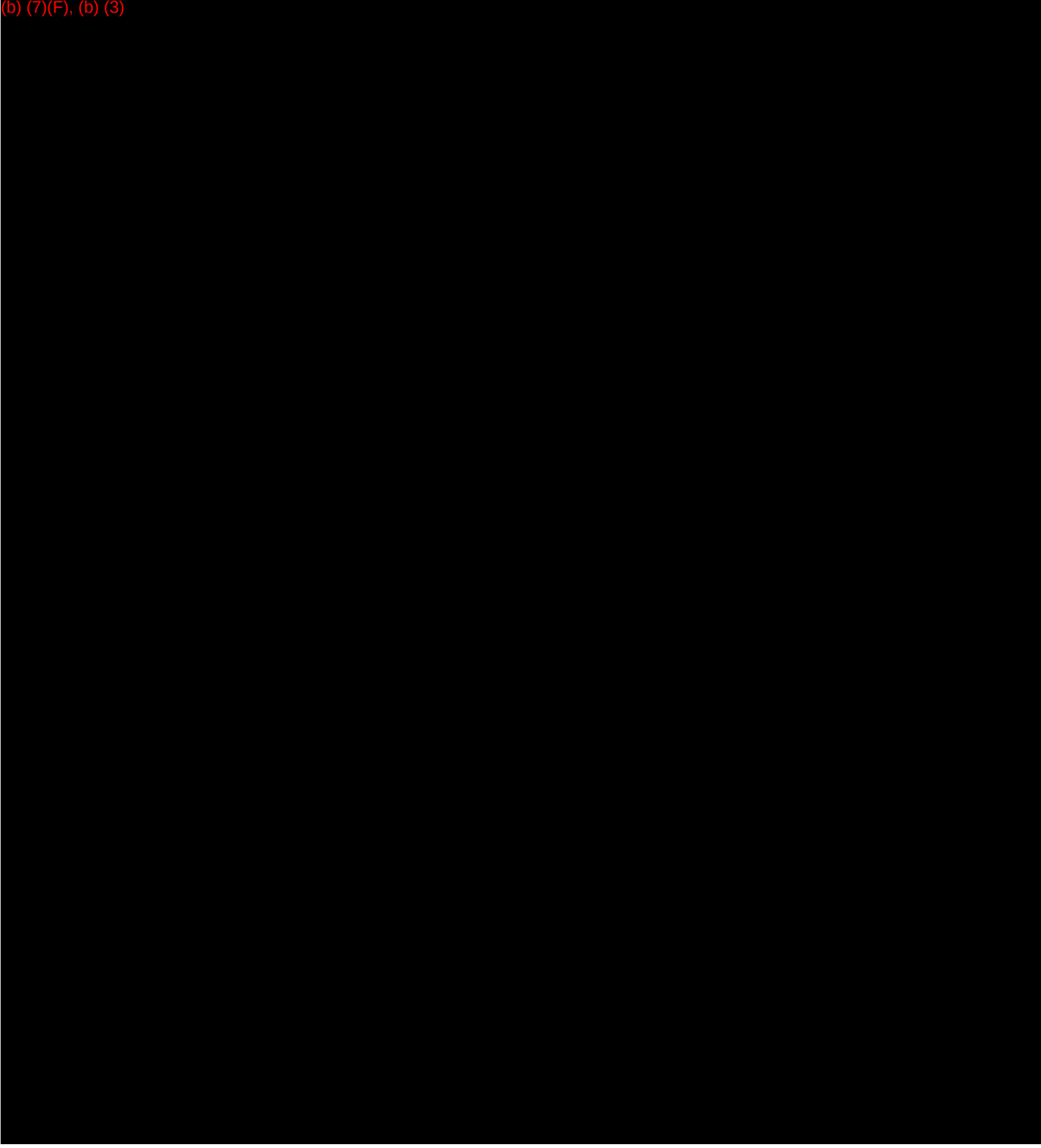
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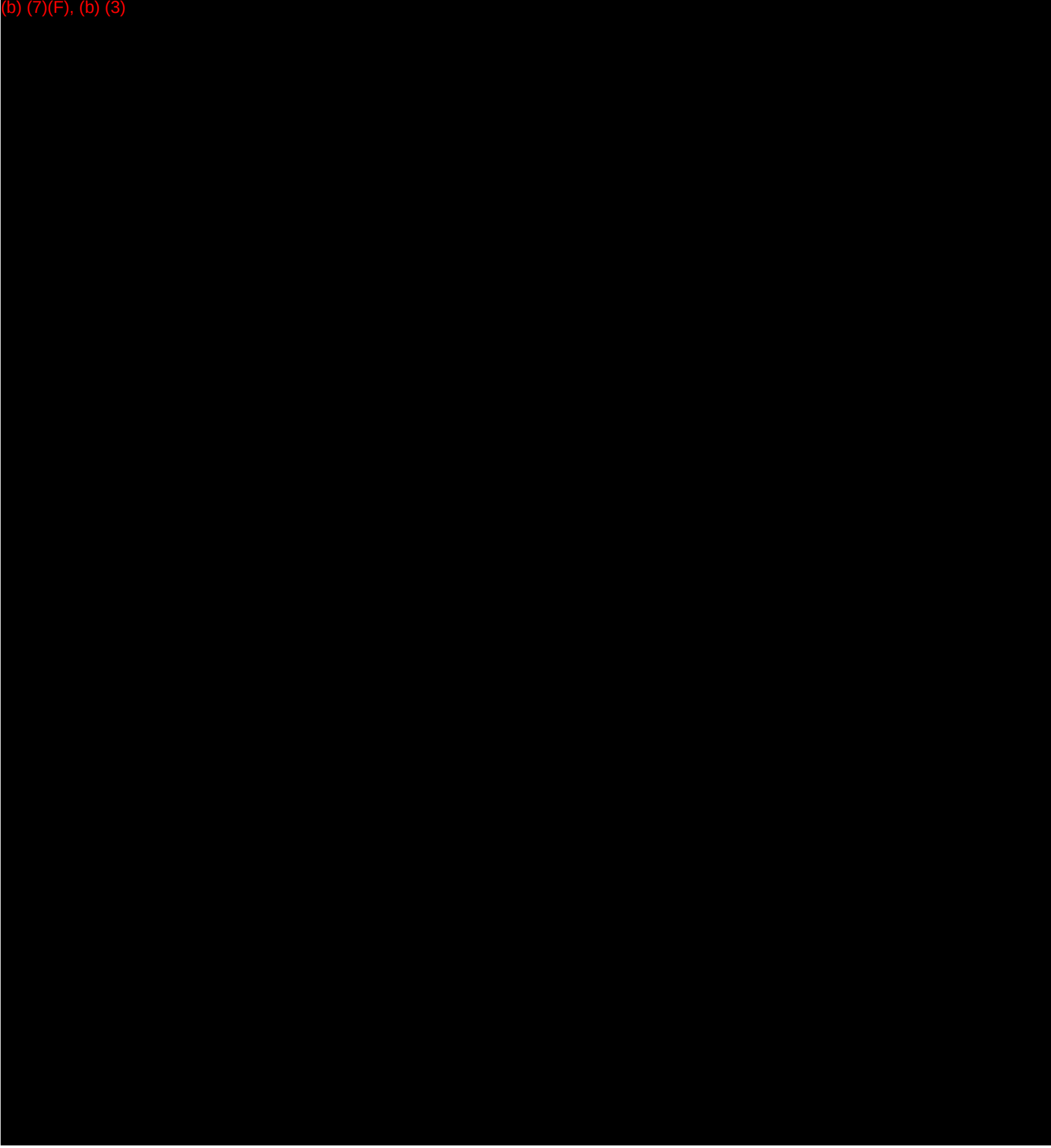
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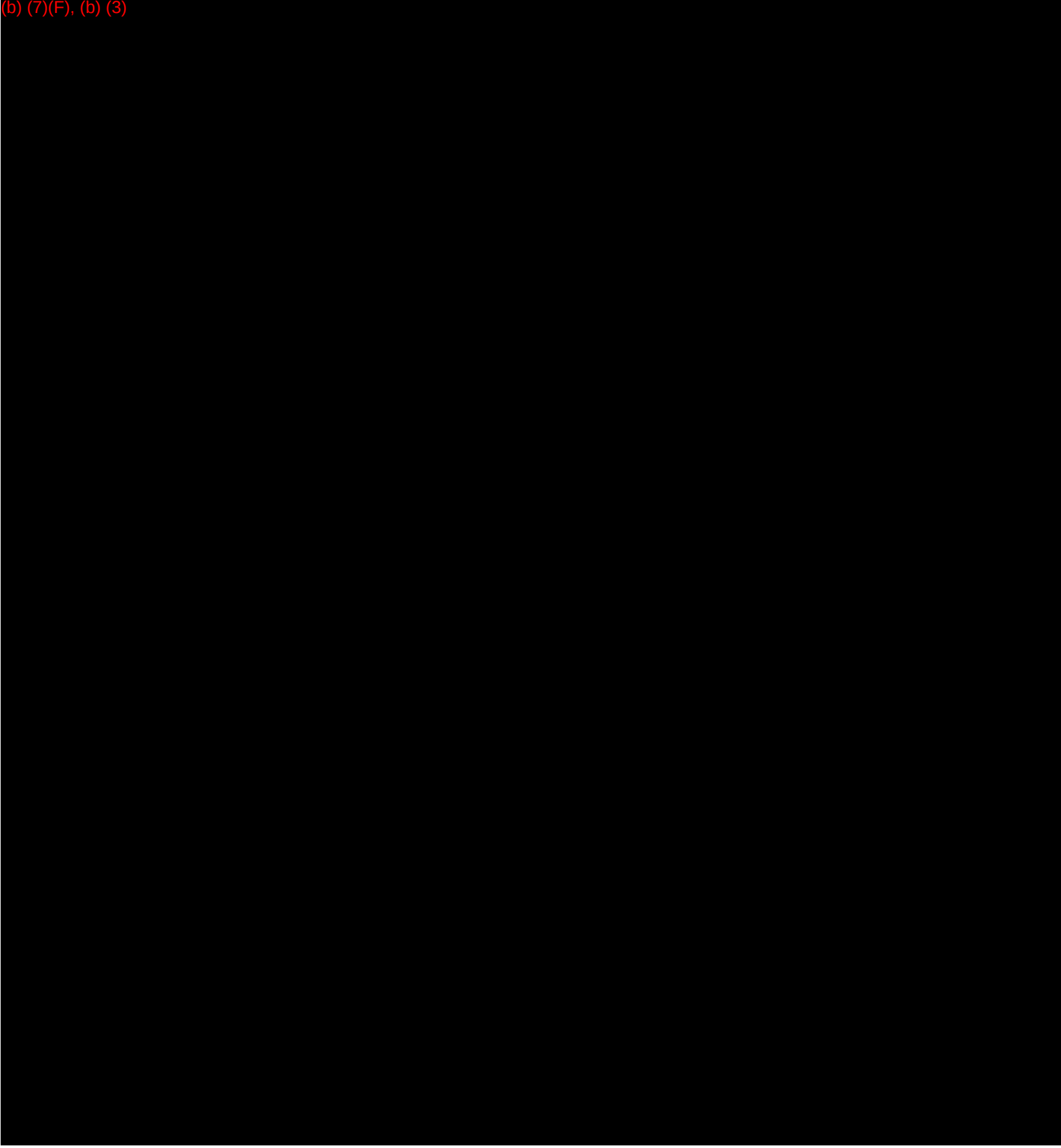
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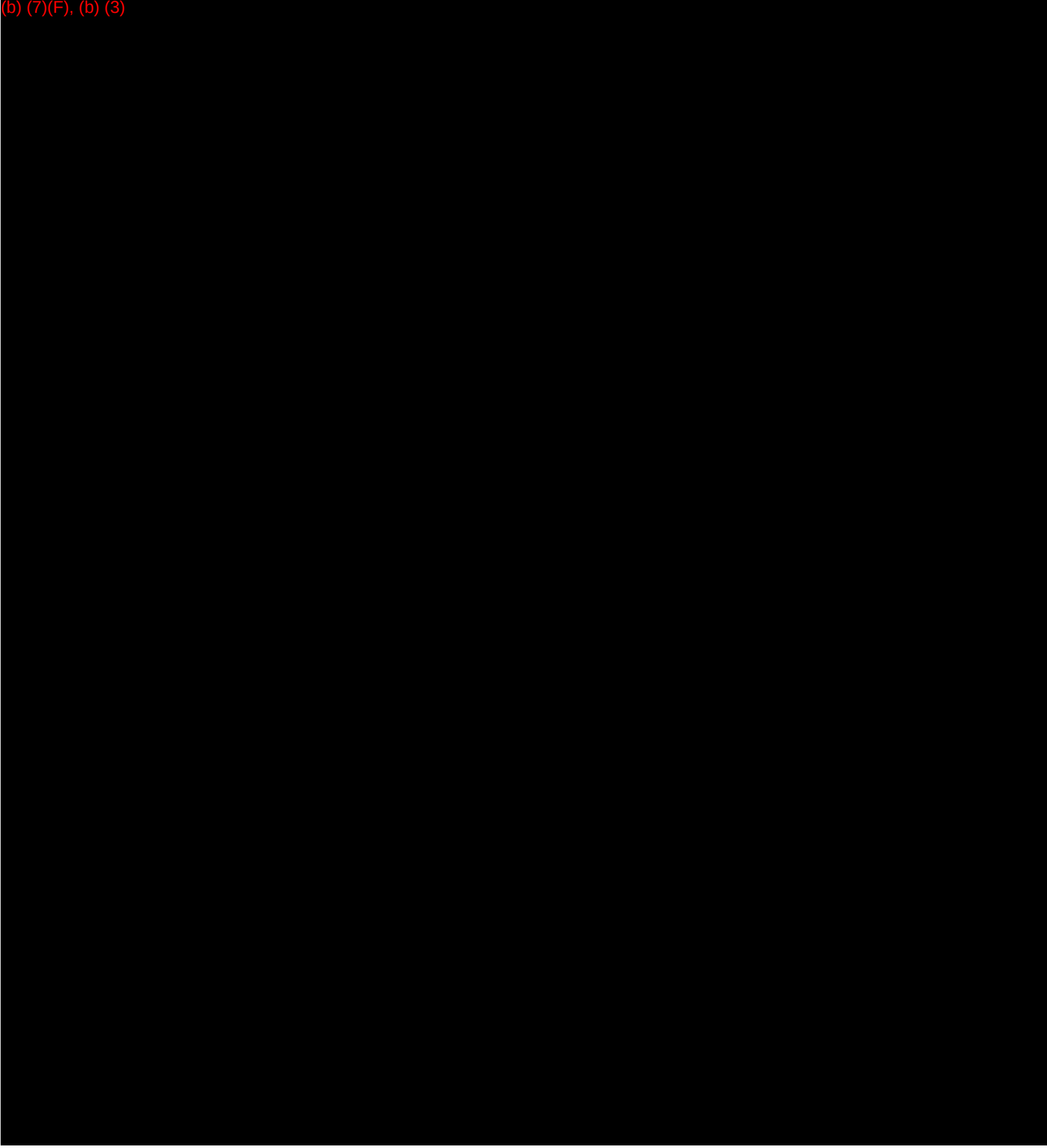
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Bay West
Customer-Focused Environmental & Industrial Solutions

EQUIPMENT TRAILERS
- 2 Equipment Spill Response Trailers

CONTAINMENT BOOM
- 1 Enclosed trailer with 600’ of containment boom
- 2 Boats with a total 350’ of containment boom stored
- 1 Trailer with 150’ of containment boom
- 3 25’ sections of mini boom
- 2 Conex boxes with a total 9,000feet of containment boom
- 3 Conex boxes with a total of 15,000 feet of containment boom (accessible through Wakota CAER)

MARINE
- 1 22' Sea Ark Boom deployment boat w/twin 60 hp 4-cycle mercury motors
- 1 18' Sea Ark Boom deployment boat w/twin 60 hp Mercury motors
- 2 18' Lund boats with 50 hp Mercury outboard motors w/Trailers
- 1 14' Alumacraft Jon Boat with 15 hp outboard motor
- 25 Life Jackets
- 16 22 lb. Danforth type Anchors
- 18 Mooring Balls
- 7 1500 gal. Elastec Tanks
- 6 Air Powered Double Diaphragm Pumps-2”
- 1 Trailer Leroy Air Compressor
- 4 12 hp Emglo Air Compressors
- 20 50' Suction hoses 2"
- 20 50' x 3/4" Air Hoses
- 20 50' x 3/8" Air Hoses
- 8 Portable Radios
- 3 Elastec Skimmers
- 4 Manta Ray Skimmers
- 1 JBF DIP-400 Skimmer
- 1 Hydraulic JBF Power pack
- 80 5' Fence Posts for Boom
- 10 Chest Waders

SORBENTS
- 20 Bales T-270 8" x 10' (4 ea.) sorbent booms
- 20 Bales T-280 8” x 10’ (4 ea) double boom
- 25 Bales T-126 17" x 100' Sweep
- 40 Bales T-151 17" x 19" Sorbent Pads
- 60 Cases P110 Universal Sorbent Pads
- 80 50 lb. Bags Floor Dry
- 60 Bags of Drizorb

CONTAINERS
- 35 55 gallon Open-top Poly Barrels
- 30 5 gallon Open-top Pails
- 300 6 mil Large Plastic Bags
- 20 Rolls 24' x 100' 6-mil Plastic
- 30 55 gallon Steel Open-top Barrel

PROTECTIVE GEAR
- 100 Sealed Seam Saranex Suits
- 100 Regular Saranex Suits
- 30 Rain Suits
- 400 Pair Nitrile Gloves
- 500 Pair Latex Gloves
- 30 Hardhats w/Shields
- 100 Encon Safety Glasses

TOOLS
- 6 Safety Gas Can for Compressors
- 5 General Purpose Tool Boxes
- 10 Long-handle Square-point shovels
- 10 Long-handle Round-point Shovels
- 6 Non-metallic Scoop Shovels
- 1 8" Rubber Squeegees
- 8 16" Flat Rakes
- 12 18" Street Brooms
- 6 Pitchforks
- 4 12' x 1¾" Pike Poles
- 1 5500W Multiquip Generator
- 2 Exhaust Fans
- 16 12-3 50' Extension Cord
- 4 #2 Premoistened Plug & Patch Kits
- 20 Explosion-proof Flashlights
- 20 Extra Batteries
- 20 Paint Pens
- 80 Duct Tape Rolls

Monitoring Equipment (PID, CGI, 4 Gas, Draeger tubes)

SAFETY
- 8 SCBA
- 8 Supplied Airline Respirators
- 45 Full Face Respirators with Cartridges
- 10 Caution Tape 1000' Rolls
- 15 NIOSH Pocket Guide to Hazardous Chemicals
- 10 Grounding Straps for Barrels
- 6 Grounding Rod for Straps
- 3 Eyewash Stations
- 5 First Aid Stations
- 10 20 lb. Fire Extinguishers
- 10 Traffic Vests
- 2 Washing Equipment
- 8 Full Body Harnesses
- 8 25' Lanyards

HEAVY EQUIPMENT
- 1 Melroe Bobcat

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Bay West
Customer-Focused Environmental & Industrial Solutions

Bay West Inc.
5 Empire Drive, St. Paul, MN 55103
651-291-0456 * FAX 651-291-0099
www.baywest.com * info@baywest.com

Documentation Form for OSRO Retainer Customers of Bay West, Inc.
Announced Equipment Deployment Exercise

1. **Date Performed**: *October 13, 2011*

2. **Deployment Location(s)**: *Mississippi River, St. Paul, MN, between I-35E Bridge and Smith Street High Bridge.*

3. **Time Start** *8:30 AM* - **End Time**: *12:15 PM*

4. **Equipment Deployed**: *OSRO-owned*

5. **Type and amount of equipment deployed and number of support personnel employed:**
   Bay West deployed: 1000 feet of containment boom, two Sea Ark boom deployment boats, one 18' Lund boat; one air compressor and double-diaphragm pump, one JBF DIP-400 skimmer, one Elastec TDS-118 skimmer, one Mantaray skimmer, and 14 response personnel. A sub-contracted 2500 gallon vacuum truck was also dispatched to the site.

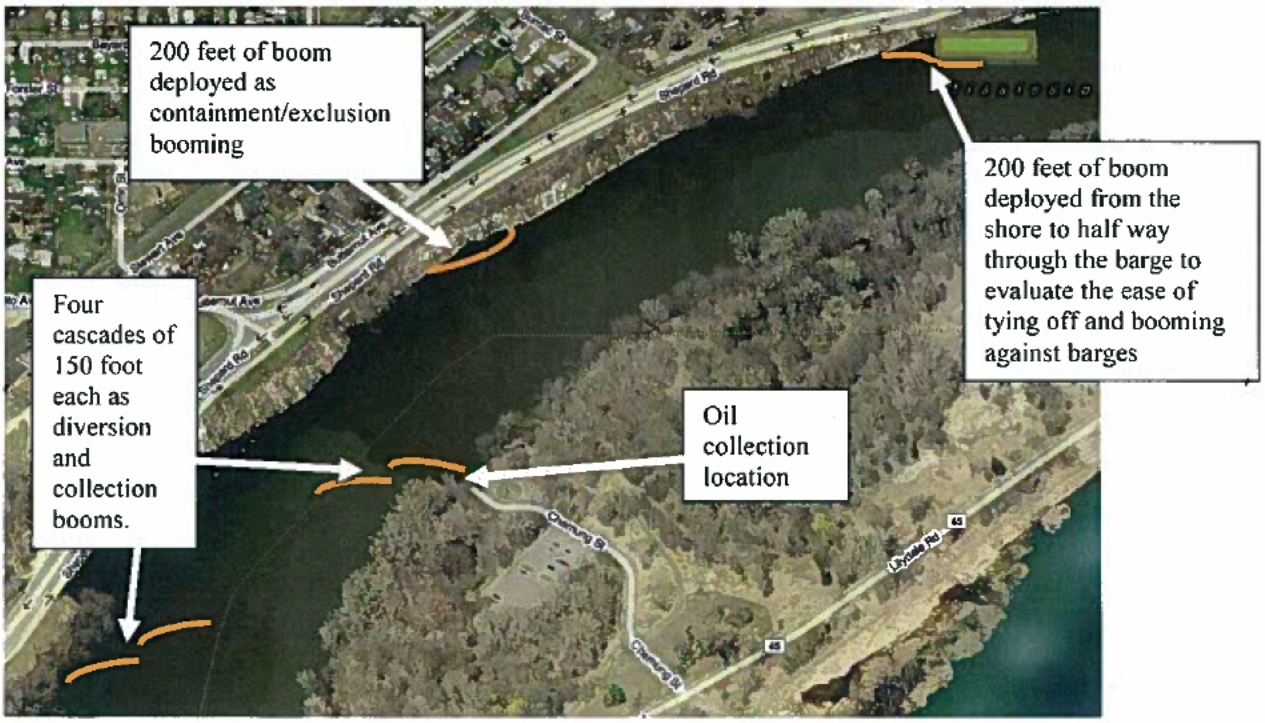
6. **Describe goals of the equipment deployment exercise and list any area contingency plan strategies tested.**
   Due to low water levels, safe areas to perform the drill were limited to river sections where deeper channels were accessible. In September of 2011, a large multi-agency emergency response drill was performed near the confluence of the Minnesota and Mississippi Rivers. The multi-agency drill scenario was described as an Airbus 319 loses power and ditches in the river near the airport. In the multi-agency drill, responders did mock removals of passengers and reported that an estimated 3,600 gallons of fuel has been released from the airplane. OSRO deployment was not part of the drill; however, table top discussions between Bay West and other agencies during the response developed a response plan for fuel/oil recovery. Bay West, through discussions with the Minnesota Pollution Control Agency, who actively participated with Bay West during this year's OSRO deployment, decided to design this year's deployment to simulate the recovery of fuel/oil that would have resulted from the scenario outlined in the multi-agency plane crash drill.

   The goal of this drill was to identify oil diversion and collection points down stream of the release point, and test the use of boom against barges. One of the table top oil response collection methods was to utilize one or two of the barges that typically reside in this stretch of the river to divert oil to the shore line. Upper River Services, the company that shuttles barges in this area, indicated that they could deploy an empty barge to a spill that occurs near St. Paul within one to two hours. Additionally, Bay West evaluated if the published OSRO deployment tactical plan (designed by WAKOTA CAER) for this stretch of the river accurately described the deployment resources and methods.

   The Lilydale Regional Park Boat Landing was identified as the best location for the deployment and would be a logical down river point for collection if the crash were to occur near the airport. This deployment is consistent with strategies that have been developed for the Mississippi River. Booming and recovery activities were developed to respond to a location as near to the release as possible and recover as much product as possible before shoreline and down river sensitive areas became contaminated. The below map depicts how boom was deployed using the two Sea Ark boats and man power from shore.

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7. **For deployment of facility-owned equipment, was the amount of equipment deployed *at least* the amount necessary to respond to an AMP Spill?** *NA*
8. **For deployment of OSRO-owned equipment, was a representative sample (at least 1,000 feet of boom and one of each type of skimming system) deployed?**
   Yes. 1000 feet of boom was deployed as shown in the above graphic.
9. **Was the equipment deployed in its intended operating environment?** *Yes*
10. **Are all facility personnel that are responsible for response operations involved in a Comprehensive Training Program, and all pollution response equipment involved in a Comprehensive Maintenance Program?**
    OSRO participation has an USCG verified program for training and maintenance. Bay West follows the requirements of PREP.
11. **Date of Last Equipment Inspection**: *Summer 2011. Also, much of our equipment has been deployed numerous times during 2010.*
12. **Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill?** *Yes*
13. **Was all the deployed equipment operational? If not, why not?** *All Bay West equipment performed properly.*
14. **Identify which of the 15 core components of your response plan were exercised during this exercise:** *NA, not facility performed.*
15. **Description of lesson(s) learned and person(s) responsible for follow-up and corrective measures.**

    1. Boat traffic and wakes can affect boom effectiveness and anchoring of the boom
    2. Recreational users of the boat landing can be a safety hazard and delay deployment efforts
    3. Upper River Services could be called on to deploy a barge to be positioned in a manner to divert product. Methods such as barge "belting with cables" or magnets should be tested soon to assess better ways to connect boom to barges.
    4. The published tactical plan for this section of river indicates that 1,000 feet of boom would be necessary to collect oil. Our deployment confirmed that 1,000 feet of containment boom outlined in the tactical plan would be sufficient for oil diversion and collection activities.

Formal follow-up regarding these lessons learned are not necessary. However, Bay West will include these lessons learned in future training events. Bryan Murdock will be responsible for ensuring this knowledge is transferred to future OSRO staff.

* This documentation form is valid for 2011 Bay West OSRO customers only, in order to comply with your Federal Facility Response Plans. Retain this record for at least five years.



Certifying Signature

Emergency Response & OSRO Manager, Bay West, Inc.

Bay West

Oil Spill Removal Organization Equipment List

EQUIPMENT TRAILERS
- 2 Equipment Spill Response Trailers

CONTAINMENT BOOM
- 1 Open trailer with 600' of containment boom
- 2 Boats with a total 350' of containment boom stored
- 1 Trailer with 150' of containment boom
- 3 25' sections of mini boom
- 2 Conex box with a total 3100' of containment boom
- 1 In possession of 1800' of containment boom
- 3 Conex boxes with a total of 4000' of containment boom (accessible through Wakota CAER)

MARINE
- 1 22' Sea Ark Boom deployment boat w/twin 60 hp 4-cycle mercury motors
- 1 18' Sea Ark Boom deployment boat w/twin 60 hp Mercury motors
- 2 18' Lund boats with 50 hp Mercury outboard motors w/Trailers
- 1 14' Alumacraft Jon Boat with 15 hp outboard motor
- 25 Life Jackets
- 16 22 lb. Danforth type Anchors
- 18 Mooring Balls
- 7 1500 gal. Elastec Tanks
- 6 Air Powered Double Diaphragm Pumps-2"
- 1 Trailer Leroy Air Compressor
- 4 12 hp Emglo Air Compressors
- 20 50' Suction hoses 2"
- 20 50' x 3/4" Air Hoses
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SORBENTS
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- 30 5 gallon Open-top Pails
- 300 6 mil Large Plastic Bags
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- 30 55 gallon Steel Open-top Barrel

PROTECTIVE GEAR
- 100 Sealed Seam Saranex Suits
- 100 Regular Saranex Suits
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- 500 Pair Surgical Gloves
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- 30 Encon Safety Glasses

TOOLS
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- 8 16" Flat Rakes
- 12 18" Street Brooms
- 6 Pitchforks
- 4 12' x 1¾" Pike Poles
- 1 5500W Multiquip Generator
- 2 Exhaust Fans
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- 20 Explosion-proof Flashlights
- 20 Extra Batteries
- 20 Paint Pens
- 80 Duct Tape Rolls
- Monitoring Equipment (PID, CGI, Draeger tubes)

SAFETY
- 8 SCBA
- 8 Supplied Airline Respirators
- 45 Full Face Respirators with Cartridges
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- 15 NIOSH Pocket Guide to Hazardous Chemicals
- 10 Grounding Straps for Barrels
- 6 Grounding Rod for Straps
- 3 Eyewash Stations
- 5 First Aid Stations
- 10 20 lb. Fire Extinguishers
- 10 Traffic Vests
- 2 Washing Equipment
- 8 Full Body Harnesses
- 8 25' Lanyards

HEAVY EQUIPMENT
- 1 Melroe Bobcat

Recovery and Temporary Storage Capacity

Recovery Capacity		
#	Skimmer	Total Effective Daily Recovery Capacity
2	Elastec TDS-118 Drum Type Skimmer	480 bbls
6	Slickbar Manta Ray Skimmer	2460 bbls
1	Douglas SkimPak 4200 Skimmer	466 bbls
1	JBF DIP-400 Skimmer	5400 bbls
	Total Recovery Capacity =	**8806 bbls**

Temporary Storage Capacity *		
#	Storage Vessel	Capacity
1	952 bbl Portable Storage Tank	952 bbls
22	MC-312 Transport Trailers	3143 bbls
1	MC-307 Transport Trailer	164 bbls
10	MC-306 Transport Trailers	19071 bbls
55	Non-code Transport Trailers	9166 bbls
7	Elastec Portable Tanks	249 bbls
1	Above Ground Storage at Ashland Refinery	28,571 bbls
	Total Temporary Storage Capacity =	**61,316 bbls**

* Arrangements have been made to utilize fixed temporary storage at Ashland Petroleum in St. Paul Park, Minnesota.

Temporary Storage Capacity is not adjusted for contracted resources. All contracted resources are cut in half for redundancy.

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 6, 2005

Via Facsimile: 651-291-0099

Mr. Lon Larson
Bay West, Inc.
5 Empire Drive
St. Paul, MN 55103

Re: Agreement #9501310-A

Dear Mr. Larson:

Your company currently has in effect an Agreement dated April 14, 1994 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-5675 • FAX 316/828-9063 or 316/828-9824

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WENINGER
LEGAL ASSISTANT

April 18, 2000

VIA FACSIMILE: 651-291-0099

Mr. Lon Larson,
Bay West, Inc.
5 Empire Drive
St. Paul, Minnesota 55103

Re: Amendment to Intermittent Services Agreement 9501310-A
Koch Petroleum Group, L.P. Koch Pipeline Company, L.P.
Minnesota Pipe Line Company

Dear Mr. Larson:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated April 14, 1994, as amended August 25, 1999, with the above referenced Koch companies. From time to time other affiliated Koch companies may need your services. The purpose of this letter is to propose adding **Koch Materials Company**, to the ISA.

Koch proposes amending the term "Company," as that term is used in the ISA dated April 14, 1994, to include all of the following Koch companies:

Koch Materials Company
Koch Petroleum Group, L.P.
Koch Pipeline Company, L.P.
Minnesota Pipe Line Company

Under this proposed amendment letter, future work/services performed by Bay West, Inc. for any of the above referenced Koch companies will be done pursuant to the ISA dated April 14, 1994, the amendment dated August 25, 1999, and this amendment dated April 18, 2000.

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Koch requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

Lon S. Larson
Chief Financial Officer

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-6587 • FAX 316/828-7664

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. T3D, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Administrator/Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Bay West, Inc.

By: _____
Printed Name: Lon S. Larson
Title: Chief Financial Officer
Date: 5/1/00

KOCH INDUSTRIES INC

August 25, 1999

LEGAL DEPARTMENT

LYNDA L. WENNINGER
LEGAL ASSISTANT
VIA FACSIMILE: 1-612-291-0099

Mr. Jon Larson
Bay West, Inc.
5 Empire Drive
St. Paul, Minnesota 55103

Re: Amendment to Intermittent Services Agreement 9501310-A
Koch Pipelines, Inc. (n/k/a Koch Pipeline Company, L.P.)
Minnesota Pipe Line Company
Koch Refining Company (n/k/a Koch Petroleum Group, L.P.)
Koch Service Company (n/k/a Koch Pipeline Company, L.P.)

Dear Mr. Larson:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated April 14, 1994, with the above referenced Koch companies. Since the time Mr. Erickson signed the ISA in June of 1994, Koch has merged or consolidated the Koch entities listed in the ISA. The purpose of this amendment letter is to propose amending the term "Company," as that term relates to the ISA, to correctly identify the Koch companies your company is approved to work for and to amend Exhibit B-Insurance Requirements to as discussed below.

Koch proposes amending the term "Company," as that term is used in the ISA dated April 14, 1994, to include all of the following Koch companies:

Koch Petroleum Group, L.P.
Koch Pipeline Company, L.P.
Minnesota Pipe Line Company

Also with respect to the ISA dated April 14, 1994, Koch proposes to amend Exhibit B-Insurance Requirements to provide for the following insurance limits, and to expressly specify the Additional Insured Endorsement that will be provided under the Commercial General Liability policy.

Commercial General Liability Insurance: Minimum combined single limit of $3,000,000 per occurrence for Bodily Injury and Property Damage, and $3,000,000 aggregate each for the general policy and the Products/Completed Operations Hazard.

Automobile Liability Insurance: Minimum combined single limit for Bodily Injury and Property Damage of $3,000,000 per accident.

Additional Insured Endorsement: Pursuant to Subsection 2.2, the Additional Insured Endorsement that will be provided is as follows: "Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93)" or "Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97)" naming Company as an additional insured.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated April 14, 1994, and this amendment dated August 25, 1999.

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Koch requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. T3D, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Administrator/Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Bay West, Inc.

By: _____
Printed Name: Lon S. Larson
Title: CFO
Date: 12/22/99

INTERMITTENT SERVICES AGREEMENT #1477

Date: April 14, 1994 Contractor: Bay West, Inc.

Area: MN, WI, IL, IA, MO, MI

PARTIES

1. It is hereby agreed between, **Koch Pipelines, Inc., Minnesota Pipeline Company, Koch Refining Company, Koch Service, Inc., (Pipelines & Terminals)**, and (referred to as "Company") and, **Bay West, Inc.** (referred to as "Contractor"), whose business address is, **Five Empire Drive, St. Paul, MN 55103-1867**, that Contractor will, as an Independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

AND BAY WEST TECHNOLOGIES, INC. RCE 6/3/94 RAC

Special Conditions:

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each _____ (name desired billing period - e.g., week, month or thirty days) during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Final payment shall be made within thirty days of the date of receipt by Company of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structure built, improved or added to are not subject to any material or labor liens or claims of liens. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions which may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining there to, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:

a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases the employee shall be considered an employee of an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and insuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material which shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services which are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability whether insured or self-insured, for loss or destruction of or physical damage to the following:

a. All tools, machinery, equipment and appliances which are owned by Contractor or loaned or leased by Contractor by others than Company and which are not to be incorporated into the completed work; and,
b. All personal property of Contractor's employees; ~~whether or not~~ such loss, destruction or damage is caused by, arises out of, or ~~is in any way~~ connected with the negligence of Company, its employees or agent.

TO THE DEGREE PERMITTED EXCEPT WHERE RAC

RCE 5/9/94

INDEMNITY AND INSURANCE

12. Contractor shall defend, protect, indemnify and save Company, Koch Industries, Inc. and any company of which Koch Industries, Inc. owns or controls fifty percent or more of the shares entitled to vote at a general election of directors (collectively referred to for purposes of this Paragraph 12 as "Company") harmless from and against all claims, demands, lawsuits, causes of action, penalties, fines, administrative law actions and orders, expenses (including but not limited to attorney's fees) and costs of every kind and character arising out of or in any way ~~incident to any~~ of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property or damage to the environment, regardless of whether such harm is to Contractor, Company, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Company harmless referred to in the preceding sentence shall include, ~~but not be limited to~~, claims, demands, lawsuits, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Company, its agents, employees or officers, ~~except~~ Contractor shall not be liable for loss or damage resulting from the ~~sole (100%)~~ negligence of Company. Contractor further agrees to pay Company for damages to Company's property and to indemnify, defend and hold it harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Company's property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this contract including, but not limited to taxes, penalties, fines, interest, liens or encumbrances ~~which result from~~ the concurrent or contributing negligence of any person or entity, which may include Company, its agents, employees or officers.

13. Contractor shall maintain at its own cost and expense such insurance damages to persons and to property which may arise from any operations und related to this contract. Contractor shall maintain during the entire ter within minimum limits of coverage all as set forth on Exhibit B which is m commencing work Contractor shall require its insurer or insurance agent to in the form as set forth on Exhibit C. Such insurance shall name Company

5/16/94
To: Roy Genevich

We can accept the changes on this ISA if the contractor names us as an additional insured on Ex. C. Exhibit C should be filled out & signed by the Contractors insurance agent.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor Company, nor shall work under the contract be assigned to a subcontractor Company.

15. No amendment to this agreement shall be valid unless made in writing of both parties.

16. Company's right to require strict performance of Contractor's obliga prior waiver, forbearance or other course of dealing.

17. This agreement comprises the entire agreement between Company and Co understandings, conditions, or representations, oral or written, expresse this agreement or superseded by it.

18. If Contractor should be adjudged a bankrupt or it should make a general assignment ... or if a receiver should be appointed for Contractor or it should refuse or fail to supply competent supervision or enough properly skilled people or proper material or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement. Such bond shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that all of Contractor's employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

TERM

24. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY

By Patti M. McC

Title Dir Mgr

Date 6-10-94

WITNESS

By Roy Genevich

Date 6-10-94

CONTRACTOR

By Ronald Erickson

Title PRESIDENT

Date 6/3/94

WITNESS

By Carolyn Cemer

Date 6/3/94

INDEMNITY AND INSURANCE

12. Contractor shall defend, protect, indemni., and save Company, Koch Industries, Inc. and any company of which Koch Industries, Inc. owns or controls fifty percent or more of the shares entitled to vote at a general election of directors (collectively referred to for purposes of this Paragraph 12 as "Company") harmless from and against all claims, demands, lawsuits, causes of action, penalties, fines, administrative law actions and orders, expenses (including but not limited to attorney's fees) and costs of every kind and character arising out of or in any way ~~incident to any~~ of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property or damage to the environment, regardless of whether such harm is to Contractor, Company, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Company harmless referred to in the preceding sentence shall include, ~~but not be limited to~~, claims, demands, lawsuits, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Company, its agents, employees or officers, ~~except~~ Contractor shall not be liable for loss or damage resulting from the ~~sole (100%)~~ negligence of Company. Contractor further agrees to pay Company for damages to Company's property and to indemnify, defend and hold it harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Company's property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this contract including, but not limited to taxes, penalties, fines, interest, liens or encumbrances ~~which result from~~ the concurrent or contributing negligence of any person or entity, which may include Company, its agents, employees or officers.

13. Contractor shall maintain at its own cost and expense such insurance as will protect it from all claims for damages to persons and to property which may arise from any operations under this contract or any subcontracts related to this contract. Contractor shall maintain during the entire term of this Contract insurance policies within minimum limits of coverage all as set forth on Exhibit B which is made a part hereof by reference. Prior to commencing work Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement comprises the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, which are not merged into this agreement or superseded by it.

18. If Contractor should be adjudged a bankrupt or it should make a general assignment for the benefit of creditors or if a receiver should be appointed for Contractor or it should refuse or fail to supply competent supervision or enough properly skilled people or proper material or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement. Such bond shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement.

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TERM

24. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY		CONTRACTOR	
By	Patrick M. McCann	By	Ronald Erickson
Title	Dir. Mgr.	Title	PRESIDENT
Date	6-10-94	Date	6/3/94
WITNESS		**WITNESS**	
By	Roy Domanick	By	Carolyn Cemer
Date	6-10-94	Date	6/3/94

Exhibit B
Insurance Requirements
Supplement to Oil Field Services Intermittent Services Contract

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as agreement), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employer's Liability Insurance,** as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, ~~the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable.~~ Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as alternate employer. RCE 6/13/94

1.2 **Commercial General Liability Insurance,** which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 11 85 or CG 00 01 11 88) with standard exclusions "a" through "n", with a minimum combined single limit of ~~$3~~,000,000 per occurrence for Bodily Injury and Property Damage and a ~~$2~~,000,000 aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features: RCE 6/13/94

1.2.1 If work to be performed by Contractor is on or near any railroad property, Coverage for such operations naming Railroad as insured, unless coverage is provided under Railroad Protective Liability Insurance - Section 1.7.

1.2.2 Contractual Liability, insuring the liabilities assumed under the insurance and Liability Section of the agreement, inclusive of XCU exposure (1.2.4 below) if applicable but excluding coverage for taxes.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting excavation and damage to property below the surface of the ground.

1.3 **Automobile Liability Insurance,** covering all owned, non owned and hired vehicles with a minimum combined single limit for Bodily Injury and Property Damage of $1,000,000 per occurrence and in the aggregate. ~~This insurance will include contractual liability insuring the indemnification provisions contained in this contract but excluding coverage for taxes.~~ RCE 6/13/94

1.4 ~~**Aircraft Liability Insurance,** If any operations require the use of aircraft, including helicopters, contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than $5,000,000 for bodily injury and property damage (including, passenger) liability.~~ RCE 6/13/94

1.5 ~~**Hull and Machinery Insurance,** covering vessels or barges owned or bareboat chartered by Contractor and used by contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include Collision Liability Insurance with limits no less than $5,000,000.~~ RCE 6/13/94

1.6 ~~**Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement The limits of liability of such insurance shall not be less than five million dollars ($5,000,00) per occurrence. Contractor may cover its' obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.~~ RCE 6/13/94

1.7 **Railroad Protective Liability** - If work is to be performed on or near any railroad property, and protection is not afforded under 1.2.1 above, Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of $2,000,000 per occurrence, $6,000,000 aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the easement premises by Contractor.

1.8 The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or materials change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, and 1.6 hereof shall name Company as an additional insured with respect to operations performed under the **agreement**, ~~and shall be primary to and not in excess of or contributory with any other insurance available to Company~~.. RCE 6/13/94

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverage's and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its general liability insurers, waives any right of subrogation that such insurers may have against Contractor arising out of this **agreement**.

4.2 ~~The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against the Company and an assignment of statutory lien, if applicable.~~ RCE 6/13/94

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against the Company.

5.0 If the Work is performed on a footage, lump-sum or maximum cost basis, the cost of the above insurance shall be shall be ~~borne by Contractor~~. included in the price RCE 6/13/94

6.0 If work is performed on a cost plus fee basis or for change order work Company will reimburse Contractor fro the cost of such insurance up to the minimum limits prescribed in Section 1.0 above. Reimbursement of insurance costs under a cost plus fee contract and change order will be determined as follows:

6.1 Worker's Compensation Manual rates applied to field labor subject to Contractor's Experience Modification (not to exceed 1.00) applicable for entire contract period as identified in proposal and further subject to the premium discount schedule applicable in the state where the Work is to be performed.

6.2 Commercial General Liability rates To Be Identified In Contractor's Proposal applied to field labor only.

6.3 Automobile Liability Insurance borne by Contractor.

6.4 Aircraft Liability Insurance borne by Contractor.

6.5 Hull and Machinery Insurance borne by Contractor.

6.7 Railroad Protective Liability Insurance borne by Contractor.

7.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify an in any way any other obligations assumed by the Contractor under the **agreement**. ~~Contractor shall be held accountable for all insurance coverage's, including those of sub-contractors~~. Company shall not be under any duty to advise Contractor in the event that Contractor's Insurance is not in compliance with this **agreement**. RCE 6/13/94

MARSH

CERTIFICATE OF INSURANCE

CERTIFICATE NUMBER: CHI-001501082-03

PRODUCER

Marsh USA Inc.
333 South 7th Street, Suite 1600
612-692-7400
Minneapolis, MN 55402-2400

069725-CAS-GAWXP-

INSURED

Bay West, INC.
Attn: Contract Admin.
5 Empire Drive
St. Paul, MN 55103

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES DESCRIBED HEREIN.

COMPANIES AFFORDING COVERAGE

COMPANY A: ZURICH INSURANCE COMPANY
COMPANY B: STEADFAST INSURANCE CO.
COMPANY C:
COMPANY D:

COVERAGES This certificate supersedes and replaces any previously issued certificate for the policy period noted below. 10

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE DESCRIBED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY	GLC5975469-03	07/01/06	07/01/07		
	X COMMERCIAL GENERAL LIABILITY				GENERAL AGGREGATE	$ 2,000,000
	X CLAIMS MADE ☐ OCCUR	Contractual Liability			PRODUCTS - COMP/OP AGG	$ 2,000,000
	OWNER'S & CONTRACTOR'S PROT				PERSONAL & ADV INJURY	$ 1,000,000
		Retro Date:			EACH OCCURRENCE	$ 1,000,000
		5/1/1990			FIRE DAMAGE (Any one fire)	$ 100,000
					MED EXP (Any one person)	$ 5,000
A	AUTOMOBILE LIABILITY	BAP5975476-03	07/01/06	07/01/07	COMBINED SINGLE LIMIT	$ 1,000,000
	X ANY AUTO				BODILY INJURY (Per person)	$
	ALL OWNED AUTOS				BODILY INJURY (Per accident)	$
	SCHEDULED AUTOS				PROPERTY DAMAGE	$
	HIRED AUTOS					
	NON-OWNED AUTOS					
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
	ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	$
					AGGREGATE	$
B	EXCESS LIABILITY	SEC5975477-03	07/01/06	07/01/07	EACH OCCURRENCE	$ 4,000,000
	X UMBRELLA FORM				AGGREGATE	$ 4,000,000
	OTHER THAN UMBRELLA FORM					$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	WC9375443-03	07/01/06	07/01/07	X WC STATUTORY LIMITS / OTHER	
	THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: X INCL ☐ EXCL				EL EACH ACCIDENT	$ 1,000,000
					EL DISEASE-POLICY LIMIT	$ 1,000,000
					EL DISEASE-EACH EMPLOYEE	$ 1,000,000
B	OTHER Contractors Professional and Pollution	PEC5975478-03 Retro Date: 5/15/1990	07/01/06	07/01/07	$1,000,000 Per Claim $1,000,000 Aggregate	

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

FLINT HILLS RESOURCES, LP, KOCH PIPELINE COMPANY, L.P., MINNESOTA PIPELINE COMPANY IS ADDITIONAL INSURED FOR GENERAL LIABILITY AND INSURANCE IS PRIMARY AND NON-CONTRIBUTORY AS REQUIRED BY WRITTEN CONTRACT - FORM CG20 33 10 01 ATTACHED. AUTOMOBILE POLICY INCLUDES CONTRACTUAL LIABILITY. WAIVER OF SUBROGATION IS ISSUED IN FAVOR OF THE CERTIFICATE HOLDERS UNDER WORKERS' COMPENSATION AS REQUIRED BY WRITTEN CONTRACT. ESPLOSION, COLLAPSE AND UNDERGROUND HAZARDS

CERTIFICATE HOLDER

FLINT HILLS RESOURCES, LP / KOCH
PIPELINE L.P. / MN PIPELINE CO.
ATTN: BECCI BIAGINI
PO BOX 2256
WICHITA, KS 67211

CANCELLATION

SHOULD ANY OF THE POLICIES DESCRIBED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.

MARSH USA INC.
BY: Jan D. Sutton

MM1(3/02)

VALID AS OF: 07/18/06

ADDITIONAL INFORMATION

DATE (MM/DD/YY)
CHI-001501082-03 07/18/06

PRODUCER

Marsh USA Inc.
333 South 7th Street, Suite 1600
612-692-7400
Minneapolis, MN 55402-2400

069725-CAS-GAWXP-

INSURED

Bay West, INC.
Attn: Contract Admin.
5 Empire Drive
St. Paul, MN 55103

COMPANIES AFFORDING COVERAGE

COMPANY
E

COMPANY
F

COMPANY
G

COMPANY
H

TEXT

CONTINUED FROM DESCRIPTION SECTION:

COVERAGE HAS NOT BEEN EXCLUDED FROM THE GENERAL LIABILITY POLICY. UMBRELLA POLICY IS EXCESS OVER GENERAL LIABILITY AND AUTOMOBILE LIABILITY.

CERTIFICATE HOLDER

FLINT HILLS RESOURCES, LP / KOCH
PIPELINE L.P. / MN PIPELINE CO.
ATTN: BECCI BIAGINI
PO BOX 2256
WICHITA, KS 67211

MARSH USA INC. BY
Jan D. Sutton

ISO | Commercial General Liability Forms | 10/01/01

COMMERCIAL GENERAL LIABILITY
CG 20 33 10 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – AUTOMATIC STATUS WHEN REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Section II – Who Is An Insured is amended to include as an insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability arising out of your ongoing operations performed for that insured. A person's or organization's status as an insured under this endorsement ends when your operations for that insured are completed.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

2. Exclusions

This insurance does not apply to:

a. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

(1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and

(2) Supervisory, inspection, architectural or engineering activities.

b. "Bodily injury" or "property damage" occurring after:

(1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

(2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

CG 20 33 10 01

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CANNON FALLS, MN SERVICE CENTER **24-Hr. #** **507.263.0200**
211 Holiday Ave **24-Hr. #** **800.645.8265**
Cannon Falls, MN 55009 **Fax #** **507.263.0252**

Michael J Christensen, General Manager EPA / Federal ID #: N/A

Personnel Authorized to release equipment / materials / manpower, etc

Michael Christensen
Joseph Wilcox
Jared Nerison

40-Hour OSHA Trained Personnel

Foreman	3
Field Technician	9
Equipment Operator	3

Equipment List **Item Description / Manufacturer**	**Location**	**Capacity / Size / Key Features**	**# of Units**	**A**	**T**	**P**	**D**
(1) Vessels & Marine Support Equipment							
Power Workboat, Alweld	Cannon Falls	21',115 HP, AWLCO525H708, V328	1	Y	Y	N	N
Power Workboat, Alweld	Cannon Falls	17', 25 HP, AWLCO525H708, V321	1	Y	Y	N	N
Workboat, SmokerCraft	Cannon Falls	14', None, V400	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Crew Cab Pickup	Cannon Falls	F250/Equivalent 8956, 8957, 8792, 8533	4	Y	Y	N	N
Rack Truck	Cannon Falls	F350/8,000 lb, U6890	1	Y	Y	N	N
Guzzler	Cannon Falls	3,000 gallon Straight, 4256, JDS5053	2	Y	Y	N	N
Cusco	Cannon Falls	3,000 gallon Straight, 7910771	1	Y	Y	N	N
Roll off Truck	Cannon Falls	Single Straight Frame, 4205, L1702	2	Y	Y	N	N
Hydrovac	Sawyer, ND	3000 gallon, US4628	1	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Cold water pressure washer	Cannon Falls	3800 psi	2	Y	Y	N	N
Hot water pressure washer	Cannon Falls	4000 psi CH544	3	Y	Y	N	N
Skid Mount/ With Pressure Washer	Cannon Falls	500 gallons, Not Assigned yet	1	Y	Y	N	N
Double Diaphram Pump	Cannon Falls	2"	2	Y	Y	N	N
Double Diaphram Pump	Cannon Falls	4"	2	Y	Y	N	N
(4) Oil Spill Containment Booms							
Oil Containment Boom	Cannon Falls	18",	1900	Y	Y	N	Y
(5) Environmental Monitoring Equipment							
5-Gas Meter	Cannon Falls	LEL/02/CO/H2S/PID Sirius	3	Y	Y	N	N
Lumex	Cannon Falls	RA-915	1	Y	Y	N	N
(6) Recovery Equipment							
Drum Skimmers	Cannon Falls		2	Y	Y	N	Y
(7) Beach or Earth Cleaning and Excavating Equipment							
Skid Loader	Cannon Falls	John Deere 320	1	Y	Y	N	N
10-12 Yd Dump Truck	Cannon Falls	International 7500	1	Y	Y	N	N
(8) Generators / Compressors / Light Towers							
Generator	Cannon Falls	4000 Watt	3	Y	Y	N	N
Compressor	Cannon Falls	185 CFM Pull Behind	1	Y	Y	N	N
Compressor	Cannon Falls	95 CFM	2	Y	Y	N	N
(9) Health and Safety Equipment							
SCBA	Cannon Falls	2216 PSI	4	Y	Y	N	N
SAR 4 Way Manifold	Cannon Falls		1	Y	Y	N	N
SAR Regulators	Cannon Falls		1	Y	Y	N	N
SAR w/5 minute egress	Cannon Falls		2	Y	Y	N	N
Air Line	Cannon Falls	Breathing Air	200'	Y	Y	N	N
APR Full Face	Cannon Falls	Stock	8	Y	Y	N	N

Tri Pod/Winch	Cannon Falls	75' Cable	1	Y	Y	N	N
Equipment List Cont. **Item Description / Manufacturer**	**Location**	**Capacity / Size / Key Features**	**# of Units**	**A**	**T**	**P**	**D**
(10) Trailers							
ER Trailers	Cannon Falls	14' Enclosed Spill Trailer, CH634, CH552, CH595	3	Y	Y	N	N
Boom Trailer	Cannon Falls	16' Open	1	Y	Y	N	Y
Hotsy Trailer	Cannon Falls	12' Enclosed	1	Y	Y	N	N
(11) Miscellaneous							
Vacuum Hose	Cannon Falls	2" chemical vacuum hose	350	Y	Y	N	N
Vacuum Hose	Cannon Falls	2" Oil vacuum hose	400	Y	Y	N	N
Vacuum Hose	Cannon Falls	3" chemical vacuum hose	150	Y	Y	N	N
Vacuum Hose	Cannon Falls	4" chemical vacuum hose	350	Y	Y	N	N
Vacuum Hose	Cannon Falls	4" Oil vacuum hose	500	Y	Y	N	N
Vacuum Hose	Cannon Falls	6" Oil vacuum hose	450	Y	Y	N	N
Floor Scubbing Attachment	Cannon Falls	Hydro attachment for the Pressure Washer	1	Y	Y	N	N
Air Mover	Cannon Falls	3,000 gallon Straight	1	Delete tem			
Vacuum Semi	Cannon Falls	5,000 gallon Tractor Trailer 1150/363	1	Delete tem			
Emergency Response Subcontractors							

Water Operations and Equipment Deployment Training
Clean Harbors Environmental Services

Course Summary: Water responders encounter multifaceted challenges necessitating training focusing on boating safety, navigational rules and regulations and equipment deployment and behaviors. This course including the resulting drills and exercises is designed to familiarize the responder in the safest and most effective tactics for a waterborne incident.

Course Structure: Clean Harbors personnel were divided in two groups of 7-9 students to allow for optimal student to instructor ratio. Future sessions will mix participants within the groups to enhance crew interoperability. Geographical locations will be swapped to assure area familiarity of crew.

Course Outline:

1. Boat Training
    a. Basics
        i. Terminology
        ii. Safety
        iii. Emergency procedures
        iv. Line handling
        v. Anchoring
        vi. Incident Command System
    b. Rules of the road
        i. Navigation
        ii. Sounds and lights
        iii. Rules
    c. Boat handling
        i. Boom towing
        ii. Basic maneuvers
2. Spill Strategies
    a. Boom sets
        i. Containment
        ii. Exclusion

July 29, 2011

RE: Swift Water Training

Clean Harbors response staff met at the Cannon River to practice containment boom deployment in fast water situations. The current speed was in excess of 4 Kt/hr with depths in this stretch of the river < 6' deep with numerous bars and shoals. Equipment utilized was 16' flat bottomed boat with a small outboard engine, 100' of 12" skirt boom and associated anchoring systems.

Lessons learned:

- Angles need to be kept very shallow to accomplish potential product deflection without entrainment or boom bellying.
- 12" skirt boom is too deep to effectively work with these current velocities.
- Safety concerns include lines under considerable load and boat handling in shallow, swift current are challenging.
- Upstream static line with pulleys is helpful with the deployment.
- Dead-fall snags in the river should not be in the vicinity or removed from the initial deployment site.

Recommendations:

- Try boom with less skirt.
- stay cognizant of heat stress of responders.

Safety Training and Response Strategies; 10121 Goodrich Circle; Bloomington, MN 55437
(952) 960-1460

Attendees:
Rob Dort, Brian Foster, Andrew Gillquist, Josh Gillquist and Jared Nerison

Training Results and Suggested Future Actions:

Students participated in shore-side training with boats being launched at both venues for hands on training. All students at the end of their respective sessions showed increased familiarity and confidence on the boats and equipment.

Lessons learned at each session included comments on all participants to spend time at the helm and additional boom to be included in the on-the-water exercises. Radio communications and future Incident Command System tabletops are being scheduled for the best next steps to preparedness. Minor necessary repairs on watercraft were noted with follow-up efforts showing successful completion of repairs.

References:

Boat Crew and Seamanship Manual; United States Coast Guard; COMDTINST M16114.5C September 2003.

Navigation Rules, International and Inland; United States Coast Guard; COMDINST M16672.2D; March, 1999.

Inland Oil Spill Manual; United States Environmental Protection Agency, Office of Solid Waste and Emergency Response; 165.18; April, 2002.

Sincerely,

Matt Stokes

Director
Safety Training and Response Strategies

Safety Training and Response Strategies

Internal Exercise Documentation Form

Emergency Procedures Exercise

1. Date performed: June 15, 2011

2. Exercise or actual response ? Exercise
If an exercise, announced or unannounced? Announced

3. Location: Mississippi River, Red Wing

4. Vessel/Barge/Facility name: NA

5. Time started: 0930
Time completed: 1430

6. Sections of Vessel/Barge/Facility emergency procedures exercised (i.e., response to collision, response to oil spill on deck, response to vessel fire, etc.)? Equipment deployment.

7. Description of exercise: Water safety training was performed prior to the deployment of equipment. PPE needs were discussed including safety considerations during an on-water deployment. VHF communications were practiced along with boat handling skills.

8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:
2) Staff mobilization, 4) Source control, 6) containment, 11) Transportation, 13) Equipment maintenance and support.

9. Attach a description of lesson(s) learned, procedures and schedule for implementation, and person(s) responsible for follow up of corrective measures.

Matt Stokes
Certifying Signature

SCOPE OF WORK AGREEMENT
(Continuing Services)

This Scope of Work Agreement ("Agreement") is made on June 14, 2010 between **Koch Pipeline Company, L.P.** (hereinafter called "Company") having a place of business at **4111 East 37th Street North, Wichita, Kansas 67220**; and **Clean Harbors Environmental Services, Inc.** (hereinafter called "Contractor"), having a place of business at **42 Longwater Drive PO Box 9149 Norwell, MA 02061**

WHEREAS, Company desires to have certain services (as further described herein) performed by Contractor, such services being described in general as follows:

Emergency Waste Removal Services

NOW THEREFORE, the parties state and agree as follows:

1. The services to be performed hereunder during the term of this Agreement (the "Services") are as more fully described on Exhibit A, which Exhibit is attached hereto and made a part of this Agreement.

2. Company and Contractor hereby agree that Contractor shall perform the Services pursuant to the terms and conditions contained in the following documents and any exhibits thereto: (i.) this Agreement and (ii.) the Service and Waste Agreement ("SWA") by and between Company et al. and Contractor dated November 29, 2000 collectively referred to hereinafter as the "Agreement Documents"). The compensation to be paid by Company to Contractor in exchange for the Services is as described on Exhibit B, which Exhibit is attached hereto and made a part of this Agreement. Such amounts shall be inclusive of all sales taxes and other applicable taxes.

3. The term of this Agreement shall be as follows (Company and Contractor recognize that it is possible that Contractor might provide services under the above-referenced SWA other than the Services described in this Agreement; the termination of this Agreement does not necessarily mean that the term of the SWA is also being terminated): Contractor shall begin providing the Services on May 26, 2010. Either party may terminate this Agreement at any time upon 48 hours or two (2) days advance written notice to the other party. This Agreement, however, may be immediately terminated by Company upon written notice to Contractor if at any time Contractor becomes unable to perform the Services for a period that, in Company's opinion, is of an unreasonably long duration, or if, in Company's opinion, Contractor becomes incapable of satisfactorily performing the Services. Any such termination of this Agreement shall not operate to relieve either party of its respective liabilities arising from work performed hereunder prior to such termination.

4. The parties agree that there are no agreements or promises between the parties relating to the subject matter hereof not fully contained in this Agreement or the above-described Service and Waste Agreement, and that such documents represent the entire understanding between the parties with respect to the subject matter hereof.

SO AGREED, EXECUTED AS OF THE DATE FIRST ABOVE WRITTEN.

"COMPANY" (as defined above)
Koch Pipeline Company, L.P.

By: David R Stecher
Printed Name: David R. Stecher
Title: VP Operations
Date: 7/23/10

"CONTRACTOR" (as defined above)
Clean Harbors Environmental Services, Inc.

By: Danny L. Stubbs
Printed Name: Danny L. Stubbs
Title: VP
Date: 6/16/10

EXHIBIT A
DESCRIPTION OF SERVICES

The parties hereto acknowledge that under State and Federal Law, Contractor is accorded certain protections when it responds to spills and discharges of oil or other hazardous materials ("Responder Immunity"). In a response, rapid and decisive action is necessary to contain a spill. In almost all actions, responders must initiate a response with no prior notice based on very limited information. Without Responder Immunity, the enormous financial and liability exposures associated with emergency response would make the business of responding to spills impracticable. Accordingly, the parties execute this Scope of Work with the intent of preserving Contractor's' statutorily conferred protections to the greatest extent possible.

1. SCOPE OF EMERGENCY RESPONSE SERVICES

1.1 Contractor agrees to provide Emergency Response Services ("Services") for the Company's accidental discharges of oil or other hazardous substances. Services may include, but are not limited to the following: Containment, recovery, repackaging and removal of materials; Site evaluation, decontamination and restoration; Transportation, storage, treatment or disposal of wastes; Technical services, including sampling, laboratory analysis, and other related services; Standby of personnel and equipment in anticipation of imminent activation; and Training and mock spill drill deployments.

EXHIBIT B
FEES

1. COMPENSATION

1.1 The payment terms set forth herein are contingent upon the approval of Contractor's Credit Department. In the event of a change in Company's financial condition, Contractor reserves the right to alter, change, or modify payment terms, and to immediately stop work. The failure of Contractor to exercise its rights under this article at any time shall not constitute a waiver of Contractor's continuing right to do so.

1.2 Company agrees to pay Contractor for Services in accordance with Contractor's Rate Schedule for emergency response work ("Rates") in effect at the time Services are rendered. Company hereby assigns to Contractor all rights to any insurance payments that Company may be entitled to receive to pay for the Services provided under this Agreement and hereby authorizes its insurance company or agent to pay Contractor directly. Company's obligation to pay amounts due pursuant to this Agreement shall not be conditioned upon or limited by the types, amounts or availability of insurance coverage.

1.3 Contractor will present its first invoice to Company as soon as possible following commencement of Services provided hereunder, and may issue subsequent invoices every five (5) days thereafter. Company agrees to pay the full amount of each invoice amount within fifteen (15) business days of the date of receipt of said invoice by Company's Representative.

1.4 Company agrees that interest shall accrue and will be paid to Contractor on any unpaid balance of any invoice after fifteen (15) business days of receipt of invoice by Company at the rate of one and one half percent (1.5%) per month or the maximum amount allowed by law.

1.5 In the event that legal or other action is required to collect unpaid balances of invoices due Contractor, Company agrees to pay all costs of collection, litigation or settlement incurred by Contractor, including reasonable attorneys fees. "Legal or other action" as used above shall include bankruptcy and insolvency proceedings.

1.6 In the event that work is suspended or terminated for any reason prior to the completion of the Services, Company agrees to pay for labor, equipment, materials, disposal and other costs incurred by Contractor at the Rates and for reasonable demobilization costs.

1.7 Company agrees to pay Contractor in accordance with the Rates for any litigation support or testimony provided by Contractor in connection with, or arising out of, the work performed by Contractor hereunder.

HERITAGE
ENVIRONMENTAL SERVICES

HERITAGE ENVIRONMENTAL SERVICES, LLC
15330 Canal Bank Road
Lemont, Illinois 60439
Phone: 630/783-5410
Fax: 630/739-9491

February 15, 2011

To Whom it May Concern:

REFERENCE: OSRO Contractor

Heritage Environmental Services, LLC as part of its status as an OSRO Contractor maintains equipment , materials and supplies for the purposes of providing support to its OPA Customers and conducts drills, exercises, and reacts to actual spill events in which this equipment and personnel is utilized or its use is simulated in accordance with the USCG guidance (PREP).

A Table F-3 summarizes these drills, exercises, and actual releases to which Heritage personnel and office locations have participated including the deployment of boom and oil recovery devices as herby certified by the undersigned. This documentation is provided to all of Heritage's active OPA Customers on an annual basis.

All Heritage personnel that participate in the response to emergency events are trained and participate in a medical monitoring program in accordance with 29 CFR 1910.120 (HAZWOPER). This training and medical monitoring is tracked and documented by Heritage on an annual basis.

I the undersigned certify that the above is true and accurate.

Robert J. Millman

Senior Project Manager

Heritage Environmental Services, LLC

HERITAGE ENVIRONMENTAL SERVICES, LLC
15330 Canal Bank Road
Lemont, Illinois 60439
Phone: 630/783-5410
Fax: 630/739-9491

July 27, 2011

To Whom it May Concern:

REFERENCE: OSRO Contractor

Heritage Environmental Services, LLC as part of its status as an OSRO Contractor maintains equipment , materials and supplies for the purposes of providing support to its OPA Customers and conducts drills, exercises, and reacts to actual spill events in which this equipment is utilized and its personnel participate or its use is simulated in accordance with the USCG guidance.

The attached Table F-3 summarizes these drills, exercises, and actual releases to which Heritage personnel and office locations have participated including the deployment of boom and oil recovery devices as herby certified by the undersigned.

Robert J. Millman
Project Manager
Heritage Environmental Services, LLC

Attachements:
Exhibit F-3

F-3
HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION
OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
	9/23/2011	Elk Grove, Ill	Lemont	Jet Fuel	Simulated 13,000 bbls	NA	Table Top Drill Tank Leak	Table Top	4 Hours	Des Plaines River	Incorporate ER contractors phone number into Facility personnel mobile phones. Have new FD Participate in next drill.	Confidential pipeline Terminal
	5/2011	Forestview, Illinois	Lemont	Diesel	Simulated 12..000bbls	NA	Table Top Drill Tank Leak	Table Top	4 Hours	Sanitary Canal	Simplify ER Plan	pipeline Terminal
	9/28/2011	Mokena, IL	Lemont	Diesel	Simulated 50,000bbls	NA	Table Top Drill	Table Top	6 - hours	Creek to Des Plaines river	Better communications	Exxon-Mobil
	6/1/2011	Dubuque, Iowa	Lemont	Diesel	Simulated 2,100 gallons	NA	Table Top Drill	Table Top	4 Hours	Creek to Mississippi River	Evaluate the use of a plumbers plug to close off storm drain ibn the event os an actual release. Facility personnel well versed in response responsibilities.	Confidential
	9/2011	Chicago, Il	Lemont	Asphalt	2,000 gallons	NA	Drill	1000 feet of boom, Spill Tracker boat, 2500 gallon vacuum truck spill trailer	4 hours	Chicago sanitary canal	Personnel need to have cash to use City of Chicago boat launch. Use of Argo boat launch may be limited.	Heritage Asphalt
930205	Jan 11	Gary, IN	Lemont	Diesel	<50 galls	30 gallons	unknown	Sorbent pads/boom + vac Truck	2-3 weeks	Little Cal River	Icy conditions and rough collection areas	Confidential
930783	May 11	Des Plaines, IL	Lemont	Diesel	<200 Gallons	200 gallons	Leaking fuel tank	Pads/boom and soil removal	1 week	Land	Tight location. Hand digging	Confidential
931619	October 11	Downers Grove, IL	Lemont	Diesel	<100 Gallons	100 gallons	Rupture tank	Vac truck + sorbents	1 day	Storm Basin	Proper containment for basin	Confidential
931657	November 11	Schnieder, IN	Lemont	Jet Fuel	<20 gallons	15-20 gallons	Leaking valve on pipeline	Vac truck	1 day	Land	-	Confidential
928884	November 11	Mokena, IL	Lemont	Crude Oil	<100 Gallons	100 gallons	Leaking valve on pipeline	Vac truck + sorbents	3-4 days	Land	Managing hydro-x soils	Confidential Terminal
930339	2/9/2011	Northbrook, IL	Lemont	Diesel Fuel	20 Gallons	20 Gallons	Truck Fuel Tank	Vac Truck + Sorbents	1 Day	None		Confidential Terminal
930530	3/22/2011	Gibson City, IL	Lemont	Crude Oil	<50 Gallons	50 Gallons	Pipeline	Sorbents – excavator + roll off box	2 days	None		Confidential Pipeline

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F-3
HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION
OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
930697	4/21/2011	Chicago, IL	Lemont	Hydraulic Oil	10 Gallons	10 Gallons	pump	Sorbents	1 Day	None		Confidential
930915	6/1/2011	Forest View, IL	Lemont	Vacuum Gas Oil	100 Gallons	100 Gallons	Tank	Sorbents, Bobcat, Roll Off Box	3 Days	None		Confidential Terminal
931102	7/14/2011	Beach Park, IL	Lemont	Diesel Fuel	5 Gallons	5 Gallons	Generator	Sorbents – Hand tools	1 Day	None	Proper Containment for Generator	Confidential
931124	7/19/2011	Elk Grove Village, IL	Lemont	Diesel Fuel	5 Gallons	5 Gallons	Truck	Sorbents – Hand tools	1 Day	None		Confidential Terminal
931671	11/7/2011	Lockport, IL	Lemont	Gasoline	15 Gallons	15 Gallons	Pipeline	Vacuum Truck- Sorbents- Roll Off Box	1 Day	None		Confidential Pipeline
930287	1-28-11	Indianapolis, in	Indianapolis	Raffene	500 gal	500gal	Rail tanker	Vac truck pressure washer Pads Hand tools drums	2 day	Drain ditch	Only can do so much in one day	Flint ink
930373	2-18-11	Indianapolis, IN	Indianapolis	FIRE FOAM	Entire system	all	Fire system	Drum vac Hand tools Pressure washer	1 day	Land	Foam will foam more when vaced	Eli Lilly
930507	3-17-11	Indianapolis, IN	Indianapolis	Mineral sprits	1200 gal	all	tank	Vac truck Pressure washer Hand tools	1 day	Land	Empty tank on regular schedule	Rolls Royce
930938	6-12-11	Indianapolis, IN	Indianapolis	Oil water	223 gal	All	Manhole	Vac truck Pressure washer Handtools	2 days	Land	Its good to clean manholes	AT&T
931893	12-22-11	Indianapolis, IN	Indianapolis	Hydraulic oil	20 gal	All	Belt truck	Drum vac pressure washer Oil dry Pads Hand tools	1 day	Land	Don't drag unit across ramp area	US airways
930170	1/4/11	Roxana, IL	St. Louis (Wood River, IL)	DEA	300-gal	300-gal	Underground leak	Vacuum Truck, Crew Cab	2 days	Land		ConocoPhillips
930171	1/5/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	500-gal	500-gal	Bad pump	Vacuum Truck, Pressure Washer, Crew Cab	4 days	Land		ConocoPhillips
930216	1/14/11	Roxana, IL	St. Louis (Wood River, IL)	Naptha	200-gal	200-gal	Overhead flange leak	Vacuum Trucks, Crew Cab	2 days	Land		ConocoPhillips
930220	1/14/11	Roxana, IL	St. Louis (Wood River, IL)	Sour water	400-gal	400-gal	Leaking overhead flange	Vacuum Trucks	2 days	Land		ConocoPhillips
930221	1/16/11	Roxana, IL	St. Louis (Wood River, IL)	Crude oil	10-gal	10-gal	Pump	Crew Cab, Hand Tools	1 day	Land		ConocoPhillips

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F-3
HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION
OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
930352	2/14/11	Roxana, IL	St. Louis (Wood River, IL)	Benzene	30-gal	30-gal	Leaking pipe	Vacuum Truck, Skid loader, Crew Cab, Hand Tools	3 days	Land		ConocoPhillips
930353	2/14/11	Roxana, IL	St. Louis (Wood River, IL)	Heavy oils	300-gal	300-gal	Leaking frac tank	Vacuum Truck, Crew Cab, Skid Vac	4 days	Land		ConocoPhillips
930368	2/17/11	Roxana, IL	St. Louis (Wood River, IL)	Sulphine	7-gal	7-gal	Instrument	Vacuum Trucks, Pressure Washer, Crew Cab	1 day	Land		ConocoPhillips
930409	2/26/11	Roxana, IL	St. Louis (Wood River, IL)	Acid	5000-gal	5000-gal	Leaking flange	Vacuum Trucks, Skid Steer, Crew Cabs, Hand Tools	16 days	Rock		ConocoPhillips
930431	3/3/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/oil	75-gal	75-gal	Pipe	Vacuum Trucks	3 days	Pond		ConocoPhillips
930437	3/3/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/oil	100-gal	100-gal	Leaking underground pipe	HydroX Truck, Crew Cab, Vacuum Truck	13 days	Land		ConocoPhillips
930503	3/13/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	25-gal	25-gal	Asphalt	Crew Cab, Air Compressor, Jack Hammers	3 days	Barge		ConocoPhillips
930547	3/28/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/oil	5-gal	5-gal	Leaking valve	Crew Cab, Hand Tools	1 day	Land		ConocoPhillips
930581	4/1/11	St. Louis, MO	St. Louis (Wood River, IL)	Benzene	10-gal	10-gal	Tank column	Crew Cab, Drum Vac, SCBA, LEL/O2 Meters	2 days	Land		Kinder Morgan
930607	4/7/11	Roxana, IL	St. Louis (Wood River, IL)	Additive	25-gal	25-gal	Leaking line	Vacuum Truck	1 day	Land		Shell Oil Products
930606	4/7/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/oil	100-gal	100-gal	Pipe	Vacuum Truck, Skid Loader, Crew Cab	1 day	Land		ConocoPhillips
930672	4/19/11	Meredosia, IL	St. Louis (Wood River, IL)	Thick oil (Spill Drill)	30-gal	30-gal	Sewer overflow	300' Hard Boom, OPA Boat	1 day	Mississippi River		Meredosia Terminal, Inc
930681	4/21/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	25-gal	25-gal	Leaking pipe	Crew Cab, Skid Loader	1 day	Land		ConocoPhillips
930702	4/24/11	Roxana, IL	St. Louis (Wood River, IL)	DEA	10-gal	10-gal	Sump overflow	Crew Cab, Skid Steer, Hand Tools	1 day	Land		ConocoPhillips
930708	4/26/11	Scott City, IL	St. Louis (Wood River, IL)	Gas	Stand By	Stand By	Pig launching & line drain up of unleaded gas	Crew Cab, Jon Boat, Hard Boom	7 days	Mississippi River		Enterprise Products
930713	4/27/11	Cahokia, IL	St. Louis (Wood River, IL)	Ethanol	10 bbl	10 bbl	Pipeline	Vacuum Trucks, Rolloff Boxes	13 days	Land		Phillips Pipeline

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F-3

HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION

OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
930830	5/22/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	75-gal	75-gal	Overfill railcar	Crew Cab, Skid Steer	2 days	Land		ConocoPhillips
930859	5/26/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	1 bbl	1 bbl	SWTF manifold	Vacuum Trucks, Crew Cab	2 days	Land		ConocoPhillips
930870	5/29/11	Roxana, IL	St. Louis (Wood River, IL)	Oily rock	20-gal	20-gal	A149 tank	Crew Cab, Hand Tools, Skid Steer	2 days	Land		ConocoPhillips
930871	5/30/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	1 barrel	1 barrel	Overfill railcar	Crew Cab, Hand Tools	1 day	Land		ConocoPhillips
930879	5/31/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	100-gal	100-gal	Line break	Vacuum Trucks,	6 days	Land		ConocoPhillips
930903	6/4/11	St. Louis, MO	St. Louis (Wood River, IL)	Water	300-gal	300-gal	Fire System	Vacuum Truck, Crew Cab	1 day	N/A		Covidien
930960	6/16/11	Roxana, IL	St. Louis (Wood River, IL)	Oils	1 bbl	1 bbl	DU-2	Crew Cab, Skid Steer	1 day	Land		ConocoPhillips
930979	6/21/11	Roxana, IL	St. Louis (Wood River, IL)	Sour water	3000-gal	3000-gal	Process line	Vacuum Trucks, Sewer Truck	3 days	Land		ConocoPhillips
931030	6/28/11	Roxana, IL	St. Louis (Wood River, IL)	Sour water	150-gal	150-gal	Overhead pipeline	Vacuum Truck	2 days	Land		ConocoPhillips
931098	7/14/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	30-gal	30-gal	Gasket leak	Crew Cab, Hand Tools, Pressure Washer	2 days	Land		Shell Oil Products
931236	8/16/11	Roxana, IL	St. Louis (Wood River, IL)	Brine spill	50 gal	50 gal	Valve	Crew Cab, Skid Steer, Hand Tools	2 days	Land		ConocoPhillips
931235	8/16/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/Oil	10-gal	10-gal	Leaking over head pipe	Vacuum Truck	1 day	Land		ConocoPhillips
931220	8/12/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	20-gal	20-gal	Sump overload	Vacuum Trucks, Sewer Truck, Crew Cab	7 days	Ditch to SmithLake		ConocoPhillips
931282	8/25/11	Roxana, IL	St. Louis (Wood River, IL)	Gas/Oil	5-gal	5-gal	Leaking pump seal	Vacuum Truck, Crew Cab, Hand Tools	1 day	Land		ConocoPhillips
931304	8/30/11	Roxana, IL	St. Louis (Wood River, IL)	Polymer	100-gal	100-gal	Leaking Pipe	Vacuum Truck, Crew Cab, Skid Vac	2 days	Concrete Containment		Shell Oil Products
931329	9/6/11	Roxana, IL	St. Louis (Wood River, IL)	Hydraulic oil	3-gal	3-gal	Truck	Crew Cab, Hand Tools	1 day	Asphalt		ConocoPhillips
931336	9/7/11	Roxana, IL	St. Louis (Wood River, IL)	Sulfaline	20-gal	20-gal	Overload Concrete	Vacuum Truck, Crew Cab,Hand Tools	4 days	Concrete		ConocoPhillips

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F-3

HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION

OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
931338	9/7/11	Roxana, IL	St. Louis (wood River, IL)	Asphalt	50-gal	50-gal	Hatch left open on railcar	Crew Cab, Pressure Washer, Vacuum Truck	9 days	Land		ConocoPhillips
931339	9/8/11	Roxana, IL	St. Louis (Wood River, IL)	Additive	100-gal	100-gal	Leaking pump	Vacuum Truck, Crew Cab, Hand Tools	1 day	Roof		Shell Oil products
931377	9/14/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	75-gal	75-gal	Leaking pump	Crew Cab, Pressure Washer	1 day	Concrete containment		ConocoPhillips
931395	9/17/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	300-gal	300-gal	Pipe	Vacuum Truck, Sewer Truck, Crew Cab,	2 days	Land		ConocoPhillips
Spill Drill	9/20/11	Roxana, IL	St. Louis (Wood River, IL)	Spill Drill	Spill Drill	Spill Drill	Spill Drill	Boat, pneumatic skimmer, 1000-feet of 24" boom and boom vane	1 Day	Mississippi River		ConocoPhillips
931413	9/21/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	150-gal	150-gal	Heat Exchanger	Vacuum Truck, Crew Cab, Pressure Washer	3 days	Land		ConocoPhillips
931489	10/4/11	Roxana, IL	St. Louis (Wood River, IL)	Additive	50-gal	50-gal	Vent left open on tanker	Crew Cab, Hand Tools	1 day	Roadway		Shell Oil Products
931503	10/6/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	1600-gal	1600-gal	Tanker over turned	Vacuum Truck, Crew Cab, Hand Tools, Absorbent Boom, Pressure Washer	6 days	Roadway and ditch		Shell Oil Products
931520	10/7/11	Roxana, IL	St. Louis (Wood River, IL)	Acid	100-gal	100-gal	Bleeder valve left open	Vacuum Truck	2 days	Rock		ConocoPhillips
931614	10/27/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	150-gal	150-gal	Pipe running across pond broke	Vacuum Trucks	1 day	Ditch		ConocoPhillips
931673	11/8/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	70-gal	70-gal	Flange leak into source	Vacuum Trucks	1 day	Coker source		ConocoPhillips
931682	11/8/11	Roxana, IL	St. Louis (Wood River, IL)	Oil	20-gal	20-gal	Oil seeped through ground	Vacuum Truck	1 day	Land		ConocoPhillips
931729	11/15/11	Roxana, IL	St. Louis (Wood River, IL)	Coker FEED MATERIAL	20BARR ELLS	20 barrels	Drum leak	Vacuum Truck, Crew Cabs, Pressure Washer	8 days	Land		ConocoPhillips
931767	11/28/11	Roxana, IL	St. Louis (Wood River, IL)	Hydro water carbs	60-gal	60-gal	Overflow	Vacuum Truck, Crew Cab	1 day	Land		ConocoPhillips
931810	12/5/11	Roxana, IL	St. Louis (Wood River, IL)	Sour water	10 barrels	10barrels	Leaking pipe	Vacuum Truck,Crew Cab, Skid Steer	2 days	Land		ConocoPhillips

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F-3
HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION
OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
931844	12/12/11	Roxana, IL	St. Louis (Wood River, IL)	Asphalt	2 barrels	2 barrels	Pipe line break	Vacuum Truck, Crew Cab, Hand Tools	2 days	Ditch		ConocoPhillips
931902	12/27/11	Roxana, IL	St. Louis (Wood River, IL)	Black Oil	100-gal	100-gal	Pump	Vacuum Truck	1 day	Rocks		ConocoPhillips
912384	3/25/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	4/19/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	4/20/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	5/9/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	5/18/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	6/15/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	7/28/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	9/6/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	9/30/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	10/3/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	10/19/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	10/20/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	10/24/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	11/2/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF

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F-3

HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION

OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
912384	11/3/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	11/14/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
912384	11/29/11	Hannibal, MO	St. Louis (Wood River, IL)	Stand By	Stand By	Stand By	Barge Unloading	OPA Boat, Crew Cab, 500' Hard Boom	1 day	Mississippi River		BASF
929026	2010	Venice and Fourchon, LA	St. Louis (Wood River, IL)	Crude Oil	>100,000 bbls	N/A	Continuing Remediation of Oil Platform explosion-Event Horizon	Rolloff Boxes, Frac Tanks, 130 bbl tankers, Straight Rolloff Trucks	4 months	Gulf of Mexico/ Intercoastal	Proper management and coordination of transportation and disposal elements are critical to ensuring logistics of this phase of remediation	BP
	9/14/11	Ohio River	Louisville	DRILL	NA	NA	Barge Transfer	1-PM; 3-FT's; Boat w/Motor; 500' of Boom	1 Day	Ohio River		
	9/24/11	Ohio River	Louisville	DUCKY DERBY	NA	NA	Charity Event	1-FS; 4-FT's; Boat w/Motor 300' of Boom	1 Day	Ohio River		
	11/22/11	Ohio River	Louisville	Table-Top	NA	NA	Barge Transfer	1-PM	NA	Ohio River		Lykins Oil
924634	January 19	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
930273	January 24-25	Gary, IN	Gary, IN	Clean Tar Spill from Permanent Boom	NA	NA	Permanent Boom Locations / #14 Blast Furnace	John Boat, Vacuum Truck and 80' sorbent boom	2 day	Channel / River		US Steel – Gary Works
924634	March 26	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	May 02	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	June 03	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	July 08	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works

PHMSA00127762

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F-3
HERITAGE ENVIRONMENTAL SERVICES – 2011 OSRO PREP DOCUMENTATION
OIL SPILL PROJECT EXPERIENCE

Job #	Date	Location	Service Center	Type Oil	Amount Spilled	Amount Recovered	Source	Type Equipment Used	Duration of Cleanup	Marine Environment	Lessons Learned	Client/Name
924634	October 23	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	October 26	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	November 08	Gary, IN	Gary, IN	Clean Debris from Permanent Boom	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	1 day	Channel / River		US Steel – Gary Works
924634	December 30-31	Gary, IN	Gary, IN	Clean Debris from Grand Cal Headwaters	NA	NA	Permanent Boom Locations	John Boat – Spill Boat and 150' boom	2 day	Channel / River		US Steel – Gary Works

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EXHIBIT F-1 HERITAGE ENVIRONMENTAL SERVICES, LLC. OPA DEDICATED EQUIPMENT

ITEM	CHICAGO		INDIANAPOLIS	LOUISVILLE	ST. LOUIS	TOLEDO	KANSAS CITY	TULSA	MEMPHIS	NORFOLK, VA	TOTAL
	GARY IN	LEMONT									
CONTAINMENT BOOM											
10" 4" Float 6" Skirt			450'								450
18" 6" Float 12" Skirt	'	4,600 12,600*	1500'	700	3000'	1000	[6]			14,000*	9100 36600
21" 8" Float 13' Skirt					8000[5]				4000'[5]		12000
24" 8" Float 16" Skirt	700'				0						700
Subtotal	700'	17,200'	1950'	700	11,000	1,000	0'	0	4000'[5]	14,000	**58400**
SORBENTS 3//8" x 18" x 18" Pads 100/Bale	5	150	104	83	100	100	50	50			642 bales
8"x10' Boom 4/bale	5	150	65	59	55	55	55	55			509bales
5"X10 ft Boom 5/box		18									18 boxes
3/16"x 19" x 100' sweeps	0	100	50	71	50	60	50	50			431bales
Snares 30/Box	0	20	50	60	50	0	50	50			280 boxes
Snare Sweeps (50 ft.) box	0	150	50	67	50	50	50	50			467boxes
SKIMMERS Elastec Model 136 Drum Skimmer-w/HYD power pack	1-137 dbpd (air)	1-480 dbpd	1-137 dbpd	1-480dpd	1-480dbpd 1-137 dbpd (air)	1-480 dbpd	1-137 dbpd (air)	1-137 dbpd (air)		d 3-480 dbpd**	9 units=2,605d dbbls/day 1440 dbbls/d
SUBTOTAL											**4,444 dbpd**
Boom/sorbent 45' Equip. Trailers		2	1	1	1	1	1	1			6
WATERCRAFT	14' Jon Boat w/6 hp	2-24'pontoon w/200 hp 1-JBF Skimmer boat, 50Hp, 1-14' jon	1-10' jon	1-20' w/50 hp	1-24' w/twin 125hp 1-16' w/25 hp	1-24'pontoon w/150 hp 1-14' jon	1-16' W/40hp	1-14' jon		1-23' w/200 hp* 3/20' w/motors* 15-12'; 14'; 16'; jon w/motor	18 boats 19 boats*

2) Oil skimmer recovery capacity includes 20% operating efficiency factor. (dbph).
3) ( ) = exclusive contracted resource
* Identifiable Resource: subject to availability
4) Sorbent inventory subject to volume change without notice.
5) LOI with National Response Corporation "available by contract or other approved means."
5) Norfolk, VA resources owned by Parker System and IMS Inc.

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PHMSA00012764

Page 2 of 2 EXHIBIT F-1 OPA Dedicated Equipment

Oil Recovery Devices	Lemont	Gary	St. Louis	Indianapolis	Louisville	Toledo	Kansas City	Tulsa	Charlotte	Derated BBLS/Day Total
Vacuum Trucks(3)	**5**	**1**	**15**	**35**	**3**	**3**	**4**	**0**	**5**	**71**
HERITAGE R/E DBPD	239	38	568	0	150	113	0	0	0	1108
Heritage Transport (H.T.)	0	0	0	2140	0	0	263	0	321	2724
Subtotal	**319**	**38**	**568**	**2140**	**150**	**113**	**263**	**150**	**321**	**3982**
H.T. Rolloff Boxes	571 1430*	0 1430*	2860*	16057 2860*	1430*	143 2860*	2381 1430*	95 1430*	0	17165*
HERITAGE Tankers	119	0	0	8334	0	1421	584	0	0	10458
Fixed Storage	42	0	0	6138	0	0	921	0	1852	8953
Frac Tanks	4762**	4762*	9524*	3810 9524*	190 4762*	1036 9524*	4762*	4762*		5036 47346*
Portable Tanks	48 2500*	114 2500*	79 5000*	476 5000*	214 2500*	1115 5000*	393 2500*	79 2500*		2518 27,500*
Barges	145,130			0						145,130
Subtotal (BBLS)	**154,602**	**8,806**	**17,463**	**52,199**	**9,096**	**21,099**	**12,971**	**8,866**	**1852**	**286,844**
1910.120 Certified Field Personnel	28	9	53	44	12	14	5	3		171
Decon Trailers				1						1
Spill Trailers/Trucks	1		1	1	1	1	1	1		7
Pumps	17	4	26	11	14	9	4			85
Oil/water separators			1							1
Carbon Units			1	1		6				8
Plate & Frame Filter Presses			1	1						2
Utility Trucks	6	3	6	5	5	5	1	2		33
Mobile Laboratory				1						1
Drum Trucks	3	2	2	2	2	1	1			13
Bobcats	1	1	1	1	1	2	1	1		9
Trachoes/Loaders	1		1							2
Water Blaster	1		1	1	3					6
Pressure Washers	3	2	4	4	6	2	1	1		23
Wash Down Pumps	3	0	4	1	2	1	1	1		13
Lowboys			1		1					2
Air Compressors	2	2	3	2	2	2		1		14
Generators	1	1	2	2	1	3		1		11
LEL/0_2 Meters	6	3	5	9	5	3	2	2		35
OVA/PID Meters	0		1	1	2	2				6
Radios –Explosion Proff marine band	6	0	6	8	6					26

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EXHIBIT F-2
HERITAGE ENVIRONMENTAL SERVICES, INC.
SUMMARY
OPA OIL RECOVERY CAPABILITIES

Oil Recovery Devices	Chicago	St. Louis	Indianapolis	Louisville	Toledo	Kansas City	Tulsa	Charlotte	Norfolk	Memphis	Derated BBLS/Day Total
Vacuum Trucks											
HERITAGE R/E	267	568	0	150	113	38	0	0			1098
Heritage Transport	0	0	2140	0	0	263	0	321			2724
Oil Skimmers	617	617	137	480	480	137	137	0	1440		4.444
TOTAL Derated BBLS/DAY	**974**	**810**	**2,277**	**630**	**558**	**438**	**287**	**321**			**8,266**
On-Site Daily Storage											
Rolloff boxes	3431	2860	18917	1430	3003	3811	1525	0			33546
Tankers	119	0	8334	0	1421	584	0	0			10458
Fixed Storage	42	0	6138	0	0	921	0	1.852			8.953
Frac Tanks	9524	9524	13334	4852	10560	4762	4762	0			52866
Barges	145.130	0	0	0	0	0	0	0			145.130
Portable Tanks	5120	5079	5476	2714	6115	2893	2579	0			30418
TOTAL BBLS/DAY	**163,366**	**17,463**	**52,199**	**9,096**	**21099**	**12,971**	**8,866**	**1,852**			**286,844**
CONTAINMENT BOOM											
10 inch	0		450'	0	0	0	0	0			450
18 inch	17.200	3.000	1.500	700	3.000	0	0	0	14000	0	9100 36600
21 inch	0	8000'	0	0	0	0	0	0		8000'	12000
24 inch	700'	0	0	0	0	0	0	0			700
TOTAL	**17,900**	**11,000**	**1,950**	**700**	**3,000'**	**0**	**0**	**0**	**14,000'**	**8000**	**58,400**
Sorbents											
Pads/Bales	155	104	104	83	100	100	100				642 bales
Sorbents Boom	155 18	65	65	59	55	55	55				509 bales 18 boxes
Sweeps - 100 ft.	100	50	50	71	60	50	50				431 bales
snares- 30/Box	20	50	50	60	0	50	50				280 boxes
Snare sweeps (50 ft) box	150	50	50	67	50	50	50				467 boxes
Skimmers											
	617dbpd	617 dbpd	137 dbpd	480 dbpd	480 dbpd	137 dbpd	137 dbpd				**2,605dbpd**
Watercraft											
	1-24'w/150 hp , 1-24'w/200hp, 1-24'w/50hp DBF Skimmer boat 50hp. 1-14' jonw/6hp. 1-14'jon.	1-24' w/ 125hp 1-16'w/25 hp	1-10' jon	1-24'w/115 hp 1-20' w/50 hp	1-24'w/150 hp 1-20' w/50hp	1-16' W/40hp	1-14' jon			1-23'w/200 hp 3-20' w/ motors 15-12'; 14'; 16' jon boats	33 boats

COMMENTS: Resources in place as of 5/10/2010 resources includes HTC- Lemont and Hammond, IN. All oil recovery device volumes are derated volumes per USCG OSRO guidelines. All daily oil storage volumes are

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calculated using USCG RRI data base

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PHMSA00012767

EXHIBIT F-1 HERITAGE ENVIRONMENTAL SERVICES, LLC. OPA DEDICATED EQUIPMENT

ITEM	CHICAGO		INDIANAPOLIS	LOUISVILLE	ST. LOUIS	TOLEDO	KANSAS CITY	TULSA	MEMPHIS	NORFOLK, VA	TOTAL
	GARY IN	LEMONT									
CONTAINMENT BOOM											
10" 4" Float 6" Skirt			450'								450
18" 6" Float 12" Skirt	'	4,600 12,600*	1500'	700	3000'	1000	(0)			14,000*	9100 36600
21" 8" Float 13' Skirt					8000'(5)				4000'(5)		12000
24" 8" Float 16" Skirt	700'				0						700
Subtotal	700'	17,200'	1950'	700	11,000	1,000	0'	0	4000'(5)	14,000	**58400**
SORBENTS 3//8" x 18" x 18" Pads 100/Bale	5	150	104	83	100	100	50	50			642 bales
8"x10' Boom 4/bale	5	150	65	59	55	55	55	55			509bales
5"X10 ft Boom 5/box		18									18 boxes
3/16"x 19" x 100' sweeps	0	100	50	71	50	60	50	50			431bales
Snares 30/Box	0	20	50	60	50	0	50	50			280 boxes
Snare Sweeps (50 ft.) box	0	150	50	67	50	50	50	50			467boxes
SKIMMERS Elastec Model 136 Drum Skimmer-w/HYD power pack	1-137 dbpd (air)	1-480 dbpd	1-137 dbpd	1-480dpd	1-480dbpd 1-137 dbpd (air)	1-480 dbpd	1-137 dbpd (air)	1-137 dbpd (air)		d 3-480 dbpd**	9 units=2,605d dbbls/day 1440 dbbls/d
SUBTOTAL											**4,444 dbpd**
Boom/sorbent 45' Equip. Trailers		2	1	1	1	1	1	1			6
WATERCRAFT	14' Jon Boat w/6 hp	2-24'pontoon w/200 hp 1-JBF Skimmer boat, 50Hp, 1-14' jon	1-10' jon	1-20' w/50 hp	1-24' w/twin 125hp 1-16' w/25 hp	1-24'pontoon w/150 hp 1-14' jon	1-16' W/40hp	1-14' jon		1-23' w/200 hp* 3/20' w/motors* 15-12'; 14'; 16'; jon w/motor	18 boats 19 boats*

2) Oil skimmer recovery capacity includes 20% operating efficiency factor. (dbph).
3) ( ) = exclusive contracted resource
* Identifiable Resource: subject to availability
4) Sorbent inventory subject to volume change without notice.
5) LOI with National Response Corporation "available by contract or other approved means."
5) Norfolk, VA resources owned by Parker System and IMS Inc.

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PHMSA000127768

Page 2 of 2 EXHIBIT F-1 OPA Dedicated Equipment

Oil Recovery Devices	Lemont	Gary	St. Louis	Indianapolis	Louisville	Toledo	Kansas City	Tulsa	Charlotte	Derated BBLS/Day Total
Vacuum Trucks(3)	**5**	**1**	**15**	**35**	**3**	**3**	**4**	**0**	**5**	**71**
HERITAGE R/E DBPD	239	38	568	0	150	113	0	0	0	1108
Heritage Transport (H.T.)	0	0	0	2140	0	0	263	0	321	2724
Subtotal	**319**	**38**	**568**	**2140**	**150**	**113**	**263**	**150**	**321**	**3982**
H.T. Rolloff Boxes	571 1430*	0 1430*	2860*	16057 2860*	1430*	143 2860*	2381 1430*	95 1430*	0	17165*
HERITAGE Tankers	119	0	0	8334	0	1421	584	0	0	10458
Fixed Storage	42	0	0	6138	0	0	921	0	1852	8953
Frac Tanks	4762**	4762*	9524*	3810 9524*	190 4762*	1036 9524*	4762*	4762*		5036 47346*
Portable Tanks	48 2500*	114 2500*	79 5000*	476 5000*	214 2500*	1115 5000*	393 2500*	79 2500*		2518 27,500*
Barges	145.130			0						145.130
Subtotal (BBLS)	**154,602**	**8,806**	**17,463**	**52,199**	**9,096**	**21,099**	**12,971**	**8,866**	**1852**	**286,844**
1910.120 Certified Field Personnel	28	9	53	44	12	14	5	3		171
Decon Trailers				1						1
Spill Trailers/Trucks	1		1	1	1	1	1	1		7
Pumps	17	4	26	11	14	9	4			85
Oil/water separators			1							1
Carbon Units			1	1		6				8
Plate & Frame Filter Presses			1	1						2
Utility Trucks	6	3	6	5	5	5	1	2		33
Mobile Laboratory				1						1
Drum Trucks	3	2	2	2	2	1	1			13
Bobcats	1	1	1	1	1	2	1	1		9
Trachoes/Loaders	1		1							2
Water Blaster	1		1	1	3					6
Pressure Washers	3	2	4	4	6	2	1	1		23
Wash Down Pumps	3	0	4	1	2	1	1	1		13
Lowboys			1		1					2
Air Compressors	2	2	3	2	2	2		1		14
Generators	1	1	2	2	1	3		1		11
LEL/O_2 Meters	6	3	5	9	5	3	2	2		35
OVA/PID Meters	0		1	1	2	2				6
Radios –Explosion Proff marine band	6	0	6	8	6					26

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EXHIBIT F-2
HERITAGE ENVIRONMENTAL SERVICES, INC.
SUMMARY
OPA OIL RECOVERY CAPABILITIES

Oil Recovery Devices	Chicago	St. Louis	Indianapolis	Louisville	Toledo	Kansas City	Tulsa	Charlotte	Norfolk	Memphis	Derated BBLS/Day Total
Vacuum Trucks											
HERITAGE R/E	267	568	0	150	113	38	0	0			1098
Heritage Transport	0	0	2140	0	0	263	0	321			2724
Oil Skimmers	617	617	137	480	480	137	137	0	1440		4.444
TOTAL Derated BBLS/DAY	**974**	**810**	**2,277**	**630**	**558**	**438**	**287**	**321**			**8,266**
On-Site Daily Storage											
Rolloff boxes	3431	2860	18917	1430	3003	3811	1525	0			33546
Tankers	119	0	8334	0	1421	584	0	0			10458
Fixed Storage	42	0	6138	0	0	921	0	1.852			8.953
Frac Tanks	9524	9524	13334	4852	10560	4762	4762	0			52866
Barges	145.130	0	0	0	0	0	0	0			145.130
Portable Tanks	5120	5079	5476	2714	6115	2893	2579	0			30418
TOTAL BBLS/DAY	**163,366**	**17,463**	**52,199**	**9,096**	**21099**	**12,971**	**8,866**	**1,852**			**286,844**
CONTAINMENT BOOM											
10 inch	0		450'	0	0	0	0	0			450
18 inch	17.200	3.000	1.500	700	3.000	0	0	0	14000	0	9100 36600
21 inch	0	8000'	0	0	0	0	0	0		8000'	12000
24 inch	700'	0	0	0	0	0	0	0			700
TOTAL	**17,900**	**11,000**	**1,950**	**700**	**3,000'**	**0**	**0**	**0**	**14,000'**	**8000**	**58,400**
Sorbents											
Pads/Bales	155	104	104	83	100	100	100				642 bales
Sorbents Boom	155 18	65	65	59	55	55	55				509 bales 18 boxes
Sweeps - 100 ft.	100	50	50	71	60	50	50				431 bales
snares- 30/Box	20	50	50	60	0	50	50				280 boxes
Snare sweeps (50 ft) box	150	50	50	67	50	50	50				467 boxes
Skimmers											
	617dbpd	617 dbpd	137 dbpd	480 dbpd	480 dbpd	137 dbpd	137 dbpd				**2,605dbpd**
Watercraft											
	1-24'w/150 hp , 1-24'w/200hp, 1-24'w/50hp DBF Skimmer boat 50hp, 1-14' jons/6hp, 1-14'jon.	1-24' w/ 125hp 1-16'w/25 hp	1-10' jon	1-24'w/115 hp 1-20' w/50 hp	1-24'w/150 hp 1-20' w/50hp	1-16' W/40hp	1-14' jon			1-23'w/200 hp 3-20' w/ motors 15-12'; 14'; 16' jon boats	33 boats

COMMENTS: Resources in place as of 5/10/2010 resources includes HTC- Lemont and Hammond, IN. All oil recovery device volumes are derated volumes per USCG OSRO guidelines. All daily oil storage volumes are

PHMSA00012770

EXHIBIT F-1 HERITAGE ENVIRONMENTAL SERVICES, LLC. OPA DEDICATED EQUIPMENT

ITEM	CHICAGO		INDIANAPOLIS	LOUISVILLE	ST. LOUIS	TOLEDO	KANSAS CITY	TULSA	MEMPHIS	NORFOLK, VA	TOTAL
	HAMMOND IN	LEMONT									
CONTAINMENT BOOM											
10" 4" Float 6" Skirt			450'		1000'						550'
18" 6" Float 12" Skirt	1,000'	2000' 1200'*	2150'	4900'	2000'	2000'	1000'	1000'		(5000') 24,000*	16,950' 27,400'* (5000')
21" 8" Float 13' Skirt					8000'(5)				4000'(5)		12,000'
24" 8" Float 16" Skirt	200'										200'
Subtotal	1,200'	3200'	2600'	6900	11,000'	2000'	1000'	1000'	4000'(5)	29,000'	**63,500'**
SORBENTS 3//8" x 18" x 18" Pads 100/Bale	85	85	104	83	100	100	50	50			657 bales
8"x10' Boom 4/bale	75	75	65	59	55	55	55	55			494 bales
3/16"x 19" x 100' sweeps	0	55	50	71	50	60	50	50			386 bales
Snares 30/Box	25	25	50	60	50	0	50	50			310 boxes
Snare Sweeps (50 ft.) box	75	75	50	67	50	50	50	50			467 boxes
SKIMMERS Elastec Model 136 Drum Skimmer-w/HYD power pack	1-137 dbpd (air)	1-480 dbpd	1-137 dbpd	1-480 dbpd	1-480 dbpd 1-137 dbpd (air)	1-480 dbpd	1-137 dbpd (air)	1-137 dbpd (air)			9 units=2,605 dbbls/day
SUBTOTAL											**2,605 dbpd**
Boom/sorbent 45' Equip. Trailers	1	1	1	1	1	1	1	1			6
WATERCRAFT	1-24'pontoon w/150 hp 24'Jon Boat w/50 hp 14' Jon Boat w/6 hp	1-24'pontoon w/200 hp 1-JBF Skimmer boat, 50Hp, 1-14' jon	1-12' jon	1-24' w/150 hp 1-18' w/115 hp 1-18' jon w/50 hp 1-12'jon boat 1-19'w/35 hp	1-24' w/twin 125hp 1-16' w/25 hp	1-24'pontoon w/150 hp 1-14' jon	1-16' W/40hp	1-14' jon		1-23' w/200 hp* 3/20' w/motors* 15-12'; 14'; 16'; jon w/motor	18 boats 19 boats*

2) Oil skimmer recovery capacity includes 20% operating efficiency factor. (dbph).
3) ( ) = exclusive contracted resource
* Identifiable Resource: subject to availability
4) Sorbent inventory subject to volume change without notice.
5) LOI with National Response Corporation "available by contract or other approved means."
5) Norfolk, VA resources owned by Parker System and IMS Inc.

CONFIDENTIAL - FOR INFORMATION PURPOSES ONLY This information is only OPA certifiable if accompanied by a valid *HERITAGE* Certificate of Agreement (Exhibit F) stating OPA Coverage.

PHMSA000127771

Page 2 of 2 EXHIBIT F-1 OPA Dedicated Equipment

Oil Recovery Devices	Lemont	Hammond	St. Louis	Indianapolis	Louisville	Toledo	Kansas City	Tulsa	Charlotte	Derated BBLS/Day Total
Vacuum Trucks(3)	**5**	**5**	**9**	**35**	**3**	**4**	**5**	**1**	**5**	**72**
HERITAGE R/E DBPD	196	161	193	0	150	78	38	150	0	966
Heritage Transport (H.T.)	0	0	0	2140	0	0	263	0	321	2724
Subtotal	**196**	**161**	**193**	**2140**	**150**	**78**	**301**	**150**	**321**	**3690**
H.T. Rolloff Boxes	571 1430*	0 1430*	2860*	16057 2860*	1430*	143 2860*	2381 1430*	95 1430*	0	17165*
HERITAGE Tankers	119	0	0	8334	0	1421	584	0	0	10458
Fixed Storage	42	0	0	6138	0	0	921	0	1852	8953
Frac Tanks	4762**	4762*	9524*	3810 9524*	190 4762*	1036 9524*	4762*	4762*		5036 47346*
Portable Tanks	48 2500*	114 2500*	79 5000*	476 5000*	214 2500*	1115 5000*	393 2500*	79 2500*		2518 27,500*
Barges	473,502									473,502
Subtotal (BBLS)	**482,074**	**8,806**	**17,463**	**52,089**	**9,096**	**21,099**	**12,971**	**8,866**	**1852**	**614,316**
1910.120 Certified Field Personnel	28	12	53	44	21	14	5	8		192
Decon Trailers				1						2
Spill Trailers/Trucks	1		1	1	1	1	1	1		7
Pumps	15	6	26	11	14	9	4			85
Oil/water separators			1		8					8
Carbon Units			1	1		6				8
Plate & Frame Filter Presses			1	1						1
Utility Trucks	7	5	6	5	5	5	1	2		34
Mobile Laboratory				1						1
Drum Trucks	2	2	2	2	2	1	1			12
Bobcats	1	1	1	1	1	2	1	1		10
Trachoes/Loaders	1		1		1					4
Water Blaster	1		2	1	2					6
Pressure Washers	3	2	4	4	6	2	1	1		23
Wash Down Pumps	3	0	4	1	1	1	1	1		10
Lowboys			1		1					1
Air Compressors	4	3	3	2	4	2		1		21
Generators	1	1	2	2	2	3		1		9
LEL/0_2 Meters	10	3	5	9	6	3	2	2		39
OVA/PID Meters	1		1	1	2	2				6
Radios - UHF	6	0	6	8	6					22

CONFIDENTIAL - FOR INFORMATION PURPOSES ONLY This information is only OPA certifiable if accompanied by a valid *HERITAGE* Certificate of Agreement (Exhibit F) stating OPA Coverage.

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

January 26, 2006

VIA FACSIMILE: 317-486-2852
Mr. Dan Handschu,
Heritage Environmental Services, LLC; Heritage Transport, LLC
7901 West Morris Street
Indianapolis, IN 56231

Re: Amendment to Agreement 9600835-A
Flint Hills Resources, LP, Koch Nitrogen Company,
Koch Pipeline Company, L.P., Minnesota Pipe Line Company

Dear Mr. Handschu:

Your company currently has in effect Agreement 9600835-A ("AGR") dated February 12, 1996 (as amended, if applicable) with the above referenced companies. From time to time other affiliated Koch companies may need your services. The purpose of this letter is to propose adding **Koch Materials Company, LLC and Reiss Remediation, LLC** to the agreement.

We propose amending the term "Company," as that term is used in the agreement dated February 12, 1996, to include all of the following companies:

Flint Hills Resources, LP, Koch Materials Company, LLC, Koch Nitrogen Company,
Koch Pipeline Company, L.P., Minnesota Pipe Line Company, Reiss Remediation, LLC

Under this proposed amendment letter, future work/services performed by Heritage Environmental Services, LLC; Heritage Transport, LLC for any of the above referenced companies will be done pursuant to the AGR dated February 12, 1996 (as amended, if applicable) and this amendment dated January 26, 2006.

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. The agreement requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Bill Burgin, Koch Industries, Inc., P.O. Box 2256, Bldg. T5G, Wichita, Kansas 67201, or fax it to me at 316-828-9063.

Sincerely,

Bill Burgin

Bill Burgin
Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Heritage Environmental Services, LLC; Heritage Transport, LLC

By: _____
Printed Name: KENNETH S. PRICE
Title: President
Date: 1/27/06

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 12, 2005

Via Facsimile: 317-486-2852

Mr. Dan Handschu
Heritage Environmental Services, LLC; Heritage Transport, LLC
7901 West Morris Street
Indianapolis, IN 56231

Re: Agreement #9600835-A

Dear Mr. Handschu:

Your company currently has in effect an Agreement dated February 12, 1996 (as amended, if applicable) (herein, the "Agreement") with Chemical Petroleum Exchange, Inc., Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-5675 • FAX 316/828-9063 or 316/828-9824

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

June 12, 2002

MICHELLE P. BUTTERFIELD
LEGAL ASSISTANT

Mr. Fred Davidson
Heritage Environmental Services, LLC
1188 Pershall Road
Belle Fontaine, Missouri 63137

Re: Amendment to Intermittent Services Agreement 9600835-A
Chemical Petroleum Exchange, Inc. Koch Materials Company
Koch Pipeline Company, L.P. Koch Waterproofing Solutions, Inc.

Dear Mr. Davidson:

Thank you for taking time to discuss the Intermittent Services Agreement ("ISA") dated February 12, 1996, as amended August 27, 1997; October 30, 1997 and February 13, 2001, with the above referenced Koch companies. The purpose of this letter is to propose adding certain language to the ISA that would enable your company to be an **Oil Spill Response Organization** for Koch. In addition, Koch also proposes to amend the term "Contractor", as that term is used in the ISA, to include **Heritage Transport, LLC.**

Koch proposes amending the ISA dated February 12, 1996, to include the following conditions under the "Special Conditions" section of the ISA:

Contractor represents and warrants that it is classified by the United States Coast Guard as a Class **[insert the appropriate Class(es): A,B,C,D, and/or E]** IWR, W1, W2, W3 Oil Spill Response Organization (OSRO) for **[insert the appropriate environment(s), i.e. Great Lakes, inland, rivers and canals, or oceans]** Great Lakes, inland, rivers and canals environment(s) in the following geographic location(s) **[insert precise description of geographic location in which OSRO classification applies]**, if Contractor is not OSRO classified, attach a complete list and description of all response equipment, personnel and training that will be maintained and made available by Contractor during the term of this agreement.

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance (individually or collectively "Environmental Emergency") with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state

counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Heritage Environmental Services, LLC

Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation. If Contractor is not OSRO classified, Contractor shall notify Company within five (5) calendar days of any material change in response equipment or personnel availability and shall provide Company with an updated list and description of such resources.

Contractor shall comply with all Federal, State and local laws, rules and regulations, including but not limited to all rules and regulations promulgated and in force pursuant to the Occupational, Safety and Health Act and all HazCom, HazMat, and HazWoper requirements set forth therein. Contractor shall be solely responsible for ensuring its employees have received all certifications and training required by the Occupational, Safety and Health Act, and any and all other applicable Federal, State or local laws, rules or regulations.

Company and Contractor understand that the exact services needed in the event of an Environmental Emergency can't be foreseen. The exact services to be rendered will be determined by Company and Contractor pursuant to the circumstances of each situation. Company understands that Contractor will use its best efforts to respond to every Environmental Emergency with its own in-house personnel and equipment. In those case where Contractor is unable to respond with its own in-house personnel and equipment, Contractor will utilize its subcontractor network and will respond through the personnel and equipment of a duly qualified subcontractor..

Where specific equipment which has been listed in attached exhibits as "OPA Dedicated Equipment," Contractor will stage specified equipment in those designated Contractor locations. Contractor will make the equipment available to OPA plan holders on a preferred basis, providing that the designated OPA equipment is not engaged on another OPA certified response project and/or said equipment is permitted to be released by USCG or USEPA officials. In the event that Contractor cannot provide labor to operate Dedicated Equipment, it will deliver the equipment to the scene for operations by other qualified personnel arranged for by Contractor.

Koch proposes amending the term "Company," as that term is used in the ISA dated February 12, 1996, as amended August 27, 1997; October 30, 1997 and February 13, 2001 to include all of the following Koch companies:

Chemical Petroleum Exchange, Inc.	**Flint Hills Resources, LP**
Koch Materials Company	**Koch Nitrogen Company**
Koch Pipeline Company, L.P.	**Minnesota Pipe Line Company**

Also, Koch proposes to amend the term "Contractor", as that term is used in the ISA dated February 12, 1996, as amended August 27, 1997; October 30, 1997 and February 13, 2001 to include the following:

Heritage Environmental Services, LLC
Heritage Transport, LLC

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated February 12, 1996, the amendments dated August 27, 1997; October 30, 1997 and February 13, 2001, and this amendment letter dated June 12, 2002.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Michelle Butterfield, Koch Legal Services, Koch Industries, Inc., P.O. Box 2256, Bldg. T5G, Wichita, KS 67201.

Sincerely,

Michelle P. Butterfield

Michelle Butterfield
ISA Legal Assistant

AGREED AND ACCEPTED:
Heritage Environmental Services, LLC
Hertigage Transport, LLC

By: _____
Printed Name: Robert J. McCann
Title: Sr. Proj. Engr.
Date: 9/15/03

Note: Could not find signed amend letter. **Please review, sign and return** in order for our Chicago facility to use your services.

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

February 13, 2001

GEOFF D. BAKER
ISA ADMINISTRATOR

Via Facsimile: 317-486-5080

Ms. Nancy J. Brown
Heritage Environmental Services, LLC
7901 West Morris Street
Indianapolis, IN 56231

Re: Intermittent Services Agreement **9600835-A**
Chemical Petroleum Exchange, Inc.
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Ms. Brown:

Your company currently has in effect an Intermittent Services Agreement (herein, the "ISA") dated February 12, 1996, as amended August 27, 1997, and October 30, 1997, with the above referenced Koch companies. From time to time other affiliated Koch companies may need your services. The purpose of this letter is to propose amending the term "Company" as that term is used in the ISA, to include **Koch Waterproofing Solutions, Inc.**

Koch proposes amending the ISA to include all of the following Koch companies within the term "Company" effective as of the date of this letter.

Chemical Petroleum Exchange, Inc.
Koch Materials Company
Koch Pipeline Company, L.P.
Koch Waterproofing Solutions, Inc.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated February 12, 1996, the amendments dated August 27, 1997, October 30, 1997, and this amendment effective February 13, 2001.

By signing at the appropriate space and returning this letter to our office, you agree to amend the ISA to include the above Koch companies within the term "Company" as used in the ISA.

A copy of the Exhibit C (Certificate of Insurance) reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Under the ISA, Koch requires the above companies to be named additional insured (form CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-7446 • FAX 316/529-7727 or 316/828-7664

liability policy. Under the workers compensation policy, Koch requires two endorsements, the alternate employer and waiver of subrogation.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Geoff D. Baker, I.S.A. Administrator, Koch Industries, Inc., P.O. Box 2256, Bldg. T3D, Wichita, Kansas 67201, or fax it to me at (316) 828-7664.

Very truly yours,

Geoff D Baker

Geoff D. Baker
I.S.A. Administrator

GDB/db

AGREED AND ACCEPTED:
Heritage Environmental Services, LLC

By: Lester Li
Printed Name: Lester Li
Title: Chief Financial Officer
Date: May 5, 2001

KOCH INDUSTRIES INC

October 30, 1997

LEGAL DEPARTMENT

DEBORAH BECKER HOLMES
LEGAL ASSISTANT/I.S.A. ADMINISTRATOR

Ms. Nancy Brown
Heritage Environmental Services, Inc.
7901 W. Morris St.
Indianapolis, IN 46231

Re: Intermittent Services Agreement
Adding Koch Pipeline Company, L.P.

Dear Ms. Brown:

Your company has executed an Intermittent Services Agreement with Koch Materials Company and Chemical Petroleum Exchange dated February 9, 1996. From time to time other Koch entities affiliated with these Koch companies may need your services. The purpose of this letter is to document your agreement to apply the Intermittent Services Agreement to work performed by your company for other entities affiliated with Koch.

By signing the appropriate space below and returning this letter to our office, you agree that the work performed for the following companies will be subject to the terms of the Intermittent Services Agreement that you have signed with the above mentioned Koch Companies as though such companies had been listed in the agreement:

Koch Pipeline Company, L.P. Koch Materials Company; Chemical Petroleum Exchange

Please contact your insurance carrier and have them provide a new certificate of insurance with all companies listed above as certificate holders to support the change to the agreement. The above companies should be named Additional Insured under the General Liability policy. Under the Worker's Compensation policy, please include the following two endorsements: Waiver of Subrogation and Alternate Employer. An Exhibit C from the Intermittent Services Agreement is attached for your insurance agent's use in reflecting your company's current coverages and the appropriate Koch companies as Certificate Holders.

If you agree with these terms, please sign in the appropriate space below and return this letter to our office.

Sincerely,

Deborah Becker Holmes
Deborah Becker Holmes
Legal Assistant/I.S.A. Administrator

AGREED TO AND ACCEPTED BY:
Heritage Environmental Services, Inc.

By: _____

Printed name: C. Steven Schmann

Title: Senior Vice President

Date: 10/31/97

DBH/pp
Enclosure

KOCH INDUSTRIES INC

August 27, 1997

LEGAL DEPARTMENT

DEBORAH BECKER HOLMES
LEGAL ASSISTANT/I.S.A. ADMINISTRATOR

Hertiage Environmental Services, Inc.
Nancy Brown
7901 W. Morris Street
Indianapolis, IN 46231

Re: Intermittent Services Agreement
Adding Chemical Petroleum Exchange

Dear Nancy:

Your company has executed an Intermittent Services Agreement with Koch Materials Company. From time to time other Koch entities affiliated with these Koch companies may need your services. The purpose of this letter is to document your agreement to apply the Intermittent Services Agreement to work performed by your company for other entities affiliated with Koch.

By signing the appropriate space below and returning this letter to our office, you agree that the work performed for the following companies will be subject to the terms of the Intermittent Services Agreement that you have signed with the above mentioned Koch Companies as though such companies had been listed in the agreement:

Chemical Petroleum Company Koch Materials Company

Please contact your insurance carrier and have them provide a new certificate of insurance with all companies listed above as certificate holders to support the change to the agreement. The above companies should be named Additional Insured under the General Liability policy. Under the Worker's Compensation policy, please include the following two endorsements: Waiver of Subrogation and Alternate Employer. An Exhibit C from the Intermittent Services Agreement is attached for your insurance agent's use in reflecting your company's current coverages and the appropriate Koch companies as Certificate Holders.

If you agree with these terms, please sign in the appropriate space below and return this letter to our office.

Sincerely,

Deborah Becker Holmes
Deborah Becker Holmes
Legal Assistant/I.S.A. Administrator

AGREED TO AND ACCEPTED BY:
Hertiage Environmental Services, Inc.

By: Lester Li
Printed name: Lester Li
Title: Vice President, CFO
Date: September 11, 1997

DBH/bb
Enclosure

INTERMITTENT SERVICES AGREEMENT

Date: «Date» 2/9/96 Contractor «Contractor» HERITAGE ENVIRONMENTAL SERVICES, INC.
Agreement Number: «ContractNumber»

PARTIES

1. It is hereby agreed between «CompanyName» (such company or companies being collectively referred to hereinafter as "Company") and «Contractor» (such company being referred to hereinafter as "Contractor"), whose business address is «Address» that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

KOCH MATERIALS COMPANY

SPECIAL CONDITIONS

HERITAGE ENVIRONMENTAL SERVICES, INC
7901 WEST MORRIS STREET, INDIANAPOLIS, INDIANA 46231

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each MONTH (name desired billing period - e.g., week, month or thirty days) during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions which may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:
   a. In a workmanlike manner using qualified, efficient and careful workers;
   b. In accord with all plans, drawings and specifications;
   c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
   d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
   e. So as not to interfere with the operations of others on the premises; and,
   f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 17 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and insuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material which shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall assign for the extensions, to Company, of all additional warranties by suppliers of goods or services which are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability whether insured or self-insured, for loss or destruction of or physical damage to the following:

a. All tools, machinery, equipment and appliances which are owned by Contractor or loaned or leased by Contractor by others than Company and which are not to be incorporated into the completed work; and,

b. All personal property of Contractor's employees; whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. To the fullest extent permitted by law, Contractor shall defend, protect, indemnify and save Company, its parent company, partners, subsidiaries and any other related or affiliated entities, and their respective officers, directors and employees (collectively referred to for purposes of this Paragraph 12 as "Indemnitees") harmless from and against all claims, demands, lawsuits, causes of action, strict liability claims, penalties, fines, administrative law actions and orders, expenses (including, but not limited to, attorneys' fees) and costs of every kind and character arising out of or in any way incident to any of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property, damage to the environment, or infringement of any patent, trademark, copyright or other property right, regardless of whether such harm is to Contractor, Indemnitees, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Indemnitees harmless referred to in the preceding sentence shall include, but not be limited to, claims, demands, lawsuits, strict liability claims, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the cooperative, concurrent or contributing negligence of any person or entity including, but not limited to, Indemnitees, their agents, employees or officers, except Contractor shall not be liable for loss or damage resulting from the sole (100%) negligence of Indemnitees. To the fullest extent permitted by law, Contractor further agrees to indemnify, defend and hold Indemnitees harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Indemnitees' property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this agreement including, but not limited to, taxes, penalties, fines, interest, liens or encumbrances which result from the concurrent or contributing negligence of any person or entity, which may include Indemnitees, their agents, employees or officers. Contractor shall maintain at its own cost and expense insurance covering this indemnity provision.

If and to the extent that Section 3C of Texas Civ. Stat. Ann. Article 6701d-11 applies to work performed under this agreement by Contractor, its subcontractors or the employees of either, the above indemnity provision shall only apply to the extent permitted by such statute.

INSURANCE

13. In addition to any other insurance Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of a type and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and which will protect Company from all claims for damages to persons and to property which may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B which is made a part hereof by reference. Prior to commencing work Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B. The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not contingent solely on guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement comprises the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, which are not merged into this agreement or superseded by it.

18. If Contractor should be adjudged as bankrupt, or it should make a general assignment for the benefit of creditors, or if a receiver should be appointed for Contractor, or it should refuse or fail to supply competent supervision or enough properly skilled people or proper materials or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement. Such bond shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise if by reason of an act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance it shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that all of Contractor's employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

TERM

25. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY:
«NextCompany»
KOCH MATERIALS COMPANY

By _____
Title President
Date 2/12/96

COMPANY'S WITNESS:
By Jeannie M. Roark
Date 2/12/96

CONTRACTOR:
«Company» HERITAGE ENVIRONMENTAL SERVICES, INC.

By _____
Title VICE PRESIDENT
Date 2/9/96

CONTRACTOR'S WITNESS:
By _____
Date 2/9/96

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement
Agreement Number: «ContractNumber»

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 Worker's Compensation and Employers' Liability Insurance, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as alternate employer.

1.2 Commercial General Liability Insurance, which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 11 88 or CG 00 01 10 93) with standard exclusions "a" through "n", with a minimum combined single limit of $3,000,000 per occurrence for Bodily Injury and Property Damage and a $3,000,000 aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor is on or near any railroad property, Coverage for such operations naming Railroad as an additional insured, unless coverage is provided under Railroad Protective Liability Insurance - Section 1.7.

1.2.2 Contractual Liability, insuring the liabilities assumed by Contractor under the agreement, inclusive of XCU exposure (1.2.4 below) if applicable, but excluding coverage for taxes and patent infringement.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground.

1.2.5 Coverage will include Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93) naming Company as an additional insured.

1.3 Automobile Liability Insurance, covering all owned, non owned and hired vehicles with a minimum combined single limit for Bodily Injury and Property Damage of $1,000,000 per accident. This insurance will include contractual liability insuring the liabilities assumed by Contractor under the agreement, but excluding coverage for taxes.

1.4 Aircraft Liability Insurance - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than $5,000,000 for bodily injury and property damage (including, passenger) liability.

1.5 Hull and Machinery Insurance covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include Collision Liability Insurance with limits no less than $5,000,000.00.

1.6 Protection and Indemnity Insurance - If marine work is to be performed under the agreement, Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than five million dollars ($5,000,000.00) per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above. Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 Railroad Protective Liability - If work is to be performed on or near any railroad property, and protection is not afforded under 1.2.1 above, Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of $2,000,000.00 per occurrence, $6,000,000.00 aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the easement premises by Contractor.

1.8 The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 Policy Endorsements

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, and 1.6 hereof shall name Company as an additional insured with respect to operations performed under the agreement and shall be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 Evidence of Insurance - Contractor shall, before commencing work, provide Company with a certificate (see attached Exhibit C) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 Waiver of Subrogation

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against the Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against the Company.

5.0 If the Work is performed on a footage, lump sum or maximum cost basis, the cost of the above insurance shall be borne by Contractor.

6.0 If work is performed on a cost plus fee basis or for change order work Company will reimburse Contractor for the cost of such insurance up to the minimum limits prescribed in Section 1.0 above. Reimbursement of insurance costs under a cost plus fee contract and change order will be determined as follows:

6.1 Worker's Compensation Manual rates applied to field labor subject to Contractor's Experience Modification (not to exceed 1.00) applicable for entire contract period as identified in proposal and further subject to the premium discount schedule applicable in the state where the Work is to be performed.

6.2 Commercial General Liability rates To be identified in Contractor's Proposal applied to field labor only.

6.3 Automobile Liability insurance borne by Contractor.

6.4 Aircraft Liability insurance borne by Contractor.

6.5 Hull and Machinery insurance borne by Contractor.

6.6 Protection and Indemnity insurance borne by Contractor.

6.7 Railroad Protective Liability insurance borne by Contractor.

7.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

EXHIBIT C
CERTIFICATE OF INSURANCE
Supplement to Intermittent Services Agreement 9600835-A
Dated February 12, 1996, as amended

This certificate is not an insurance policy. It is evidence of the types of coverage's and forms of endorsements existing in regard to the insurance policies specified and neither amends the requirements of the contract to which this certificate pertains, nor amends, extends or alters the coverage afforded by the specified insurance policies or the terms, exclusions and conditions of such policies.

Name & Address of Certificate Holder: Koch Materials Company, LLC; Koch Pipeline Company, L.P.; Reiss Remediation, LLC; Flint Hills Resources, LP; Koch Nitrogen Company; and Minnesota Pipe Line Company. ATTN: Geoff Baker, Legal Dept., P.O. Box 2256, Wichita, Kansas 67201. This is to certify that the insurance Companies as shown below have issued policies of insurance as indicated to Heritage Environmental Services, LLC.; Heritage Transport, LLC ("Contractor"), 7901 W. Morris Street, Indianapolis, IN 46231, and are aware that said policies will apply to work performed under Agreement Number 96-00835-A between Company and Contractor, dated February 12, 1996, and amended.

APPLIES TO ALL HERITAGE ENVIRONMENTAL SERVICES, LLC. ETAL LOCATIONS/DIVISIONS

A. WORKERS' COMPENSATION/EMPLOYERS LIABILITY

Insurance Company: Zurich American Insurance Company
Policy Period: 06/01/06 to 06/01/07
Policy Number: WC8 9886306

Experience Modification Rate (EMR): 0.76

Workers Compensation: Statutory Limits: Yes X
State Fund: Yes ___
Qualified Self-Insurer: Yes ___

Employers' Liability Limits: 1,000,000 Each Accident
1,000,000 Disease-Policy Limit
1,000,000 Disease-Each Empl

Yes	No		Yes	No	
X	___	Longshoremen's and Harbor Workers' Act	X	___	Alternate Employer Endorsement (WC 00 03 01 or equivalent) naming Company as alternate employer
___	___	Jones' Act			
X	___	Outer Continental Shelf Lands Act	X	___	Waiver of Subrogation as required

B. COMMERCIAL GENERAL LIABILITY

Limits of Liability: 2,000,000 General Aggregate
1,000,000 Personal & Adv. Injury
1,000,000 Each Occurrence

Insurance Company: Greenwich Insurance Company
Policy Period: 06/01/06 to 06/01/07
Policy Number: GEC0003041(06)

Yes	No		Yes	No	
X	___	Is the coverage at least as broad as that provided by standard ISO form CG 00 01 01 96 with standard exclusions "a" through "h" or CG 00 01 04 98 with standard exclusions "a" through "o"?	X	___	Additional Insured Endorsement (CG 20 26 11 85)
			X	___	Additional Insured Endorsement CG20 10 10 93 or CG 20 10 03 97 as required
			X	___	Coverage for Explosion, Collapse & Underground Hazards (XCU)
X	___	Contractual Liability assumed in an Insured Contract	X	___	Watercraft exclusion deleted
X	___	Products and Completed Operations			25 ft Owned
					50 ft Non-Owned

C. AUTOMOBILE LIABILITY INSURANCE

Limits of Liability: 1,000,000 Combined Single Limit
___ Bodily Injury Per Person
___ Bodily Injury Per Accident
___ Property Damage

Insurance Company: Greenwich Insurance Company
Policy Period: 06/01/06 to 06/01/07
Policy Number: AEC0003043(06)

Yes	No		Yes	No	
X	___	Owned Vehicles	X	___	Hired/Leased Vehicles
X	___	Non Owners Vehicles	X	___	Contractual Liability assumed in an Insured Contract

D. AIRCRAFT LIABILITY INSURANCE

Limits of Liability: 75,000,000 Combined Single Limit
___ Bodily Injury, Except Passengers
___ Bodily Injury Passengers
___ Property Damage

Insurance Company: United State Aircraft Ins.
Policy Period: 06/01/06 to 06/01/07
Policy Number: 360AC866844

Yes	No	
___	X	Additional Insured as required

E. HULL AND MACHINERY INSURANCE N/A

(Name of Vessel)
Limits of Liability: ___ Vessel Insured Value
___ Collision Liability Limits Each Accident

Insurance Company: ___
Policy Period: ___
Policy Number: ___

Yes	No	
___	___	Includes Collision Liability
___	___	Additional Insured as required

F. PROTECTION AND INDEMNITY INSURANCE N/A

Limits of Liability _____ Each Accident

Insurance Company _____
Policy Period _____
Policy Number _____

Yes No

___ ___ Includes coverage for injuries of death of masters, mates and crews
___ ___ Includes Collision Liability excess of underlying Hull and Machinery policy
___ ___ Includes coverage for pollution
___ ___ Additional Insured as required

G. RAILROAD PROTECTIVE LIABILITY INSURANCE N/A

Limits of Liability _____ Each Occurrence
_____ Aggregate

Insurance Company _____
Policy Period _____
Policy Number _____

Yes No

___ ___ Railroad named as insured

H. UMBRELLA/EXCESS LIABILITY INSURANCE

Limits of Liability 10,000,000 Each Occurrence
10,000,000 Aggregate

Insurance Company Greenwich Insurance Company
Policy Period 06/01/06 to 06/01/07
Policy Number UEC001183804

Yes No

X ___ Excess of Section A – Worker's Compensation/Employers Liability Insurance
X ___ Excess of Section B – Commercial General Liability Insurance
X ___ Excess of Section C – Automobile Liability Insurance
___ X Excess of Section D – Aircraft Liability Insurance
___ X Excess of Section F – Protection and Indemnity Insurance
___ X Additional Insured as required
X ___ Follows Form as to coverages and endorsements on primary policies

REMARKS

It is further certified that:

(1.) Each of the above policies contains a provision that the policy shall not be canceled or materially changed without 30 days' prior written notice to the holder of this certificate
(2.) The policies listed under B and D shall be primary to and not in excess of or contributory with any other insurance available to Koch.

Upon written request by the holder of this certificate, the insurer or his agent will furnish a copy of any policy cited above, certified to be a true and complete copy of the original.

AUTHORIZED REPRESENTATIVE

By _____
Name
Nick J. Rallakis
(Printed Name)

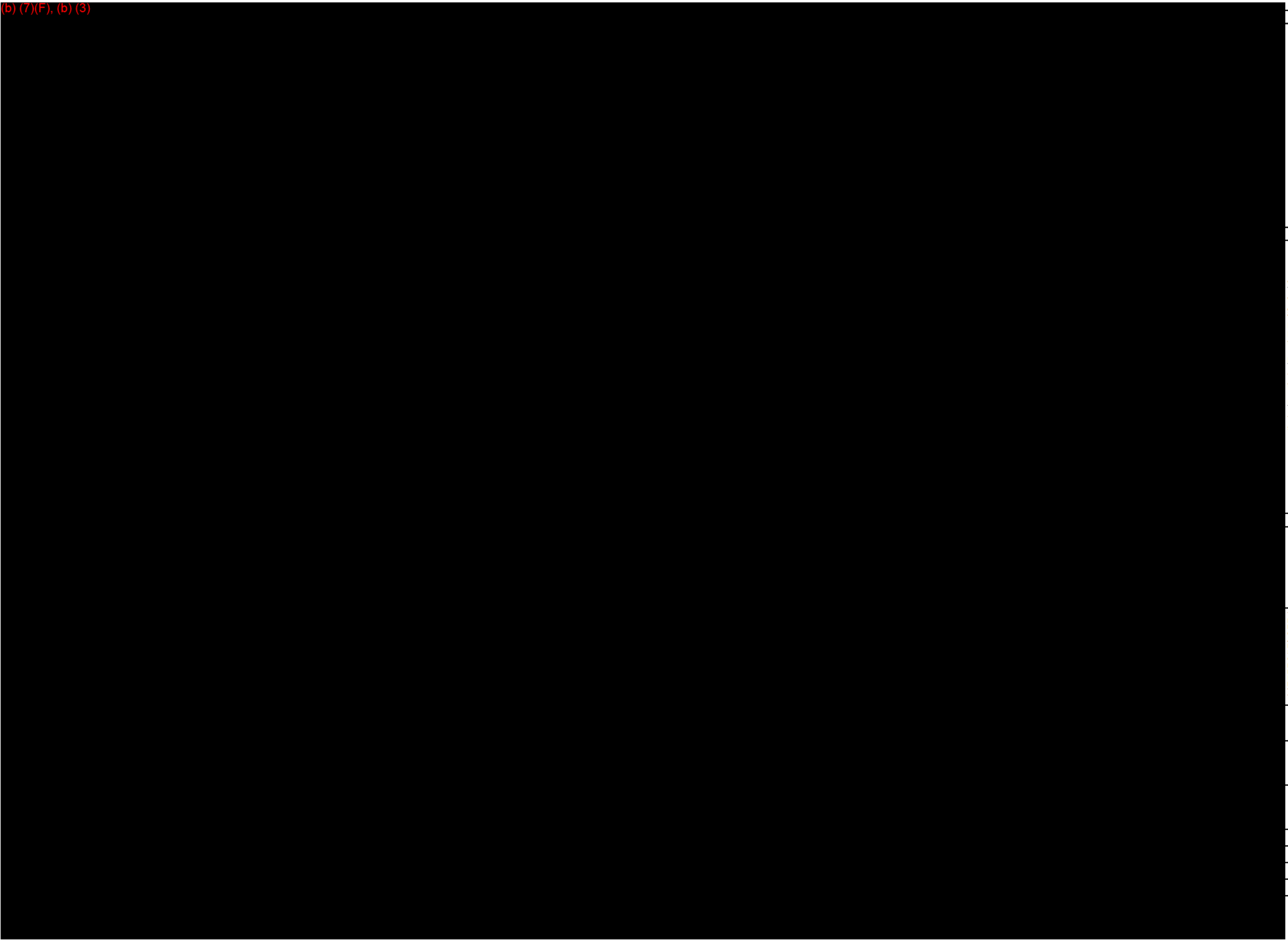
Date June 1 20 06

PRODUCER

Tobias Insurance Group, Inc.
Name
9247 N. Meridian Street, Suite 300
Address
Indianapolis IN 46260
City State Zip
317-844-7759 317-844-9910
Telephone Fax

1 Include data for these items if performance of the contract requires the use of watercraft.
2 Include data for these items if work performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, roadbeds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 85.
3 Include data for these items if performance of the contract requires use of aircraft (including helicopters).
4 If pollution policy is separate, provide the insurance company, policy number, policy period and each occurrence limits.
5 Include data for these items if coverage is required by Company.

(b) (7)(F), (b) (3)



LEGEND

- High Population Area (HPA) with buffer
- Other Populated Area (OPA) with buffer
- Drinking Water Resource Area (DW) with buffer
- Ecological Area (ECO) with buffer
- Commercially Navigable Waterway (CNW) with buffer
- Public Land Survey Township / Range
- Buffered Transport Paths (Overland Flow & Hydrographic Transport Paths, Lateral Spread & Water Body Polygons)
- Coating Change
- Pipe Specification Change
- Check Valve
- Indirect / Potential
- Direct
- Pipeline
- Pipeline Covered Section
- Interstates / Turnpikes
- Federal Highways
- State Highways
- Major Local Roads
- Roads
- Railroad
- Waterway
- County Line
- State Line
- Natural Ground
- Mainline Valve
- Remote Operated Valve

CALCULATION SUMMARY

WORST CASE DISCHARGE:

Worst Case Discharge volumes are shown in the graphs with two valve response scenarios. Volumes are evaluated by multiplying the maximum Release Time and the maximum Pipeline Flow Rate then adding the maximum Line Drainage for the specific location under evaluation.

RELEASE TIME:

The time from start of a release until detection plus the shutdown response time.

LINE DRAINAGE:

The volume that could drain from the pipe after shutdown and isolation of the pipeline segment.

VOLUME GRAPH LEGEND

Response Scenario A
- EFRDs
- No Response to Block Valves

Response Scenario B
- EFRDs
- Response to Block Valves

THIS DRAWING AND ITS INPUTS ARE THE PROPERTY OF KOCH PIPELINE COMPANY, L.P. THIS DRAWING IS BEING PROVIDED TO THE RECIPIENT SOLELY FOR THE PURPOSES OF THE RECIPIENT'S CONFIDENTIAL USE IN THE PLANNING AND PREPAREDNESS FOR EMERGENCY OR OTHER PLANNING PURPOSES. THE DRAWING IS BEING LENT, NOT SOLD TO THE RECIPIENT. IN CONSIDERATION OF THE LOAN OF THIS DRAWING THE BORROWER AGREES THAT THE DRAWING WILL NOT BE REPRODUCED, COPIED, SOLD, LOANED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN FOR WHICH THE DRAWING IS SPECIFICALLY FURNISHED. THIS COPY IS UNCONTROLLED AND IS VALID ONLY AT THE TIME OF PRINTING.

FLINT HILLS RESOURCES

Wisconsin Pipeline
INDEX 5201

Pine Bend to Eau Claire

FROM +11 TO 1462+31
TOTAL PIPE LENGTH = 146220 FEET

FILE: ICP-ICP-5201-ASICP-B-1

SHEET CREATION DATE: 9/21/2006 12:39:59 PM

UTM - 1983 Zone 15	SCALE: 1 IN = 3 MI
BandDef_ICP_B.xml	SHEET 1 OF 3

(b) (7)(F), (b) (3)

LEGEND

- High Population Area (HPA) with buffer
- Other Populated Area (OPA) with buffer
- Drinking Water Resource Area (DW) with buffer
- Ecological Area (ECO) with buffer
- Commercially Navigable Waterway (CNW) with buffer
- Public Land Survey Township / Range
- Buffered Transport Paths (Overland Flow & Hydrographic Transport Paths, Lateral Spread & Water Body Polygons)
- Coating Change
- Pipe Specification Change
- Check Valve
- Indirect / Potential
- Direct
- Pipeline
- Pipeline Covered Section
- Interstates / Turnpikes
- Federal Highways
- State Highways
- Major Local Roads
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- No Response to Block Valves

Response Scenario B

- EFRDs
- Response to Block Valves

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FLINT HILLS RESOURCES

Wisconsin Pipeline
INDEX 5201

Pine Bend to Eau Claire

FROM 1462+31 TO 2924+51
TOTAL PIPE LENGTH = 146220 FEET

FILE: ICP-ICP-5201-ASICP-B-2

SHEET CREATION DATE: 9/21/2006 12:44:25 PM

UTM - 1983 Zone 15	SCALE: 1 IN = 3 MI
BandDef_ICP_B.xml	SHEET 2 OF 3

(b) (7)(F), (b) (3)

[redacted]

LEGEND

- High Population Area (HPA) with buffer
- Other Populated Area (OPA) with buffer
- Drinking Water Resource Area (DW) with buffer
- Ecological Area (ECO) with buffer
- Commercially Navigable Waterway (CNW) with buffer
- Public Land Survey Township / Range
- Buffered Transport Paths (Overland Flow & Hydrographic Transport Paths, Lateral Spread & Water Body Polygons)
- Coating Change
- Pipe Specification Change
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- Indirect / Potential
- Direct
- Pipeline
- Pipeline Covered Section
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- Federal Highways
- State Highways
- Major Local Roads
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- Railroad
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Worst Case Discharge volumes are shown in the graphs with two valve response scenarios. Volumes are evaluated by multiplying the maximum Release Time and the maximum Pipeline Flow Rate then adding the maximum Line Drainage for the specific location under evaluation.

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The volume that could drain from the pipe after shutdown and isolation of the pipeline segment.

VOLUME GRAPH LEGEND

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Response Scenario B
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- Response to Block Valves

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FLINT HILLS RESOURCES

Wisconsin Pipeline
INDEX 5201

Pine Bend to Eau Claire

FROM 2924+51 TO 4386+71
TOTAL PIPE LENGTH = 146220 FEET

FILE: ICP-ICP-5201-ASICP-B-3

SHEET CREATION DATE: 9/21/2006 12:50:07 PM

UTM - 1983 Zone 15	SCALE: 1 IN = 3 MI
BandDef_ICP_B.xml	SHEET 3 OF 3

TECHNICAL RESPONSE PLANNING CORPORATION

1995 ✧ 2005
10 YEARS OF EXCELLENCE

December 28, 2006

L. E. Herrick
Response Plans Officer
U.S. DOT Office of Pipeline Safety
400 Seventh Street, S.W., Room 2103
Washington, D.C. 20590

RE: RSPA Sequence Number 620 - Minnesota Zone Spill Response Plan
RSPA Sequence Number 623 - Wisconsin Zone Spill Response Plan
RSPA Sequence Number 621 – Wood River Zone Spill Response Plan

Dear L. E. Herrick:

In response to the letter dated June 13, 2006 from your office, Koch Pipeline Company, L.P. (KPL) is respectfully submitting the two enclosed copies of the above referenced 49 CFR Part 194, Response Plans for Onshore Transportation-Related Facilities for your review and approval.

Previously KPL and Flint Hills Resources, LP (FHR) submitted a joint Integrated Contingency Plan (ICP) to your office for review and approval. KPL is now submitting response plans, separate from those of FHR, due to the development of the electronic plan format.

There are several findings in the June 13, 2006 letter concerning uncertainties with the joint response plans and cross-reference errors. The electronic plan has addressed the cross-reference errors and the separate plans address the uncertainties that were contained in the combined plan.

The summary of review findings has been addressed in this submission. The plans include a cross reference that will aid your review of the plan and ensure KPL has met all required components. In addition, we have attached a reference of the identified deficiencies and the section in which they are addressed.

If you have any questions regarding the enclosed KPL plans, please contact Mick Hemenway, DOT Compliance Capability Leader, at (651) 480-3826.

Sincerely,
TECHNICAL RESPONSE PLANNING CORPORATION

Gregory Desmond
Senior Project Manager

Enclosures
Federal Express

GD:ac

RE: RSPA RESPONSE REVIEW CHECKLIST

RSPA DEFICIENCY PROTOCOL		LOCATION IN PLAN WHERE DEFICIENCY IS SATISFIED
1.2	**ACP** • Identify appropriate ACP	**SECTION 1.1**
3.4	**Notifications** • OSRO 24 hour contact number	**FIGURE 3.1-6**
3.6	**Oil Spill Removal Organizations** • Address	**APPENDIX B.1.1**
6.1	**Spill Recovery Strategies** • In-Situ Burn, Bioremediation, and dispersants	**SECTION 6.2**
10.1	**Communications** • Equipment	**SECTION 7.1.6**
10.4	**Unclassified OSRO's** • Equipment	**N/A The KPL plan does not identify an OSRO that is not USCG-classified. InterCon Construction and Environment Specialists, Inc. are not OSRO's or OSRO's without USCG classifications contracted by KPL.**
10.5	**Unclassified OSRO's** • Equipment maintenance	**N/A The KPL plan does not identify an OSRO that is not USCG-classified. InterCon Construction and Environment Specialists, Inc. are not OSRO's or OSRO's without USCG classifications contracted by KPL.**
16.2	**Consistent with ACP's**	**ENTIRE PLAN**
16.3	**WCD Response**	**ENTIRE PLAN**

PHMSA0001277795

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 21, 2005

Via Facsimile: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Agreement #9500119-A

Dear Mr. Leines:

Your company currently has in effect an Agreement dated November 9, 1995 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

KOCH

June 27, 2005

VIA FACSIMILE: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Partial Termination and Amendment of Agreement **9500119-A** for Koch Hydrocarbon, LP and Koch Underground Storage Company

Dear Mr. Leines:

As you know, your company currently has in effect an Agreement, dated **November 9, 1995** (as amended, if applicable) (hereinafter "Agreement"), with certain Koch companies, including Koch Hydrocarbon, LP and Koch Underground Storage Company (hereinafter "KHLP and KUSC"). On May 9, 2005, ONEOK, Inc. ("ONEOK") agreed to acquire KHLP and KUSC. The sale of KHLP and KUSC will be effective upon the closing of the transaction with ONEOK (the date of the closing referred to as, the "Effective Date"), currently scheduled for July 1, 2005.

The Agreement will not transfer with the sale of KHLP and KUSC. Accordingly, we hereby advise you that, effective on the Effective Date, KHLP and KUSC will no longer be parties to the Agreement and will be removed from the defined term "Company" in the Agreement. Additionally, effective on the Effective Date, the term "Company" in the Agreement will mean the following companies only:

Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company

Because KHLP and KUSC will no longer be parties to the Agreement, you may delete KHLP and KUSC as certificate holders on any future insurance certificates you provide under the Agreement. Please note that, except for the changes to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

Although KHLP and KUSC will no longer be parties to the Agreement after the Effective Date, KHLP and KUSC, under their new ownership, may want you to continue providing services to KHLP and KUSC or their successor entity. If so, we anticipate that after the Effective Date, KHLP and KUSC or ONEOK will forward a replacement service agreement to you for your review and acceptance, or you can contact ONEOK directly by calling Delaine Kurth at (918) 588-7833. To the extent you are currently providing services to KHLP and KUSC, you should continue to provide those services after the Effective Date until further notice from KHLP and KUSC or ONEOK.

We appreciate your cooperation during this ownership change, and should you have any questions please feel free to contact me at 316-828-7872.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
CRM Administrator

I'm sorry, but in working your file I was unable to locate a execute copy of the attached Amendment. If you have already signed this amendment please fax me a copy, if not please sign and return ASAP. I sorry for any inconvenience this may cause.

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WERRINGER
LEGAL ASSISTANT

Mar 10, 2004

VIA FACSIMILE: 763-428-8219
Mr. Christopher Leines, President
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Flint Hills Resources, LP
Koch Hydrocarbon, LP
Koch Nitrogen Company
Minnesota Pipe Line Company
Koch Fertilizer Storage and Terminal Company
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Leines:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated November 9, 1995, as amended February 27, 1997; December 11, 2001; and March 25, 2002, with the above referenced Koch companies. The purpose of this letter is to amend Exhibit B-Insurance Requirements to add a new Paragraph 1.9, as further defined below:

Koch proposes to amend the ISA to add the following language to Exhibit B-Insurance Requirements as a new Paragraph 1.9:

1.9 Pollution Liability Insurance - Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in

advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: [redacted] **per loss** and [redacted] **annual aggregate.**
$1,000,000 CTL $1,000,000 CTL

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated November 9, 1995, the amendments dated February 27, 1997; December 11, 2001; and March 25, 2002, and this amendment dated May 1, 2003.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, IKoch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: Christopher T Lewies
Printed Name: Christopher T Lewies
Title: President
Date: March 10, 2004

SECOND REQUEST
4-1-02

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WENINGER
LEGAL ASSISTANT

March 25, 2002

Mr. Christopher Leines,
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Flint Hills Resources, LP
Koch Hydrocarbon, LP
Koch Nitrogen Company
Minnesota Pipe Line Company
Koch Fertilizer Storage and Terminal Company
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Leines:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated November 9, 1995, as amended February 27, 1997, and December 11, 2001, with the above referenced Koch companies. The purpose of this amendment is to amend Exhibit B-Insurance Requirements, as discussed below.

Koch proposes to amend the Exhibit B-Insurance Requirements which expressly specifies Additional Insured Endorsement CG 20 10 10 93 or CG 20 10 03 97.

Commercial General Liability Insurance: Minimum combined single limit of $5,000,000 per occurrence for Bodily Injury and Property Damage, and $5,000,000 aggregate each for the general policy and the Products/Completed Operations Hazard.

Automobile Liability Insurance: Minimum combined single limit for Bodily Injury and Property Damage of $5,000,000 per accident.

Additional Insured Endorsement: Pursuant to Subsection 2.2, the Additional Insured Endorsement that will be provided is as follows: "Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93)" or "Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97)" naming Company as and additional insured.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated November 9, 1995, the amendments dated February 27, 1997, and December 11, 2001, and this amendment dated March 25, 2002.

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-6587 • FAX 316/828-7664

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Koch requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, ISA Legal Assistant, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, KS 67201.

Sincerely,

Lynda L. Weninger
ISA Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: _____
Printed Name: Christopher T. Leines
Title: President
Date: April 2, 2002

KOCH INDUSTRIES, INC.

LEGAL DEPARTMENT

GEOFF D. BAKER
ISA Administrator

December 11, 2001

VIA FACSIMILE: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon Company
Koch Materials Company
Koch Nitrogen Company
Koch Petroleum Group, L.P.
Koch Pipeline Company, L.P.
Minnesota Pipe Line Company

Dear Mr. Leines:

Minnesota Limited, Inc. currently has in effect an Intermittent Services Agreement dated November 9, 1995 (as amended, if applicable) ("ISA") with the above-referenced entities. The purpose of this letter is to propose amending the ISA as detailed below.

Because of an internal reorganization, Koch proposes that the term "Company," as used in the ISA, be amended as follows:

(a.) Effective January 1, 2002, the term "Company" **shall not include** Koch Hydrocarbon Company (a division of Koch Industries, Inc.), except as relating to such entities' activities and operations prior to such date; and

(b.) With respect to work/services performed on or after January 1, 2002, the term "Company" **shall include** (in addition to the other entities referenced above) Koch Hydrocarbon, LP.

Also, please note that effective January 1, 2002, Koch Petroleum Group, L.P. will be changing its name to Flint Hills Resources, LP

In addition, Koch proposes adding certain clarification language to the ISA. For the convenience of the parties, and in order to reduce the necessity of having multiple agreements, the term "Company," as used in the ISA, currently includes multiple entities. Koch proposes adding the following language as a new last paragraph to the ISA, effective upon your company's execution of this letter amendment-

"The parties recognize and acknowledge that 'Company,' as defined above, includes more than one entity. Contractor agrees that each such entity will be separately, not jointly, responsible for the obligations hereunder as relating to work performed for such entity."

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment will be forwarded to your insurance agency. Upon your approval of this amendment, please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Geoff D. Baker, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201, or via fax to (316) 828-7664.

Sincerely,

Geoff D. Baker
I.S.A. Administrator

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: _____
Printed Name: Christopher T. Leines
Title: President
Date: 12/17/01

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNELLE M. ROBBEN
LEGAL ASSISTANT

February 27, 1997

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Intermittent Services Agreement
Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; Koch Materials Company; Koch Nitrogen Company; Koch Pipeline Company, L.P.; Koch Refining Company, L.P.; Minnesota Pipeline Company

Dear Mr. Leines:

Your company currently has in effect the following Intermittent Services Agreements ("ISA"):

- An ISA dated June 8, 1992 with Minnesota Pipe Line Company (see copy attached);
- An ISA dated June 8, 1992 with Koch Refining Company (n/k/a Koch Refining Company, L.P.) (see copy attached);
- An ISA dated February 21, 1995 with Koch Materials Company; Koch Refining Company (n/k/a Koch Refining Company, L.P.); and Koch Service, Inc. (n/k/a Koch Pipeline Company, L.P.) (see copy attached); and
- An ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; Koch Nitrogen Company; and Koch Service Company (n/k/a Koch Pipeline Company, L.P.) (see copy attached).

The purpose of this letter is to propose consolidating these existing ISAs for future work/services and to propose certain insurance changes discussed below:

Koch proposes amending the ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; and Koch Nitrogen Company to include all of the following Koch companies:

Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon Company
Koch Materials Company
Koch Nitrogen Company
Koch Pipeline Company, L.P.
Koch Refining Company, L.P.
Minnesota Pipeline Company

Also with respect to the ISA dated November 9, 1995, Koch proposes to add the attached Exhibit B-Insurance Requirements which expressly specifics the Additional Insured Endorsement that will be provided under the Commercial General Liability policy.

4111 East 37th Street North ▪ Wichita, Kansas 67220 ▪ P.O. Box 2256 ▪ Wichita, Kansas 67201
316/828-2440 ▪ FAX 316/828-7664

Under this proposed amendment letter, future work/services performed by your company for any of the above-referenced Koch companies will be done pursuant to the ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; and Koch Nitrogen Company and this amendment letter dated February 27, 1997, all of which supersede the ISAs dated June 8, 1992 with Minnesota Pipe Line Company; June 8, 1992 with Koch Refining Company, L.P.; February 21, 1995 with Koch Materials Company; Koch Refining Company, L.P. and Koch Pipeline, L.P. as relating to future work/services.

Please contact your insurance agent to complete the attached Exhibit C-Certificate of Insurance to reflect this amendment as well as the required insurance coverage and endorsements. Koch requires the above companies to be named Additional Insured (CG 20 10 10 93) under the General Liability and Umbrella/Excess Liability policies. Under the Workers' Compensation policy, Koch requires two endorsements, an Alternate Employer and a Waiver of Subrogation.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynelle M. Robben, I.S.A. Administrator/Legal Dept., Koch Industries, Inc., P.O. Box 2256, Bldg. T6B, Wichita, Kansas 67201.

Sincerely,

Lynelle M. Robben
I.S.A. Administrator/Legal Assistant

Enclosures
LMR\LETTERS\227MINN.AMD

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: Christopher T. Leines
Printed Name: CHRISTOPHER T. LEINES
Title: VICE PRESIDENT
Date: APRIL 1, 1997

INTERMITTENT SERVICES AGREEMENT

Date: November 9, 1995 **Contractor:** Minnnesota Limited, Inc.

PARTIES

1. It is hereby agreed Koch Pipeline Co., L.P., Koch Fertilizer Storage & Terminal, Koch Hydrocarbon Co., Koch Nitrogen Co., Koch Service, Inc., One Danuser Drive, Hermann, MO 65041 (referred to as "Company") and Minnesota Limited, Inc. (referred to as "Contractor"), whose business address 14485 Northdale, Rogers, MN 55374 Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

As a general contractor, I agreed to provide to the company, an emergency number that I may be reached at 24 hours a day.

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each __month_____ (name desired billing period - e.g., week, month or thirty days) during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Payment shall be made within thirty (30) days of receipt of Company of the statement described in paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions which may affect performance of the work. Contractor shall be solely responsible for advising its subcontractors of such contitions.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:

a. In a workmanlike manner using qualified, efficient and careful workers and, if subcontractors are used, qualified, efficient and careful subcontractors;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and insuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material which shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services which are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability whether insured or self-insured, for loss or destruction of or physical damage to the following:

a. All tools, machinery, equipment and appliances which are owned by Contractor or loaned or leased by Contractor by others than Company and which are not to be incorporated into the completed work; and,

b. All personal property of Contractor's employees; whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY AND INSURANCE

12. Contractor shall defend, protect, indemnify and save Company, Koch Industries, Inc. and any company of which Koch Industries, Inc. owns or controls fifty percent or more of the shares entitled to vote at a general election of directors (collectively referred to for purposes of this Paragraph 12 as "Company") harmless from and against all claims, demands, lawsuits, causes of action, strict liability claims, penalties, fines, administrative law actions and orders, expenses (including but not limited to attorney's fees) and costs of every kind and character arising out of or in any way incident to any of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property, damage to the environment, or infringement of any patent, regardless of whether such harm is to Contractor, Company, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Company harmless referred to in the preceding sentence shall include, but not be limited to, claims, demands, lawsuits, strict liability claims, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Company, its agents, employees or officers, except Contractor shall not be liable for loss or damage resulting from the sole (100%) negligence of Company. Contractor further agrees to pay Company for damages to Company's property and to indemnify, defend and hold it harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Company's property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this contract including, but not limited to taxes, penalties, fines, interest, liens or encumbrances which result from the concurrent or contributing negligence of any person or entity, which may include Company, its agents, employees or officers.

13. Contractor shall maintain at its own cost and expense such insurance of a type and in the amounts as required by Company to insure Contractor's indemnification and other obligations under this agreement and which will protect Company from all claims for damages to persons and to property which may arise from any operations under this contract or any subcontracts related to this contract. Contractor shall maintain during the entire term of this Contract insurance policies within minimum limits of coverage all as set forth on Exhibit B which is made a part hereof by reference. Prior to commencing work Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company.

15. Work under the contract shall not be assigned or delegated to a subcontractor without the prior written consent of Company. In the event Company grants such permission, Contractor shall, by appropriate agreement in writing where legally required for validity and enforceability, require each subcontractor, to the extent of the work to be performed by the subcontractor, to be bound to Contractor by the terms of this agreement. In this regard, Contractor shall require each subcontractor to assume as to Contractor all the obligations and responsibilities which the Contractor, by this agreement, has assumed toward Company. Each such subcontract agreement shall preserve and protect the rights of Company under this agreement with respect to the work to be performed by each subcontractor so that the subcontracting thereof will not prejudice such rights. Where appropriate, Company may require each subcontractor to enter into similar arrangements with sub-subcontractors.

16. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

17. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

18. This agreement comprises the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, which are not merged into this agreement or superseded by it.

19. If Contractor should be adjudged as bankrupt, or it should make a general assignment for the benefit of creditors, or if a receiver should be appointed for Contractor, or it should refuse or fail to supply competent supervision or enough properly skilled people or proper material or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

20. Company may at any time during the term of this agreement require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or a payment bond guaranteeing payment of all sums which may be due to laborers, subcontractors, or materialmen, or both. Such bonds shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

21. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

22. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance it shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

23. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

24. Contractor warrants and represents that all of Contractor's employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor further warrants and represents that it will require all subcontractors, and all subcontractors' employees, to have received all such safety training as required by law. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

TERM

25. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY

By _____

Title Dist Mgr.

Date 7/31/96

COMPANY'S WITNESS

By _____

Date 7/31/96

7/30/96 LMC

CONTRACTOR Minnesota Limited, Inc.

By _____

Christopher T. Leines

Title Vice President

Date July 11, 1996

CONTRACTOR'S WITNESS

By Deb Bowen

Date July 11, 1996

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer.

1.2 **Commercial General Liability Insurance**, which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy ISO CG 00 01 11 88, CG 00 01 10 93, or CG 00 01 01 96 with standard exclusions "a" through "n", with a minimum combined single limit of **$1,000,000** per occurrence for Bodily injury and Property Damage and a **$1,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93) naming Company as an additional insured.

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$1,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, 1.6 and 1.8 hereof shall:
(i.) name Company as an additional insured with respect to work performed for Company, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them); and;
(ii.) be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 21, 2005

Via Facsimile: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Agreement #9500119-A

Dear Mr. Leines:

Your company currently has in effect an Agreement dated November 9, 1995 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

KOCH

June 27, 2005

VIA FACSIMILE: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Partial Termination and Amendment of Agreement **9500119-A** for Koch Hydrocarbon, LP and Koch Underground Storage Company

Dear Mr. Leines:

As you know, your company currently has in effect an Agreement, dated **November 9, 1995** (as amended, if applicable) (hereinafter "Agreement"), with certain Koch companies, including Koch Hydrocarbon, LP and Koch Underground Storage Company (hereinafter "KHLP and KUSC"). On May 9, 2005, ONEOK, Inc. ("ONEOK") agreed to acquire KHLP and KUSC. The sale of KHLP and KUSC will be effective upon the closing of the transaction with ONEOK (the date of the closing referred to as, the "Effective Date"), currently scheduled for July 1, 2005.

The Agreement will not transfer with the sale of KHLP and KUSC. Accordingly, we hereby advise you that, effective on the Effective Date, KHLP and KUSC will no longer be parties to the Agreement and will be removed from the defined term "Company" in the Agreement. Additionally, effective on the Effective Date, the term "Company" in the Agreement will mean the following companies only:

Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company

Because KHLP and KUSC will no longer be parties to the Agreement, you may delete KHLP and KUSC as certificate holders on any future insurance certificates you provide under the Agreement. Please note that, except for the changes to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

Although KHLP and KUSC will no longer be parties to the Agreement after the Effective Date, KHLP and KUSC, under their new ownership, may want you to continue providing services to KHLP and KUSC or their successor entity. If so, we anticipate that after the Effective Date, KHLP and KUSC or ONEOK will forward a replacement service agreement to you for your review and acceptance, or you can contact ONEOK directly by calling Delaine Kurth at (918) 588-7833. To the extent you are currently providing services to KHLP and KUSC, you should continue to provide those services after the Effective Date until further notice from KHLP and KUSC or ONEOK.

We appreciate your cooperation during this ownership change, and should you have any questions please feel free to contact me at 316-828-7872.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
CRM Administrator

I'm sorry, but in working your file I was unable to locate a execute copy of the attached Amendment. If you have already signed this amendment please fax me a copy, if not please sign and return ASAP. I sorry for any inconvenience this may cause.

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WERRINGER
LEGAL ASSISTANT

Mar 10, 2004

VIA FACSIMILE: 763-428-8219
Mr. Christopher Leines, President
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Flint Hills Resources, LP
Koch Hydrocarbon, LP
Koch Nitrogen Company
Minnesota Pipe Line Company
Koch Fertilizer Storage and Terminal Company
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Leines:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated November 9, 1995, as amended February 27, 1997; December 11, 2001; and March 25, 2002, with the above referenced Koch companies. The purpose of this letter is to amend Exhibit B-Insurance Requirements to add a new Paragraph 1.9, as further defined below:

Koch proposes to amend the ISA to add the following language to Exhibit B-Insurance Requirements as a new Paragraph 1.9:

1.9 Pollution Liability Insurance - Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in

advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: [redacted] **per loss** and [redacted] **annual aggregate.**
$1,000,000 CTL $1,000,000 CTL

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated November 9, 1995, the amendments dated February 27, 1997; December 11, 2001; and March 25, 2002, and this amendment dated May 1, 2003.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, IKoch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: Christopher T Lewies
Printed Name: Christopher T Lewies
Title: President
Date: March 10, 2004

SECOND REQUEST
4-1-02

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WENNINGER
LEGAL ASSISTANT

March 25, 2002

Mr. Christopher Leines,
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Flint Hills Resources, LP
Koch Hydrocarbon, LP
Koch Nitrogen Company
Minnesota Pipe Line Company
Koch Fertilizer Storage and Terminal Company
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Leines:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated November 9, 1995, as amended February 27, 1997, and December 11, 2001, with the above referenced Koch companies. The purpose of this amendment is to amend Exhibit B-Insurance Requirements, as discussed below.

Koch proposes to amend the Exhibit B-Insurance Requirements which expressly specifies Additional Insured Endorsement CG 20 10 10 93 or CG 20 10 03 97.

Commercial General Liability Insurance: Minimum combined single limit of $5,000,000 per occurrence for Bodily Injury and Property Damage, and $5,000,000 aggregate each for the general policy and the Products/Completed Operations Hazard.

Automobile Liability Insurance: Minimum combined single limit for Bodily Injury and Property Damage of $5,000,000 per accident.

Additional Insured Endorsement: Pursuant to Subsection 2.2, the Additional Insured Endorsement that will be provided is as follows: "Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93)" or "Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97)" naming Company as and additional insured.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated November 9, 1995, the amendments dated February 27, 1997, and December 11, 2001, and this amendment dated March 25, 2002.

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-6587 • FAX 316/828-7664

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Koch requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, ISA Legal Assistant, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, KS 67201.

Sincerely,

Lynda L. Weninger
ISA Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: _____
Printed Name: Christopher T. Leines
Title: President
Date: April 2, 2002

KOCH INDUSTRIES, INC.

LEGAL DEPARTMENT

GEOFF D. BAKER
ISA Administrator

December 11, 2001

VIA FACSIMILE: 763-428-8219

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, MN 55374

Re: Amendment to Intermittent Services Agreement 9500119-A
Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon Company
Koch Materials Company
Koch Nitrogen Company
Koch Petroleum Group, L.P.
Koch Pipeline Company, L.P.
Minnesota Pipe Line Company

Dear Mr. Leines:

Minnesota Limited, Inc. currently has in effect an Intermittent Services Agreement dated November 9, 1995 (as amended, if applicable) ("ISA") with the above-referenced entities. The purpose of this letter is to propose amending the ISA as detailed below.

Because of an internal reorganization, Koch proposes that the term "Company," as used in the ISA, be amended as follows:

(a.) Effective January 1, 2002, the term "Company" **shall not include** Koch Hydrocarbon Company (a division of Koch Industries, Inc.), except as relating to such entities' activities and operations prior to such date; and

(b.) With respect to work/services performed on or after January 1, 2002, the term "Company" **shall include** (in addition to the other entities referenced above) Koch Hydrocarbon, LP.

Also, please note that effective January 1, 2002, Koch Petroleum Group, L.P. will be changing its name to Flint Hills Resources, LP

In addition, Koch proposes adding certain clarification language to the ISA. For the convenience of the parties, and in order to reduce the necessity of having multiple agreements, the term "Company," as used in the ISA, currently includes multiple entities. Koch proposes adding the following language as a new last paragraph to the ISA, effective upon your company's execution of this letter amendment-

"The parties recognize and acknowledge that 'Company,' as defined above, includes more than one entity. Contractor agrees that each such entity will be separately, not jointly, responsible for the obligations hereunder as relating to work performed for such entity."

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment will be forwarded to your insurance agency. Upon your approval of this amendment, please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Geoff D. Baker, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201, or via fax to (316) 828-7664.

Sincerely,

Geoff D. Baker
I.S.A. Administrator

Enclosures

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: _____
Printed Name: Christopher T. Leines
Title: President
Date: 12/17/01

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNELLE M. ROBBEN
LEGAL ASSISTANT

February 27, 1997

Mr. Christopher Leines
Minnesota Limited, Inc.
14485 Northdale Blvd.
Rogers, Minnesota 55374

Re: Intermittent Services Agreement
Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; Koch Materials Company; Koch Nitrogen Company; Koch Pipeline Company, L.P.; Koch Refining Company, L.P.; Minnesota Pipeline Company

Dear Mr. Leines:

Your company currently has in effect the following Intermittent Services Agreements ("ISA"):

- An ISA dated June 8, 1992 with Minnesota Pipe Line Company (see copy attached);
- An ISA dated June 8, 1992 with Koch Refining Company (n/k/a Koch Refining Company, L.P.) (see copy attached);
- An ISA dated February 21, 1995 with Koch Materials Company; Koch Refining Company (n/k/a Koch Refining Company, L.P.); and Koch Service, Inc. (n/k/a Koch Pipeline Company, L.P.) (see copy attached); and
- An ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; Koch Nitrogen Company; and Koch Service Company (n/k/a Koch Pipeline Company, L.P.) (see copy attached).

The purpose of this letter is to propose consolidating these existing ISAs for future work/services and to propose certain insurance changes discussed below:

Koch proposes amending the ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; and Koch Nitrogen Company to include all of the following Koch companies:

Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon Company
Koch Materials Company
Koch Nitrogen Company
Koch Pipeline Company, L.P.
Koch Refining Company, L.P.
Minnesota Pipeline Company

Also with respect to the ISA dated November 9, 1995, Koch proposes to add the attached Exhibit B-Insurance Requirements which expressly specifics the Additional Insured Endorsement that will be provided under the Commercial General Liability policy.

4111 East 37th Street North ▪ Wichita, Kansas 67220 ▪ P.O. Box 2256 ▪ Wichita, Kansas 67201
316/828-2440 ▪ FAX 316/828-7664

Under this proposed amendment letter, future work/services performed by your company for any of the above-referenced Koch companies will be done pursuant to the ISA dated November 9, 1995 with Koch Pipeline Company, L.P.; Koch Fertilizer Storage and Terminal Company; Koch Hydrocarbon Company; and Koch Nitrogen Company and this amendment letter dated February 27, 1997, all of which supersede the ISAs dated June 8, 1992 with Minnesota Pipe Line Company; June 8, 1992 with Koch Refining Company, L.P.; February 21, 1995 with Koch Materials Company; Koch Refining Company, L.P. and Koch Pipeline, L.P. as relating to future work/services.

Please contact your insurance agent to complete the attached Exhibit C-Certificate of Insurance to reflect this amendment as well as the required insurance coverage and endorsements. Koch requires the above companies to be named Additional Insured (CG 20 10 10 93) under the General Liability and Umbrella/Excess Liability policies. Under the Workers' Compensation policy, Koch requires two endorsements, an Alternate Employer and a Waiver of Subrogation.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynelle M. Robben, I.S.A. Administrator/Legal Dept., Koch Industries, Inc., P.O. Box 2256, Bldg. T6B, Wichita, Kansas 67201.

Sincerely,

Lynelle M. Robben
I.S.A. Administrator/Legal Assistant

Enclosures
LMR\LETTERS\227MINN.AMD

AGREED AND ACCEPTED:
Minnesota Limited, Inc.

By: Christopher T. Leines
Printed Name: CHRISTOPHER T. LEINES
Title: VICE PRESIDENT
Date: APRIL 1, 1997

INTERMITTENT SERVICES AGREEMENT

Date: November 9, 1995 **Contractor:** Minnnesota Limited, Inc.

PARTIES

1. It is hereby agreed Koch Pipeline Co., L.P., Koch Fertilizer Storage & Terminal, Koch Hydrocarbon Co., Koch Nitrogen Co., Koch Service, Inc., One Danuser Drive, Hermann, MO 65041 (referred to as "Company") and Minnesota Limited, Inc. (referred to as "Contractor"), whose business address 14485 Northdale, Rogers, MN 55374 Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

As a general contractor, I agreed to provide to the company, an emergency number that I may be reached at 24 hours a day.

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each __month_____ (name desired billing period - e.g., week, month or thirty days) during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Payment shall be made within thirty (30) days of receipt of Company of the statement described in paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions which may affect performance of the work. Contractor shall be solely responsible for advising its subcontractors of such contitions.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:

a. In a workmanlike manner using qualified, efficient and careful workers and, if subcontractors are used, qualified, efficient and careful subcontractors;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and insuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material which shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services which are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability whether insured or self-insured, for loss or destruction of or physical damage to the following:

a. All tools, machinery, equipment and appliances which are owned by Contractor or loaned or leased by Contractor by others than Company and which are not to be incorporated into the completed work; and,

b. All personal property of Contractor's employees; whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY AND INSURANCE

12. Contractor shall defend, protect, indemnify and save Company, Koch Industries, Inc. and any company of which Koch Industries, Inc. owns or controls fifty percent or more of the shares entitled to vote at a general election of directors (collectively referred to for purposes of this Paragraph 12 as "Company") harmless from and against all claims, demands, lawsuits, causes of action, strict liability claims, penalties, fines, administrative law actions and orders, expenses (including but not limited to attorney's fees) and costs of every kind and character arising out of or in any way incident to any of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property, damage to the environment, or infringement of any patent, regardless of whether such harm is to Contractor, Company, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Company harmless referred to in the preceding sentence shall include, but not be limited to, claims, demands, lawsuits, strict liability claims, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Company, its agents, employees or officers, except Contractor shall not be liable for loss or damage resulting from the sole (100%) negligence of Company. Contractor further agrees to pay Company for damages to Company's property and to indemnify, defend and hold it harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Company's property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this contract including, but not limited to taxes, penalties, fines, interest, liens or encumbrances which result from the concurrent or contributing negligence of any person or entity, which may include Company, its agents, employees or officers.

13. Contractor shall maintain at its own cost and expense such insurance of a type and in the amounts as required by Company to insure Contractor's indemnification and other obligations under this agreement and which will protect Company from all claims for damages to persons and to property which may arise from any operations under this contract or any subcontracts related to this contract. Contractor shall maintain during the entire term of this Contract insurance policies within minimum limits of coverage all as set forth on Exhibit B which is made a part hereof by reference. Prior to commencing work Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company.

15. Work under the contract shall not be assigned or delegated to a subcontractor without the prior written consent of Company. In the event Company grants such permission, Contractor shall, by appropriate agreement in writing where legally required for validity and enforceability, require each subcontractor, to the extent of the work to be performed by the subcontractor, to be bound to Contractor by the terms of this agreement. In this regard, Contractor shall require each subcontractor to assume as to Contractor all the obligations and responsibilities which the Contractor, by this agreement, has assumed toward Company. Each such subcontract agreement shall preserve and protect the rights of Company under this agreement with respect to the work to be performed by each subcontractor so that the subcontracting thereof will not prejudice such rights. Where appropriate, Company may require each subcontractor to enter into similar arrangements with sub-subcontractors.

16. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

17. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

18. This agreement comprises the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, which are not merged into this agreement or superseded by it.

19. If Contractor should be adjudged as bankrupt, or it should make a general assignment for the benefit of creditors, or if a receiver should be appointed for Contractor, or it should refuse or fail to supply competent supervision or enough properly skilled people or proper material or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

20. Company may at any time during the term of this agreement require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or a payment bond guaranteeing payment of all sums which may be due to laborers, subcontractors, or materialmen, or both. Such bonds shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

21. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

22. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance it shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

23. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

24. Contractor warrants and represents that all of Contractor's employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor further warrants and represents that it will require all subcontractors, and all subcontractors' employees, to have received all such safety training as required by law. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

TERM

25. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY

By _____

Title Dist Mgr.

Date 7/31/96

COMPANY'S WITNESS

By _____

Date 7/31/96

7/30/96 LMC

CONTRACTOR Minnesota Limited, Inc.

By _____

Christopher T. Leines

Title Vice President

Date July 11, 1996

CONTRACTOR'S WITNESS

By Deb Bowen

Date July 11, 1996

rev. 5/95

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer.

1.2 **Commercial General Liability Insurance**, which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy ISO CG 00 01 11 88, CG 00 01 10 93, or CG 00 01 01 96 with standard exclusions "a" through "n", with a minimum combined single limit of **$1,000,000** per occurrence for Bodily injury and Property Damage and a **$1,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93) naming Company as an additional insured.

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$1,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, 1.6 and 1.8 hereof shall:
(i.) name Company as an additional insured with respect to work performed for Company, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them); and;
(ii.) be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

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(b) (3), (b) (7)(F)

Rum River
County Road 30 and 4th Avenue Bridge

Anoka, MN



Tactical Plan Details

- River Velocity = 3.67 ft/s or 2.5 mi/hr
- River is 115 yards wide at this location
- Product would reach this location approximately 315 minutes after the release

Response Equipment

- 600 feet of 6” containment boom
- Skimmer and associated operating equipment
- Vacuum truck or other containment
- Air Compressor
- 2” Diaphragm Pump
- Hoses, Rope, anchor stakes



Highway 10 in Anoka to Route 31 N
Approx 200 m North, turn West onto Route 30

Rum River
Highway 7 Bridge

Andover, MN

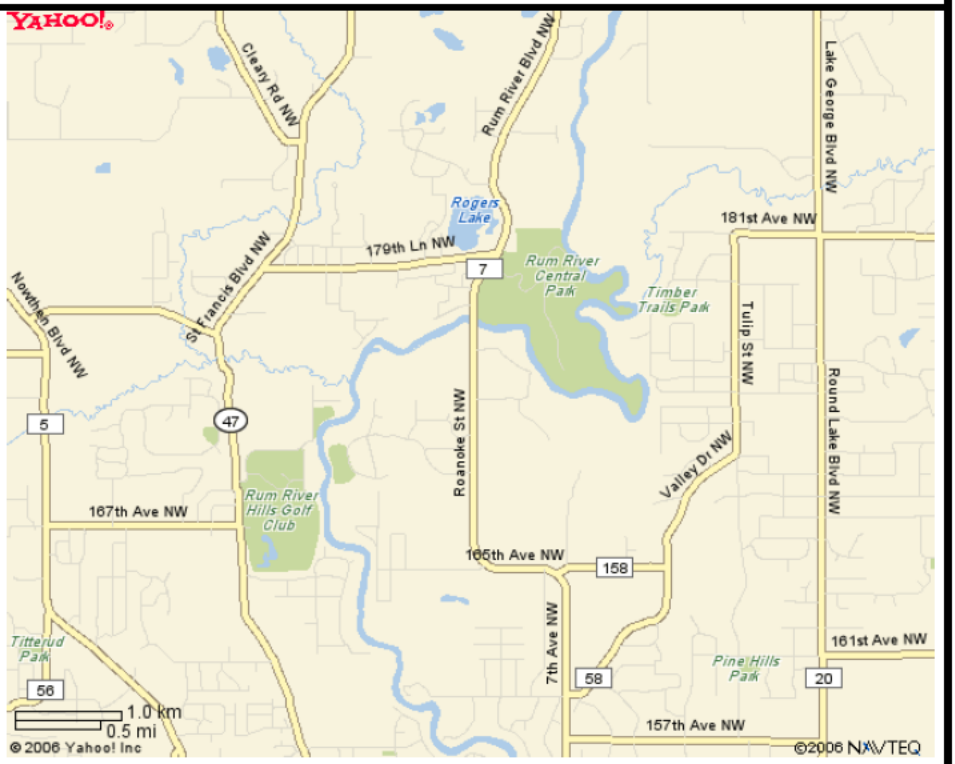


Tactical Plan Details

- River Velocity = 3.67 ft/s or 2.5 mi/hr
- River is 70 yards wide at this location
- Product would reach this location approximately 90 minutes after the release

Response Equipment

- 500 feet of 6” containment boom
- Skimmer and associated operating equipment
- Vacuum truck or other containment
- Air Compressor
- 2” Diaphragm Pump
- Hoses, Rope, anchor stakes



Highway 10 in Anoka to Route 7 N (Rum River Boulevard) appprox. 6 mi north

Rum River
Rum River Central Park

Andover, MN

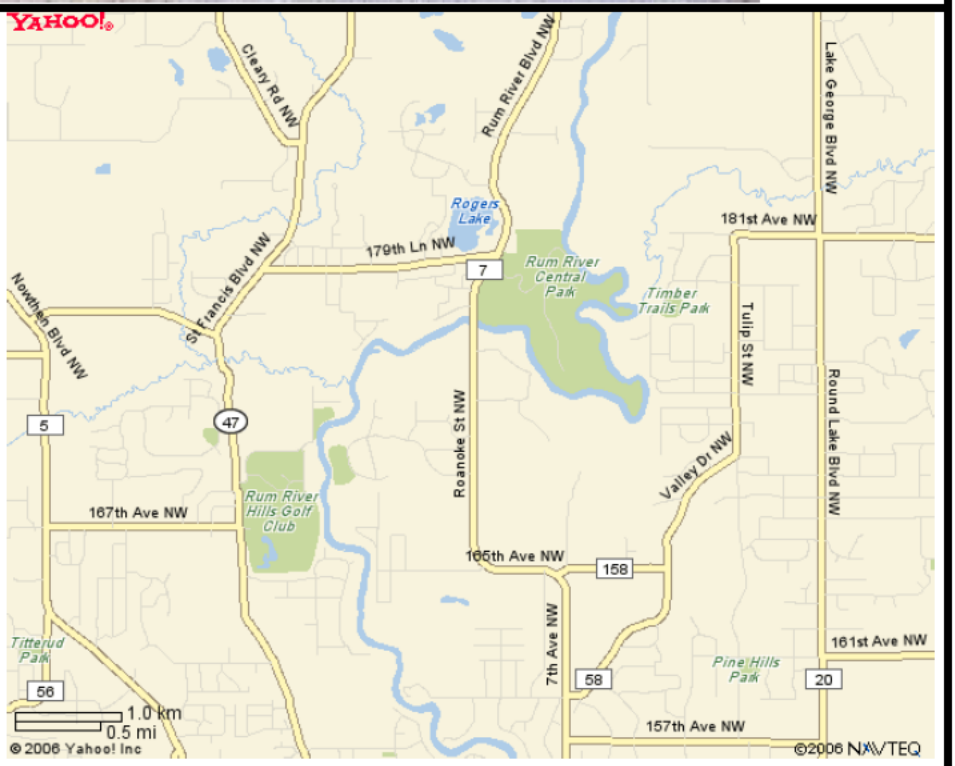


Tactical Plan Details

- River Velocity = 3.67 ft/s or 2.5 mi/hr
- River is 50 yards wide at this location
- Product would reach this location approximately 30 minutes after the release

Response Equipment

- 300 feet of 6” containment boom
- Skimmer and associated operating equipment
- Vacuum truck or other containment
- Air Compressor
- 2” Diaphragm Pump
- Hoses, Rope, anchor stakes



Highway 10 in Anoka to Route 7 N (Rum River Boulevard) appprox. 7 mi north on west side

Rum River
Rum River South Park
Staging and Collection

St. Francis Boulevard
Anoka, MN

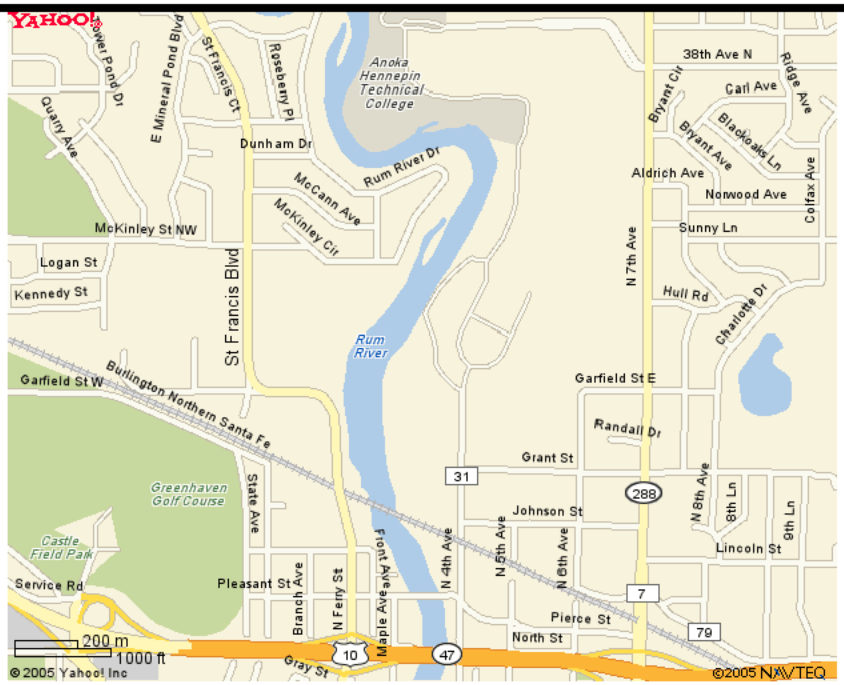


Tactical Plan Details

- River Velocity = 3.67 ft/s or 2.5 mi/hr
- River is 141 yards wide at this location
- Product would reach this location approximately 300 minutes after the release
- Adequate room for staging equipment

Response Equipment

- 800 feet of 6" containment boom
- Skimmer and associated operating equipment
- Vacuum truck or other containment
- Air Compressor
- 2" Diaphragm Pump
- Hoses, ropes, anchor stakes



Highway 10 in Anoka to Route 47 N (St Francis Boulevard) On the east side, approximately 0.5 mi North on St Francis Boulevard

Rum River
Strootman Park Canoe Landing

Kiowa Street
Andover, MN

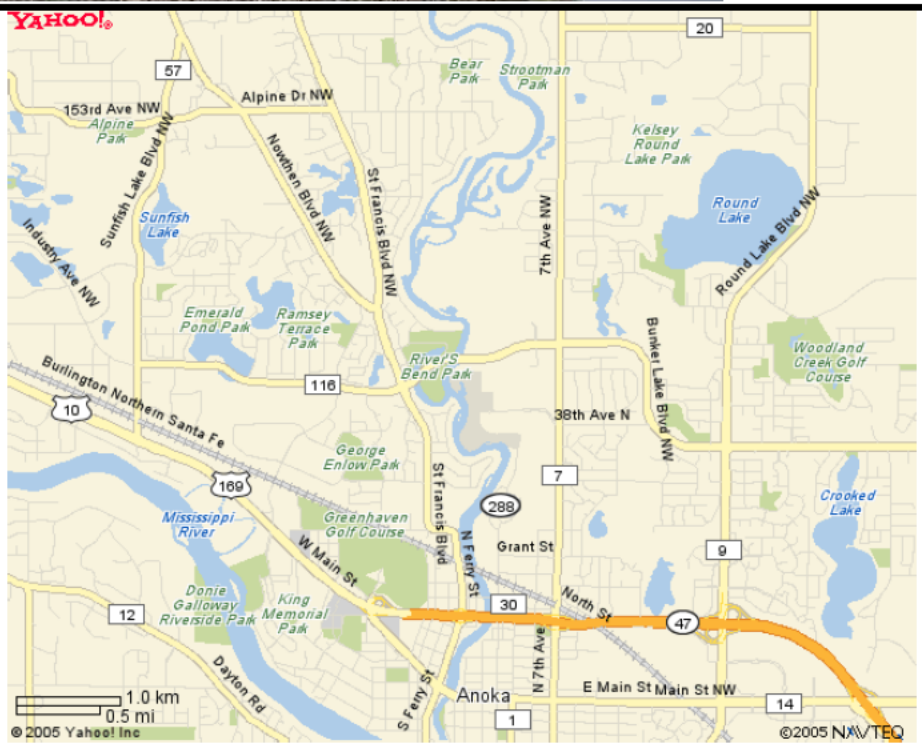


Tactical Plan Details

- River Velocity = 3.67 ft/s or 2.5 mi/hr
- River is 80 yards wide at this location
- Product would reach this location approximately 210 minutes after the release

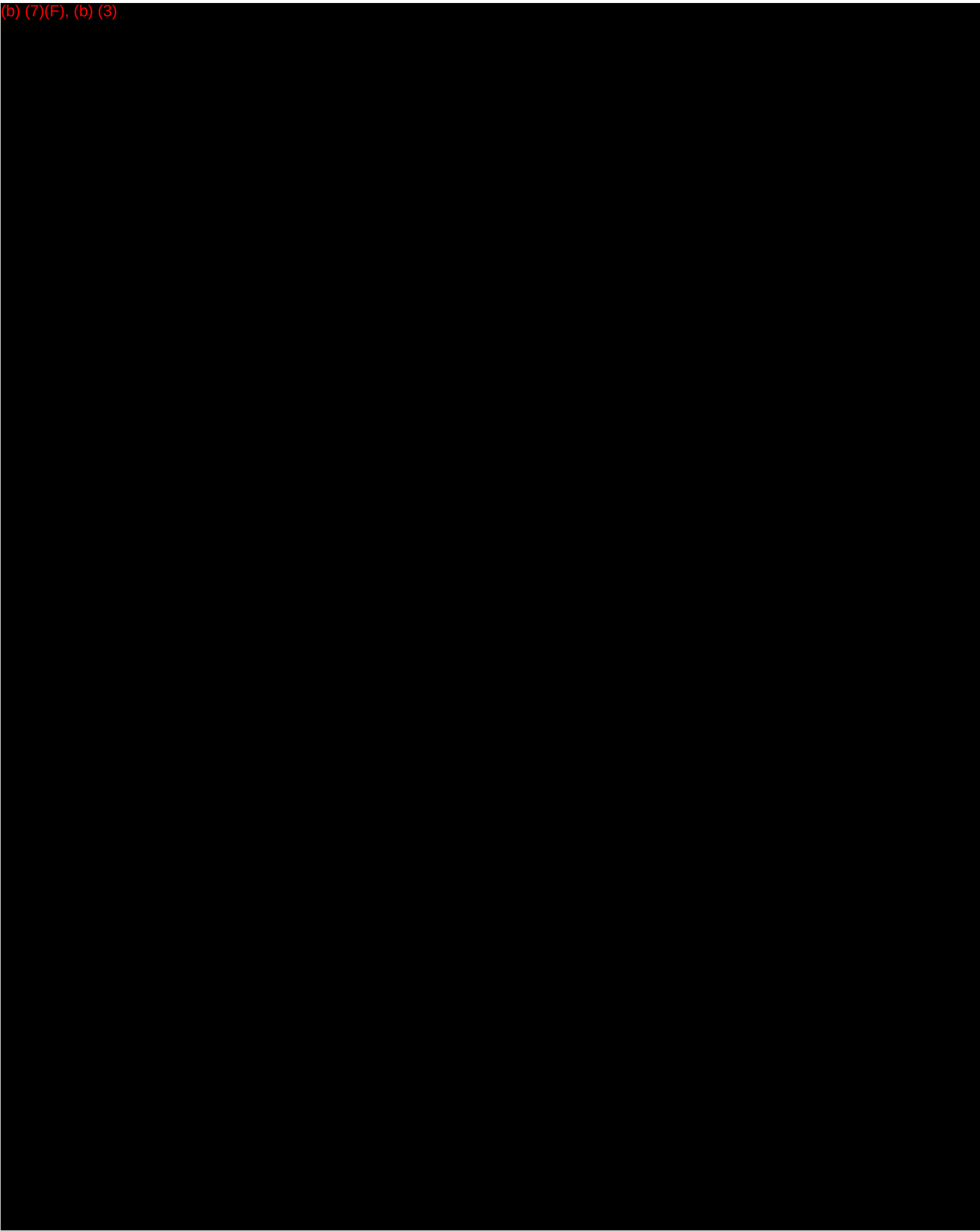
Response Equipment

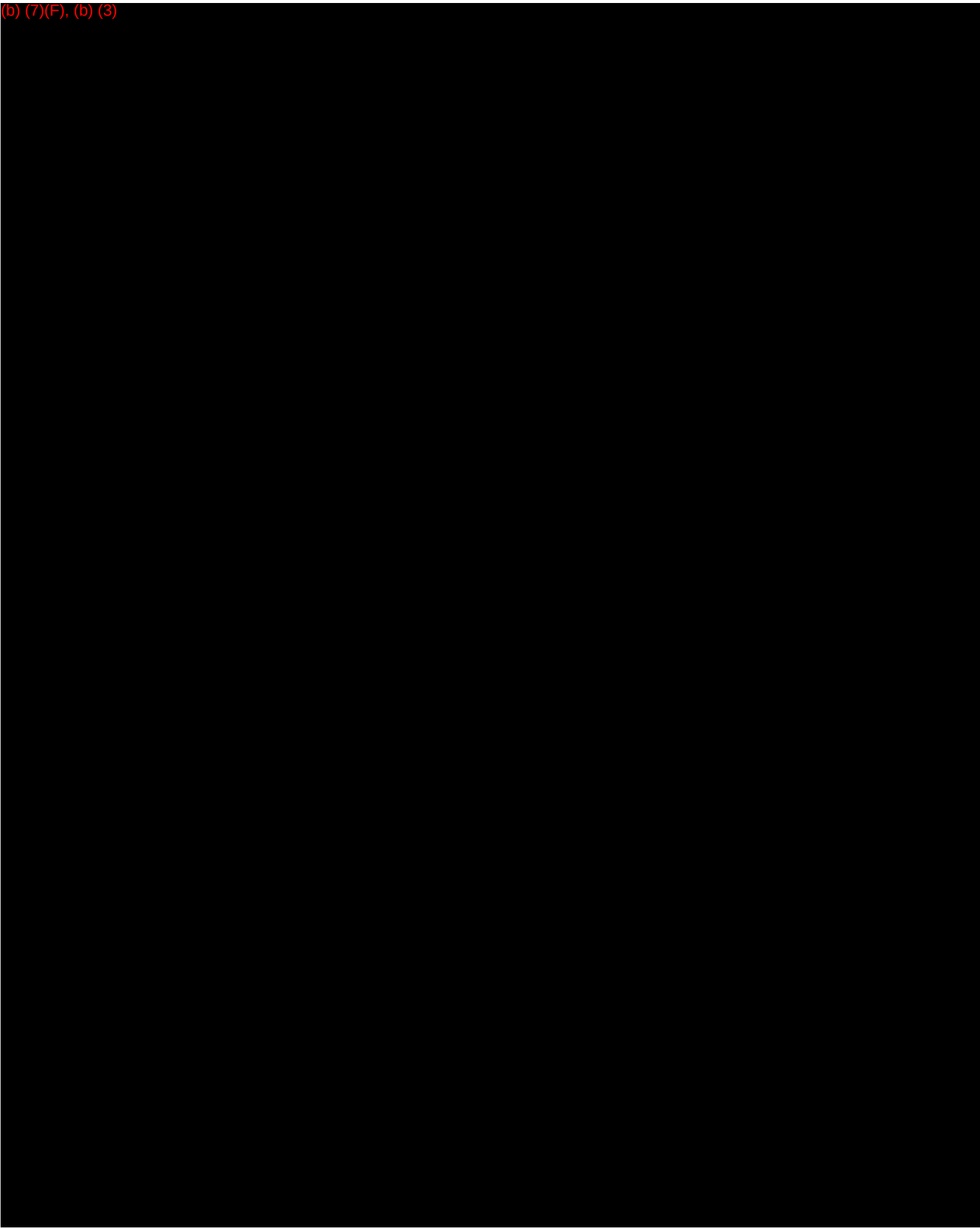
- 500 feet of 6” containment boom
- Skimmer and associated operating equipment
- Vacuum truck or other containment
- Air Compressor
- 2” Diaphragm Pump
- Hoses, Rope, anchor stakes



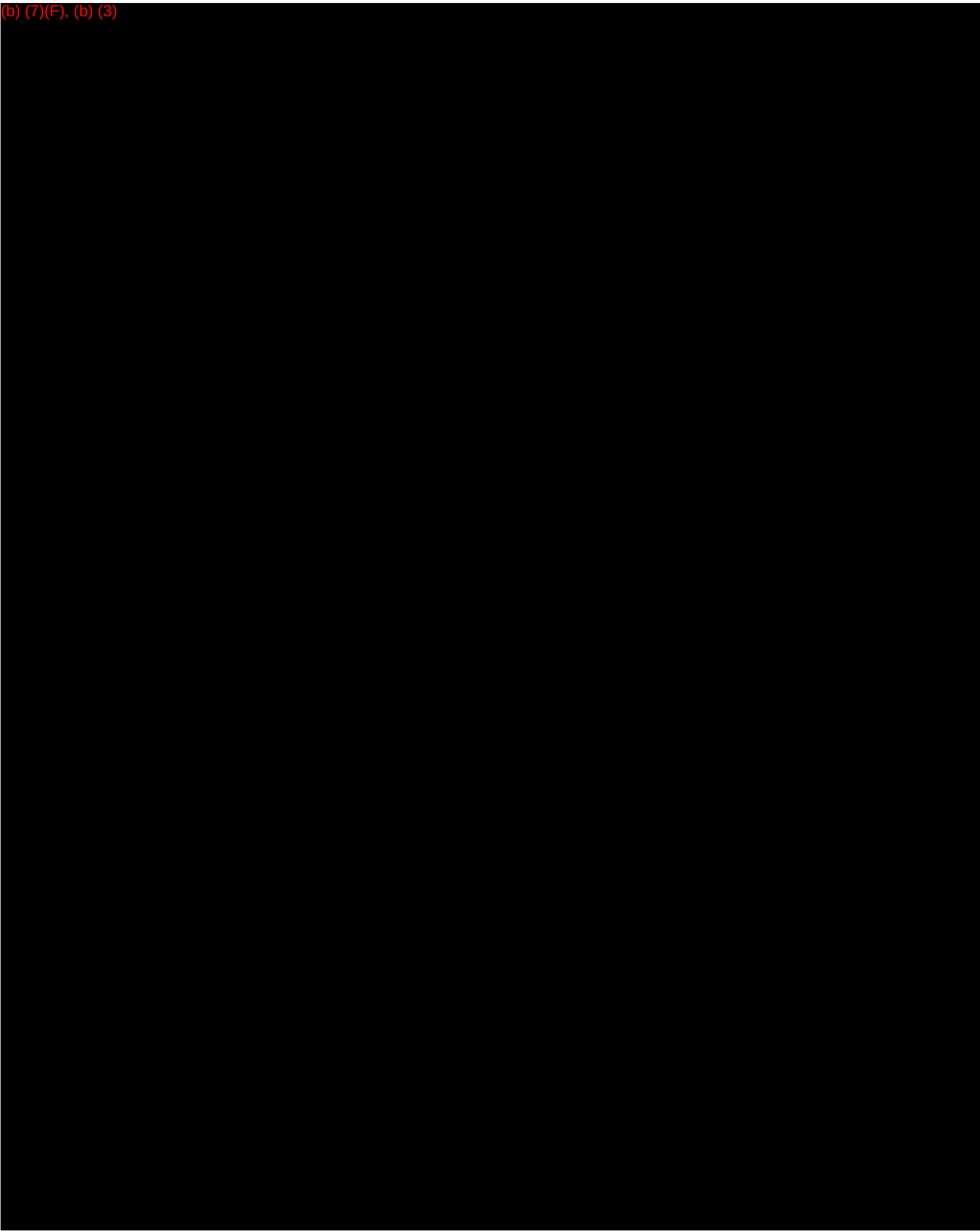
Highway 10 in Anoka to Route 7 N (Rum River Boulevard)
Turn West on 155th Ave
Turn South onto Kiowa Street

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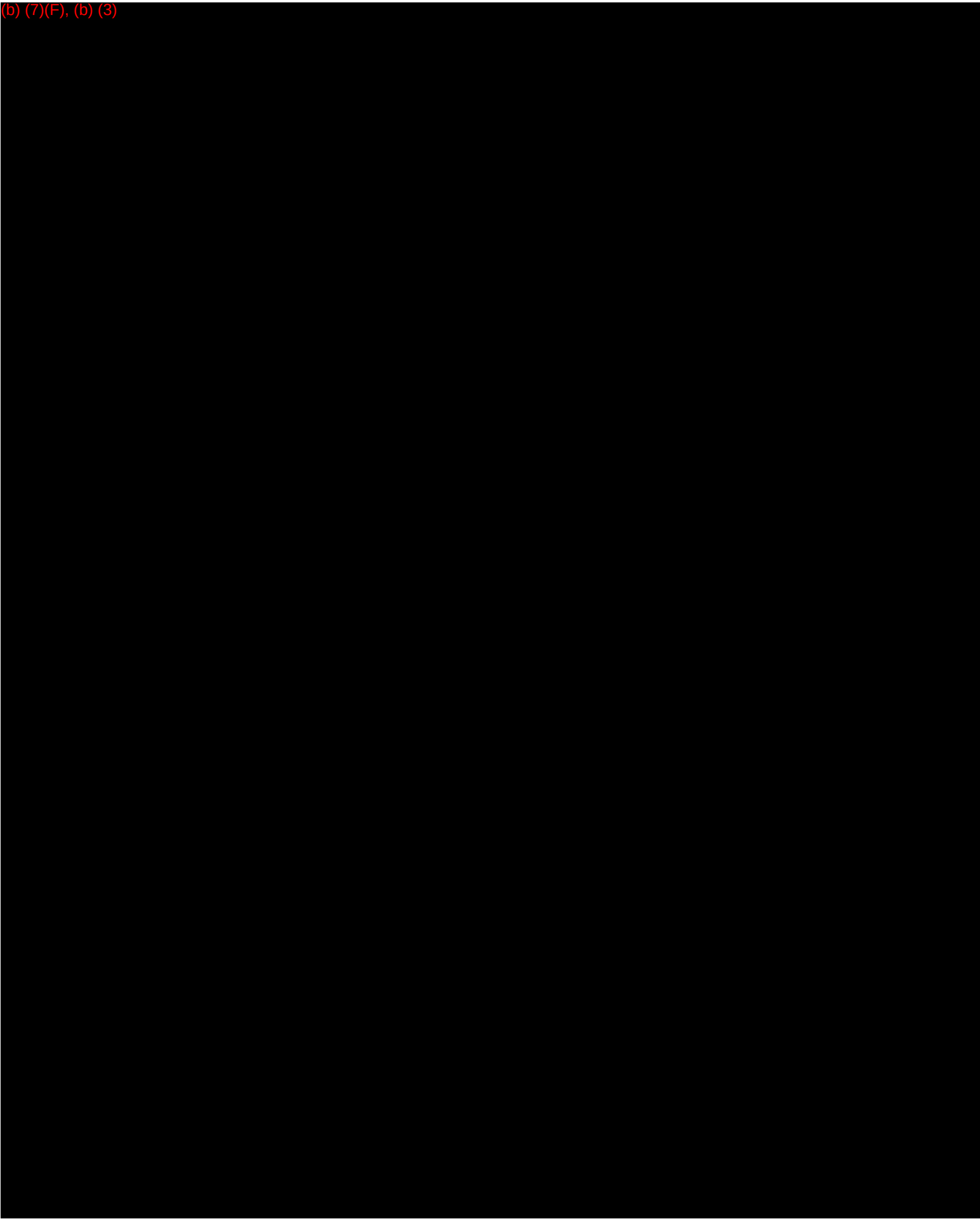

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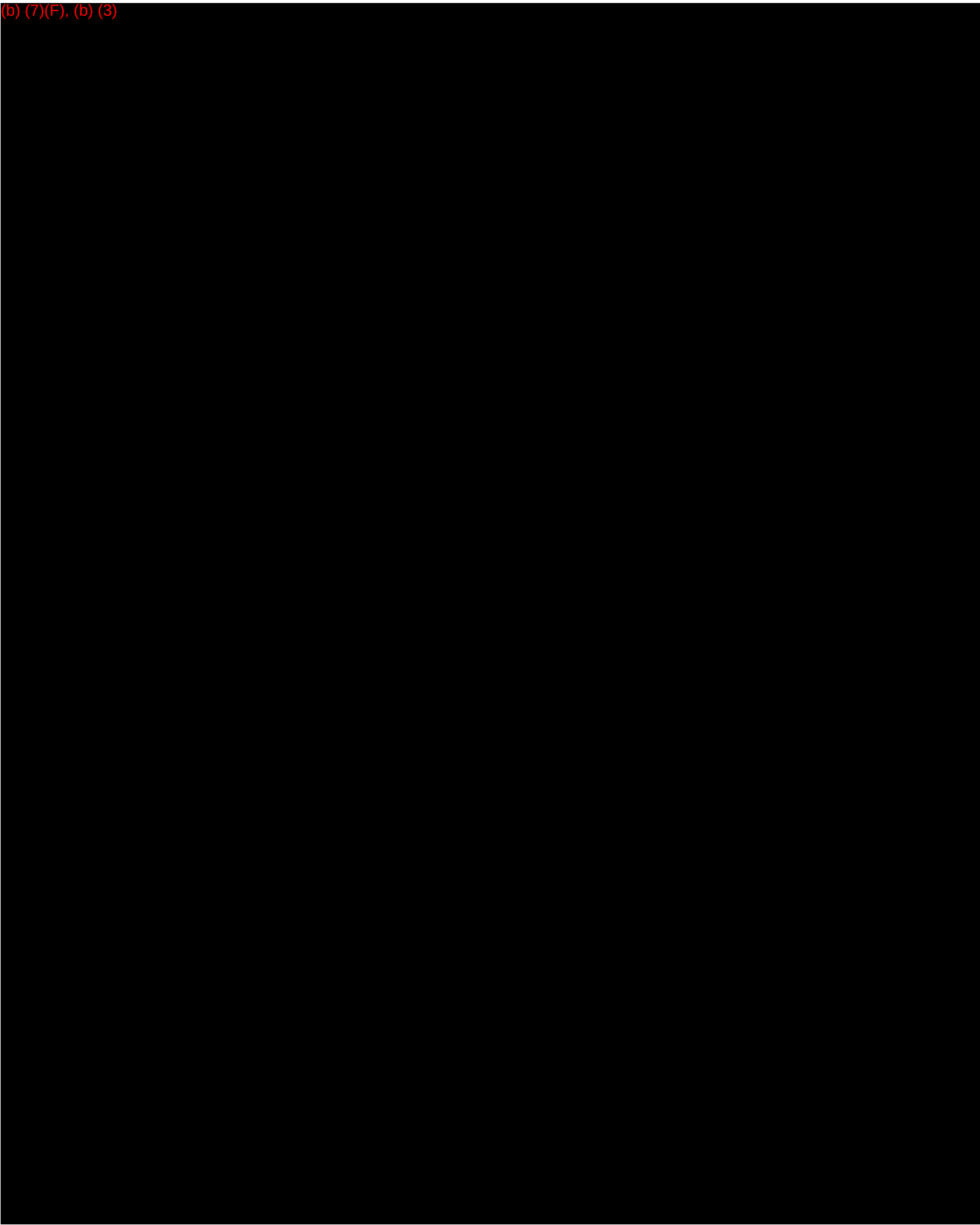
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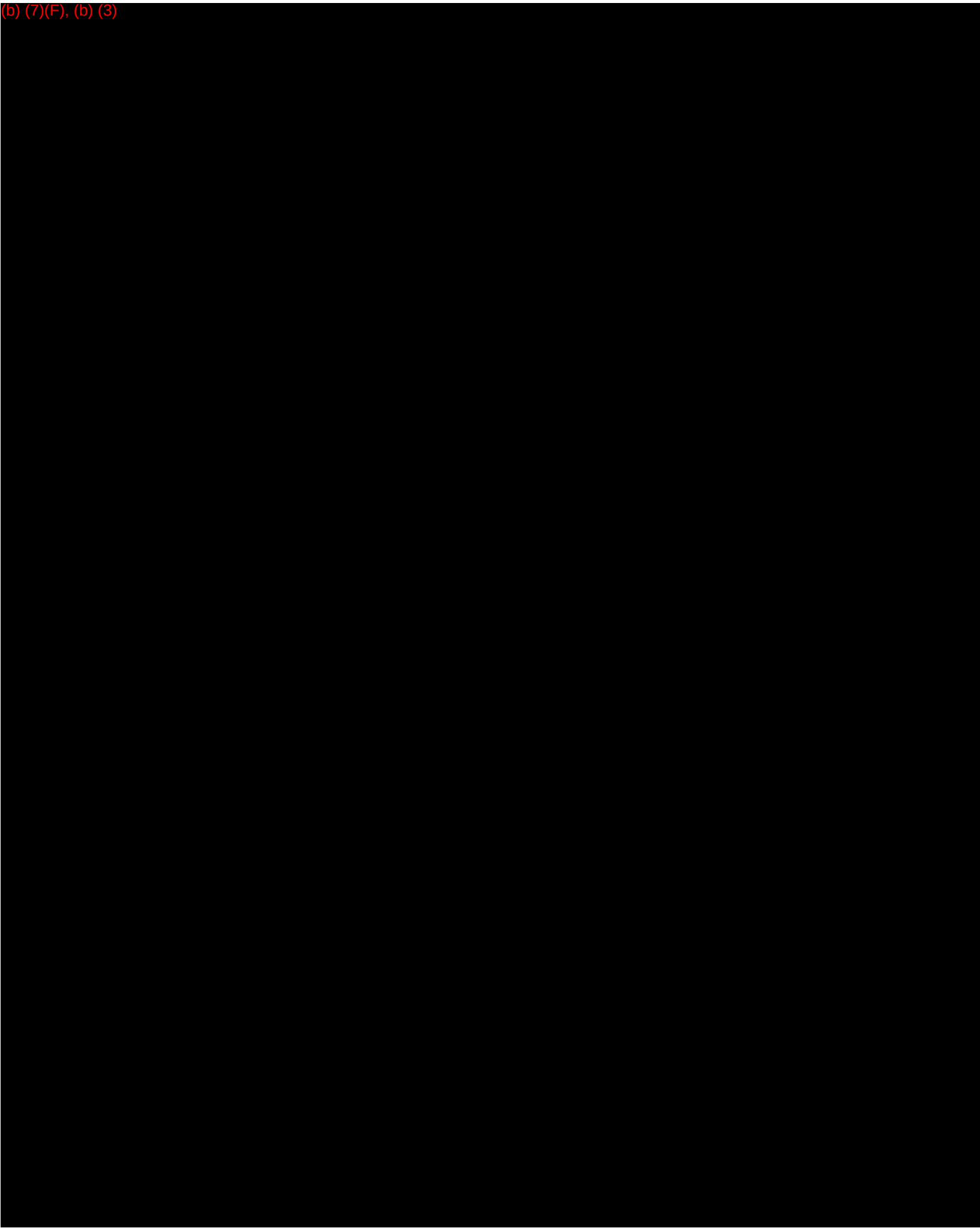


Open Zone Overview | Open Map 2 of 2 | Open River Overview

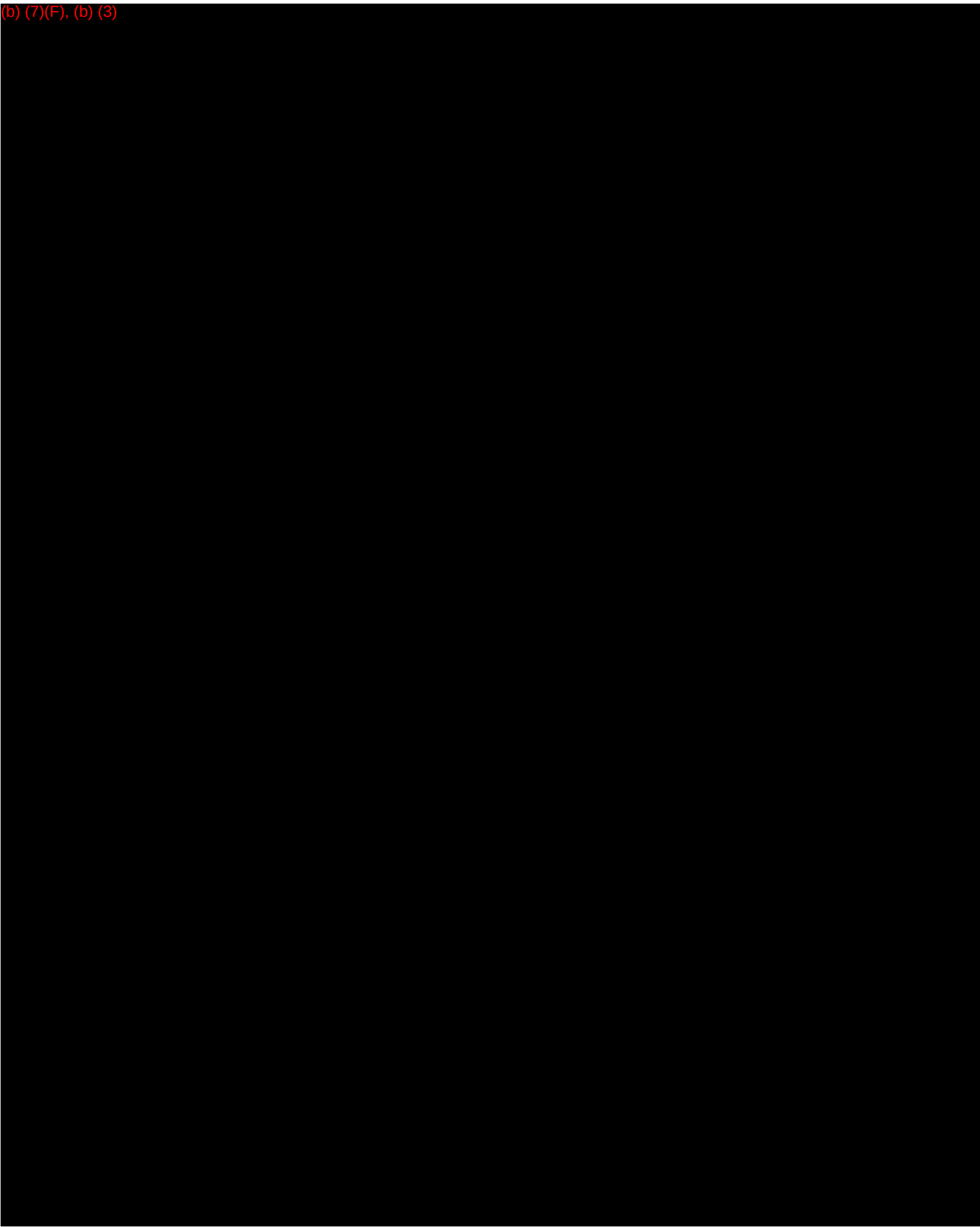
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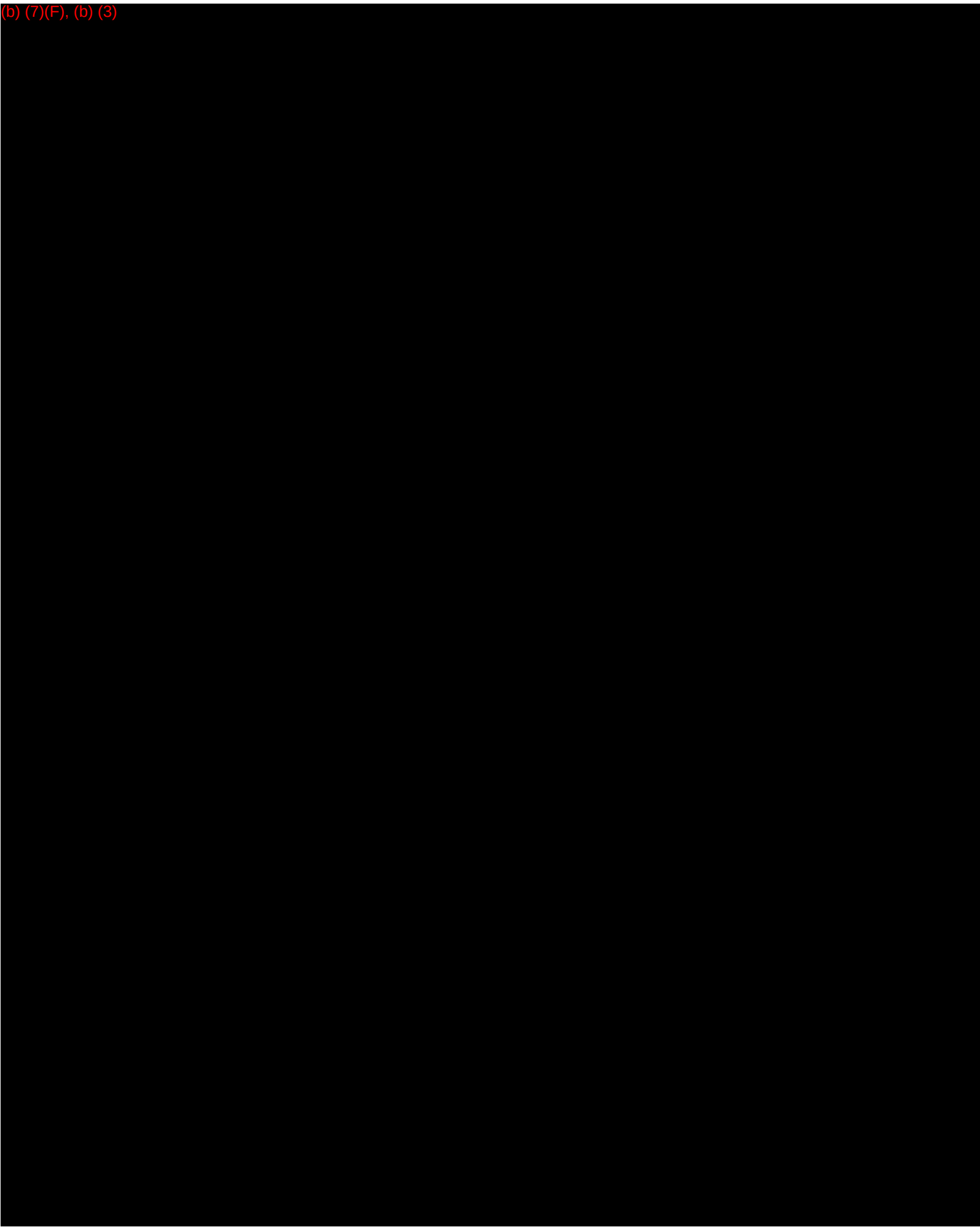


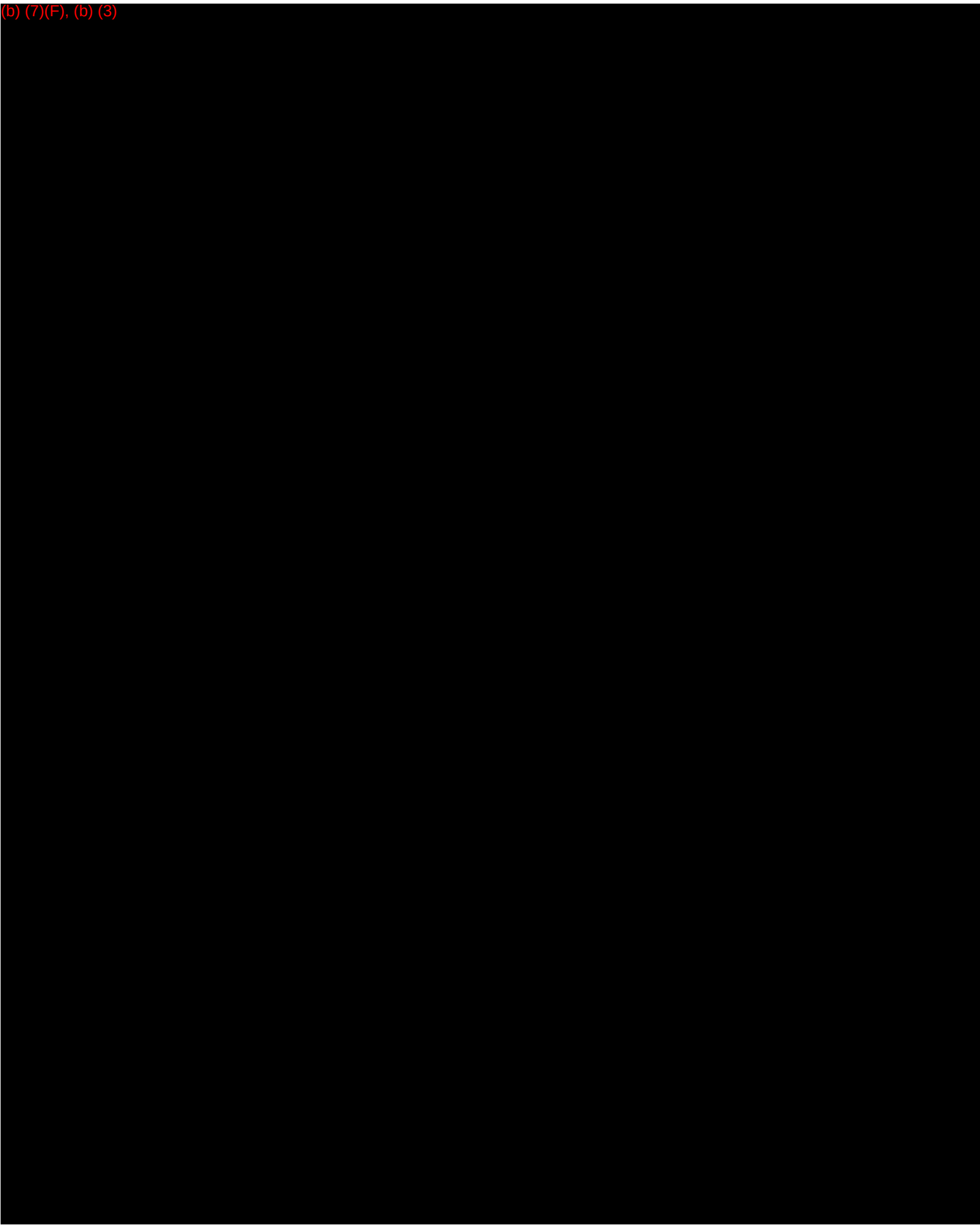

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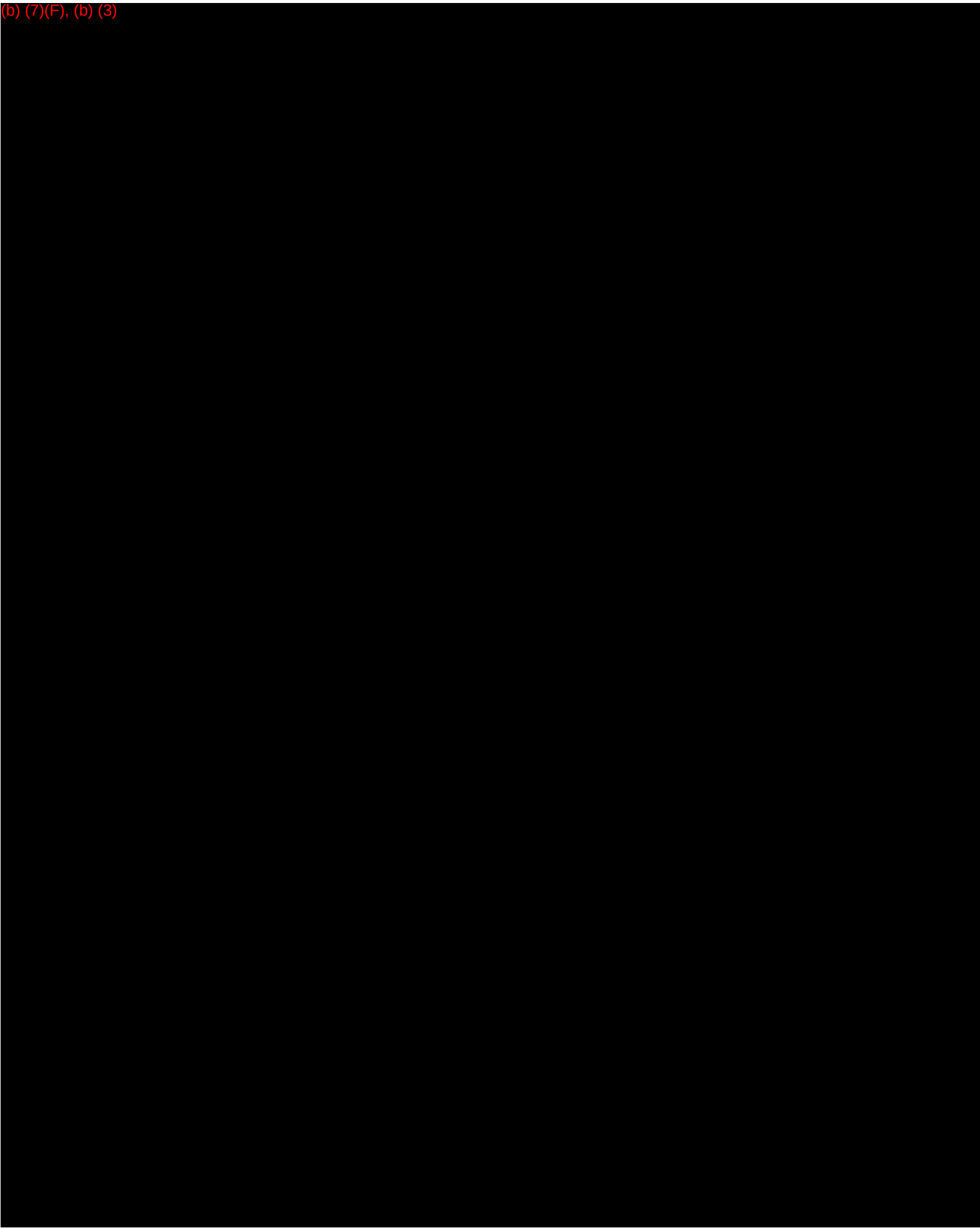

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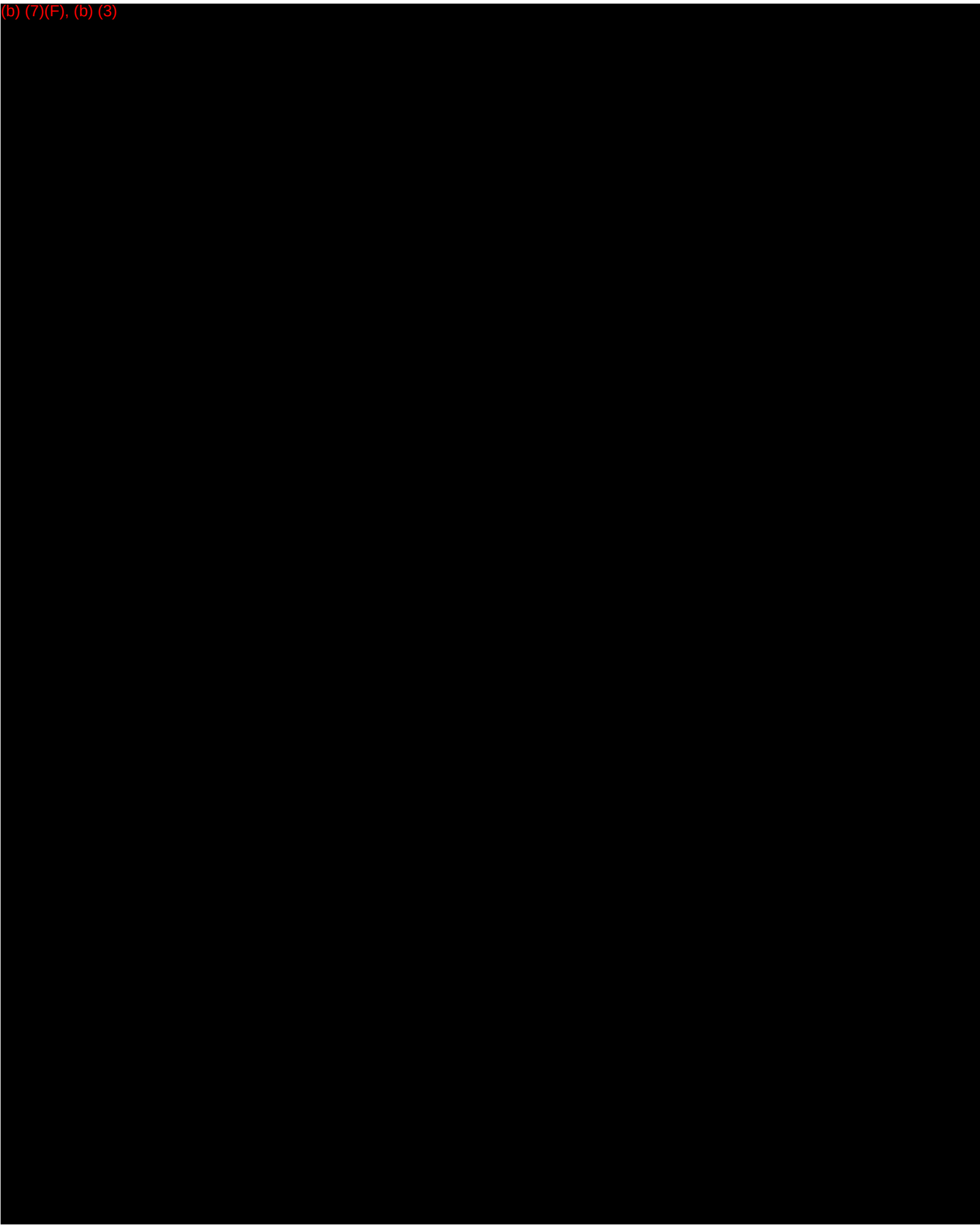
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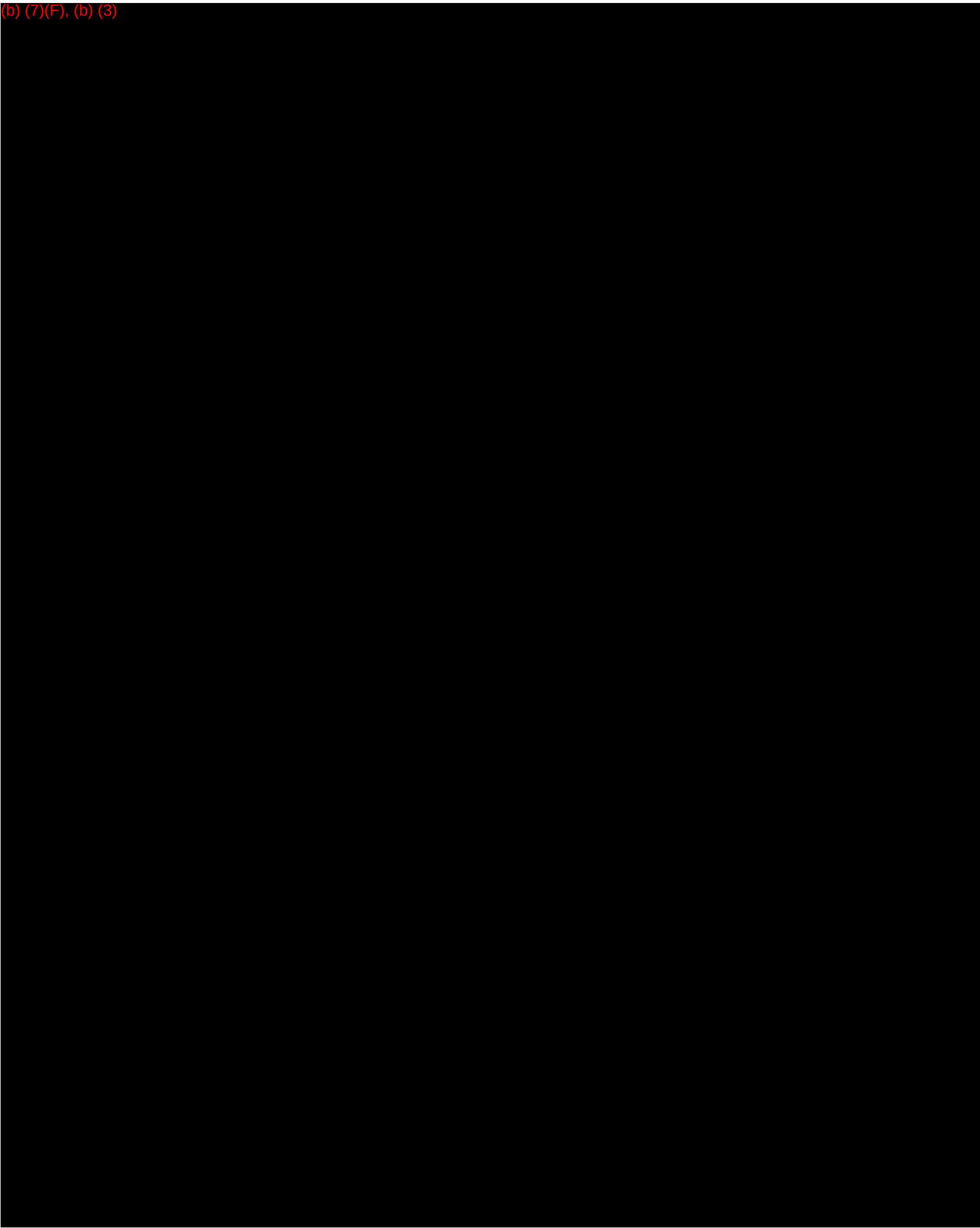

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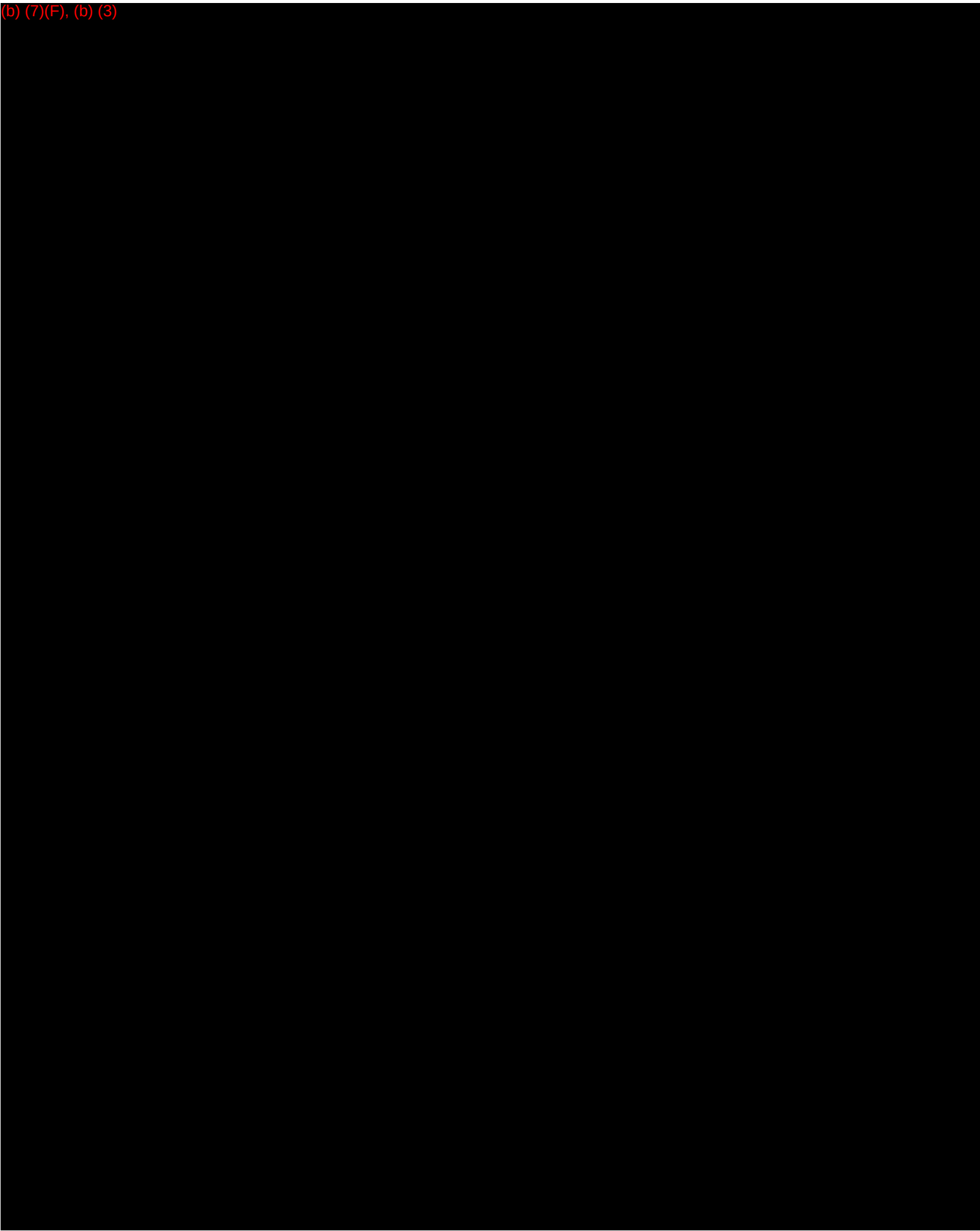

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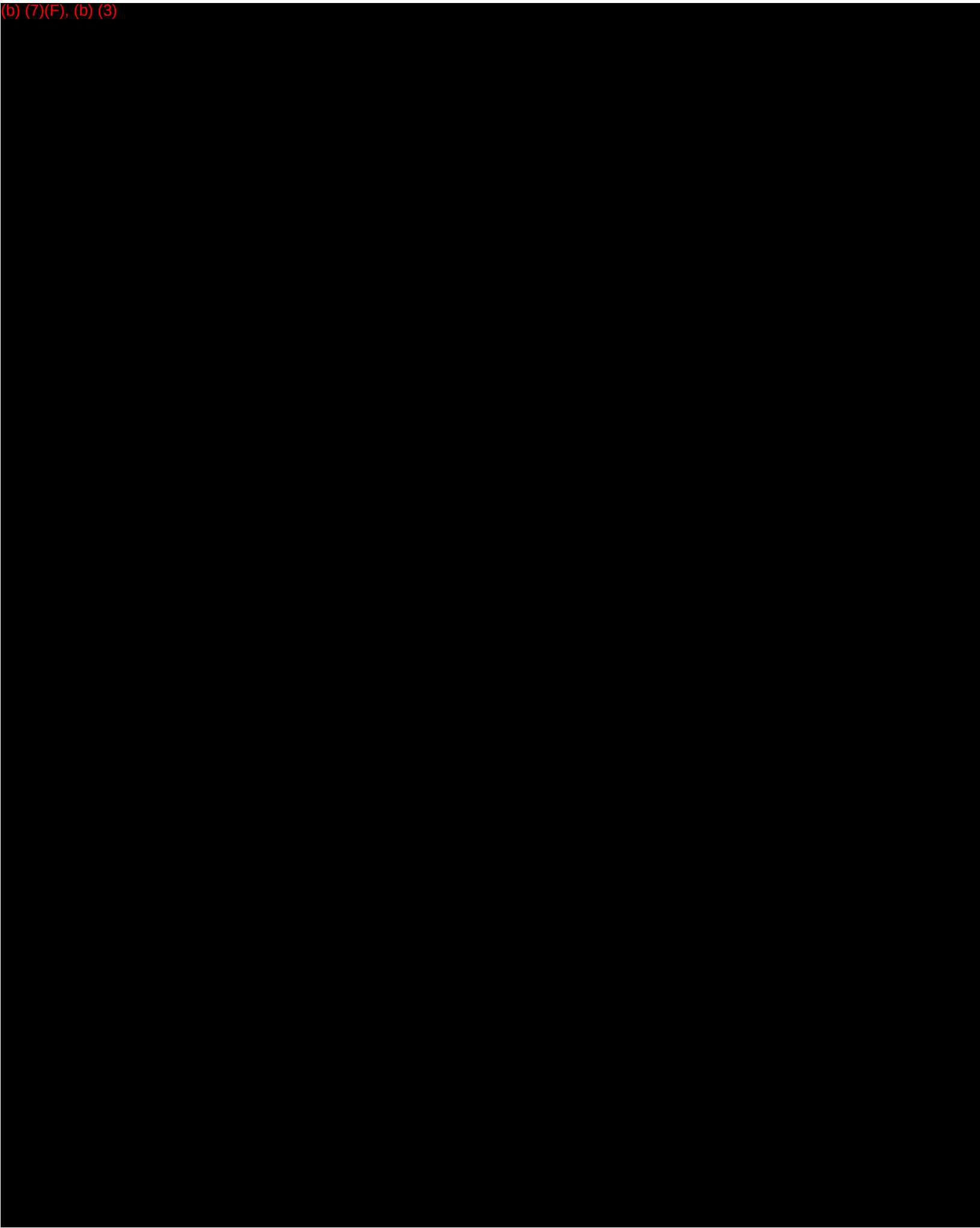
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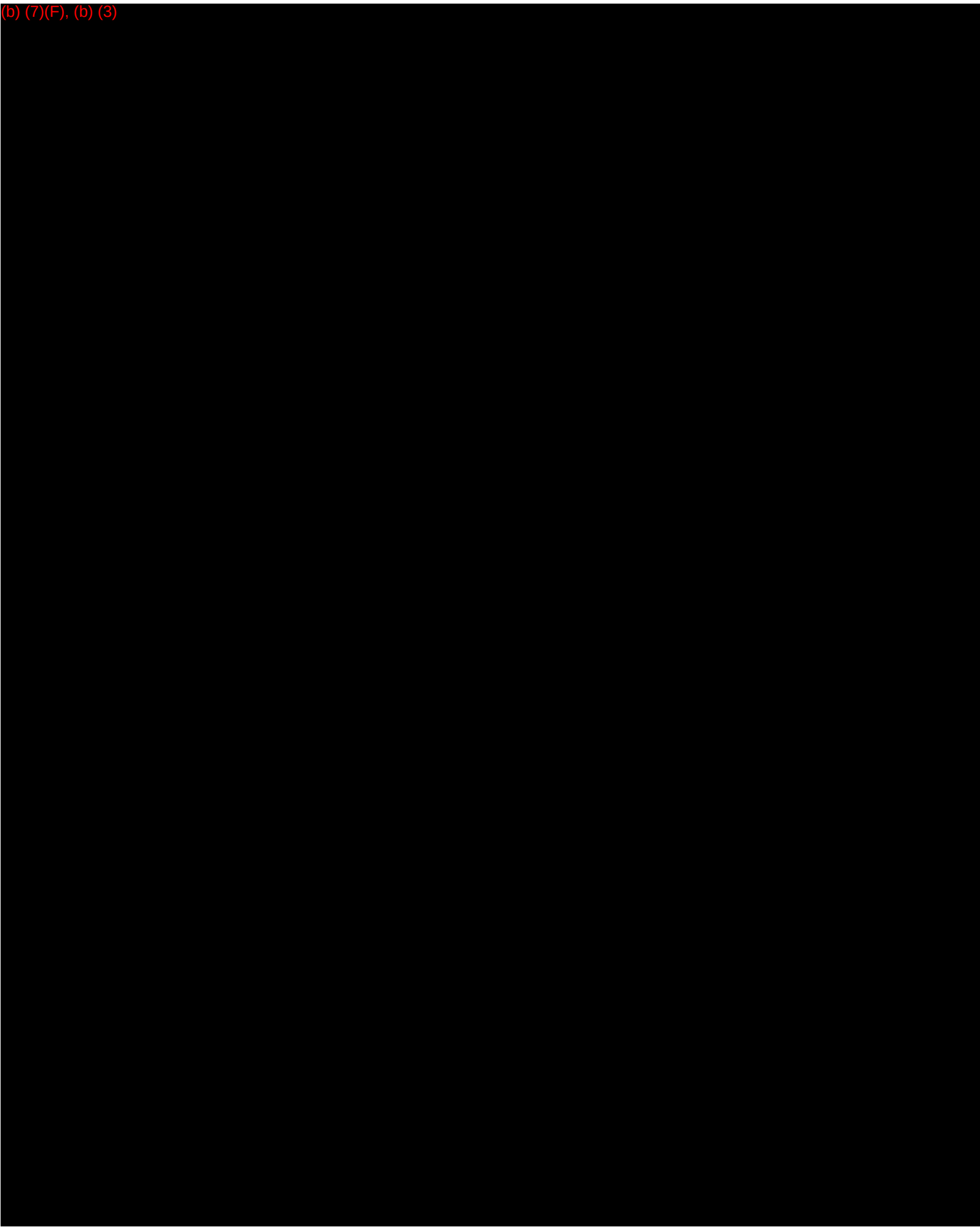


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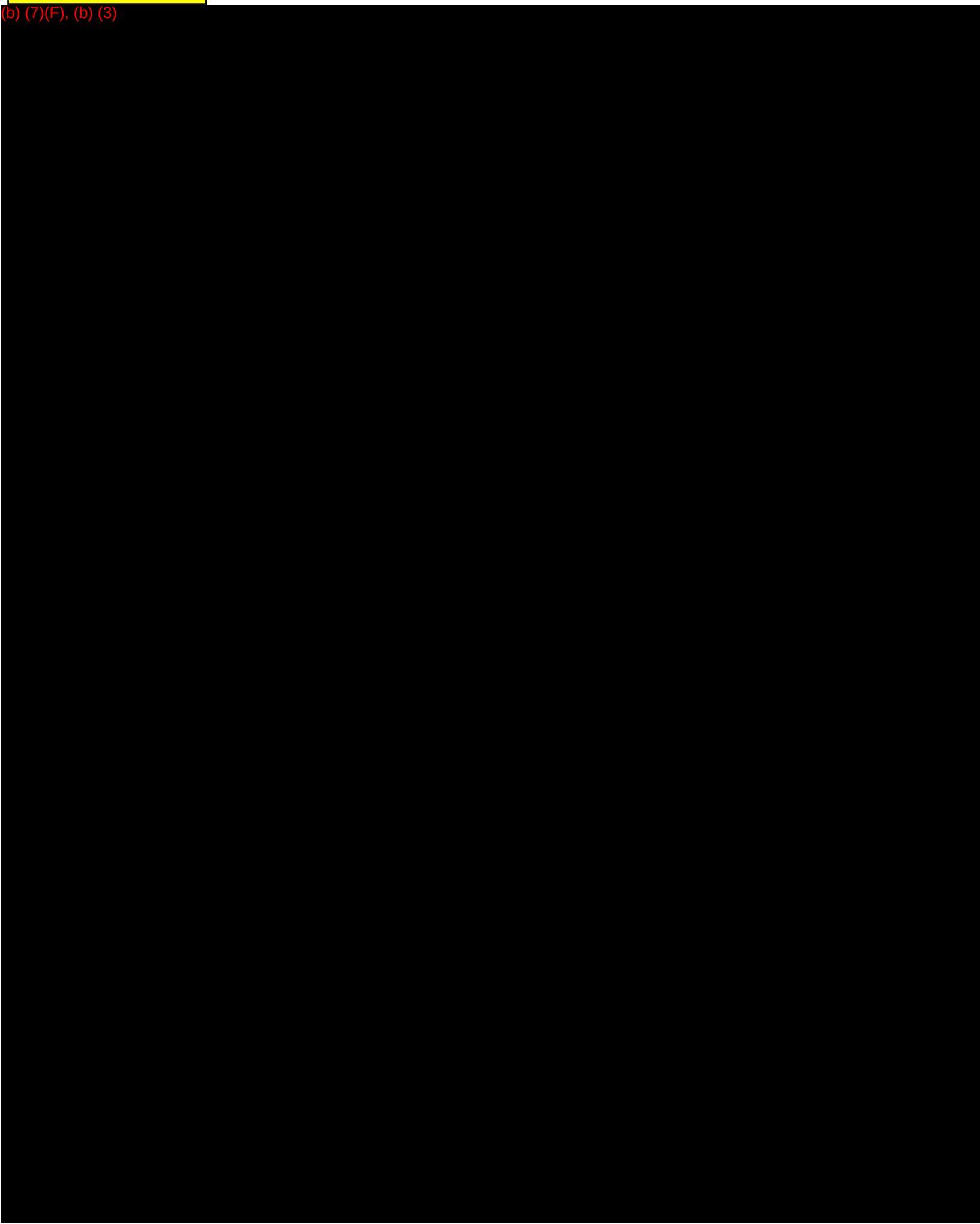
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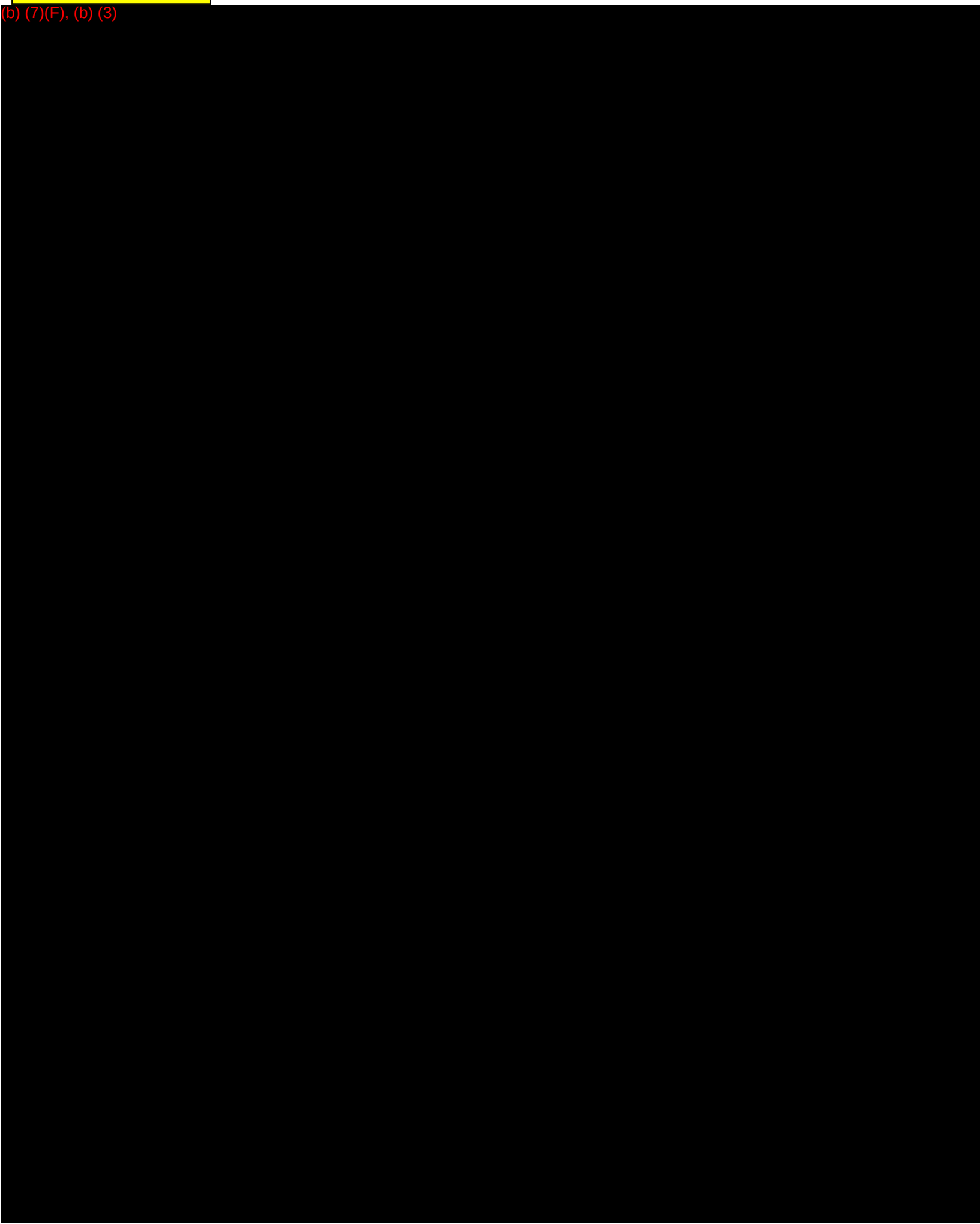
Open Zone Overview

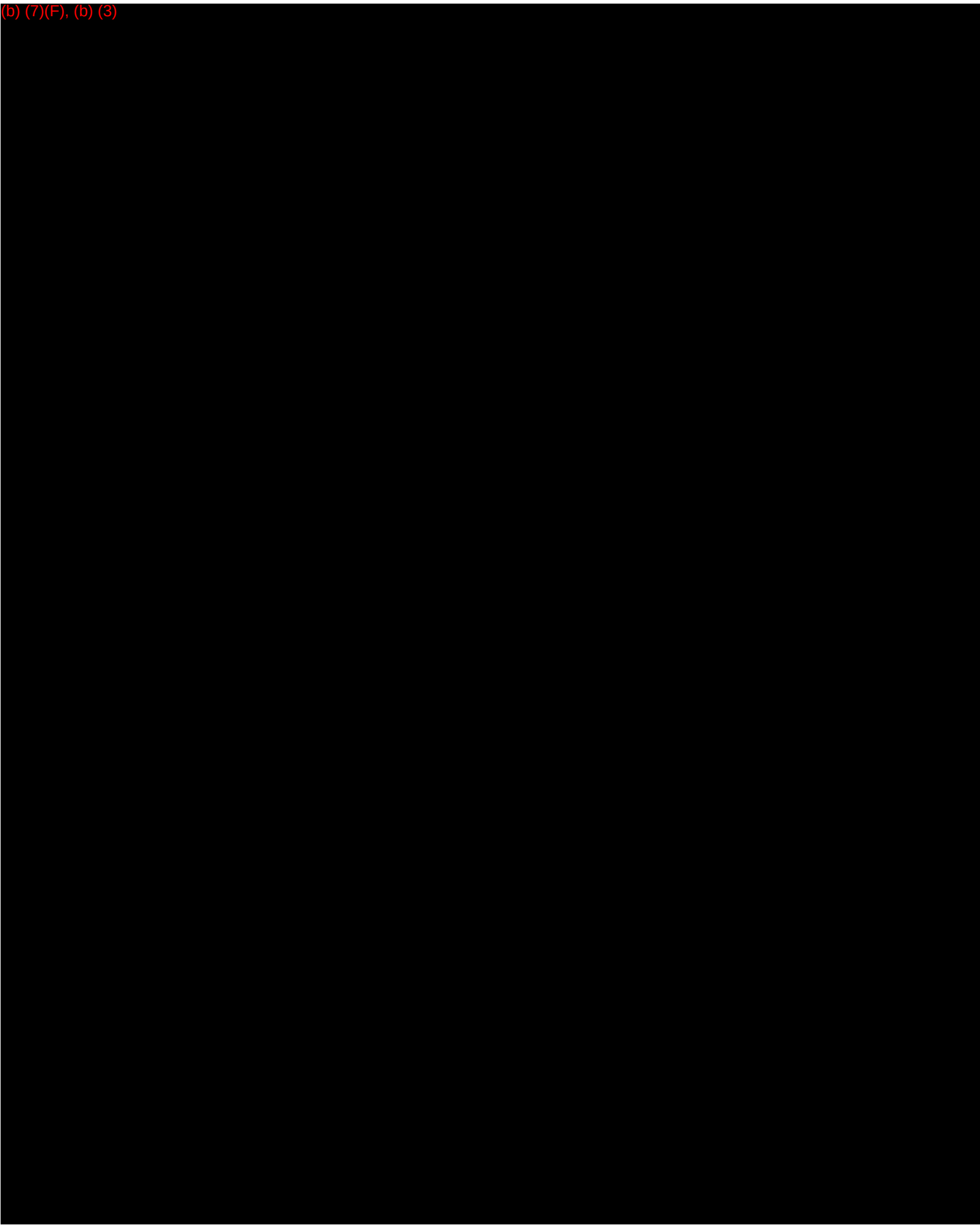
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Open Zone Overview

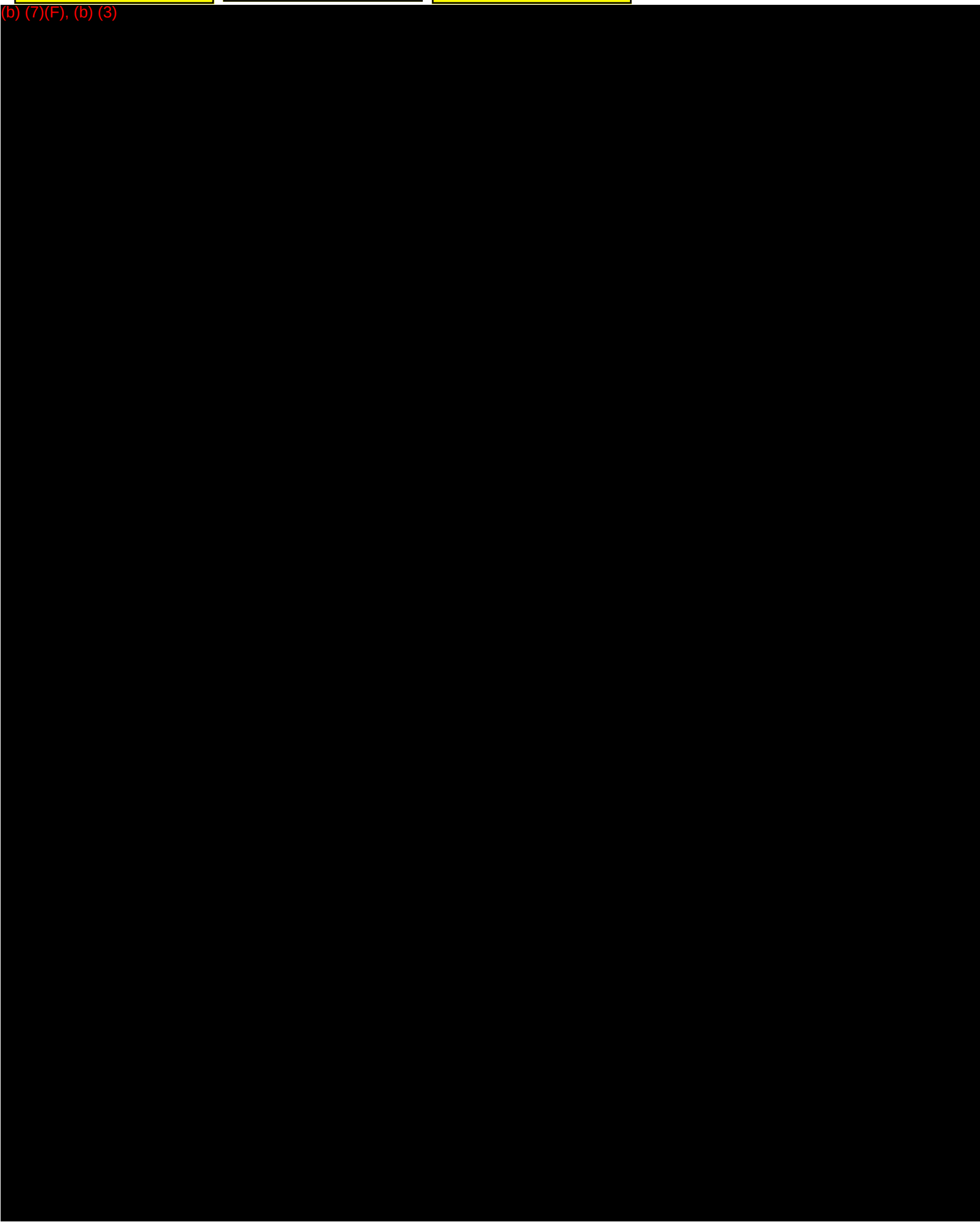
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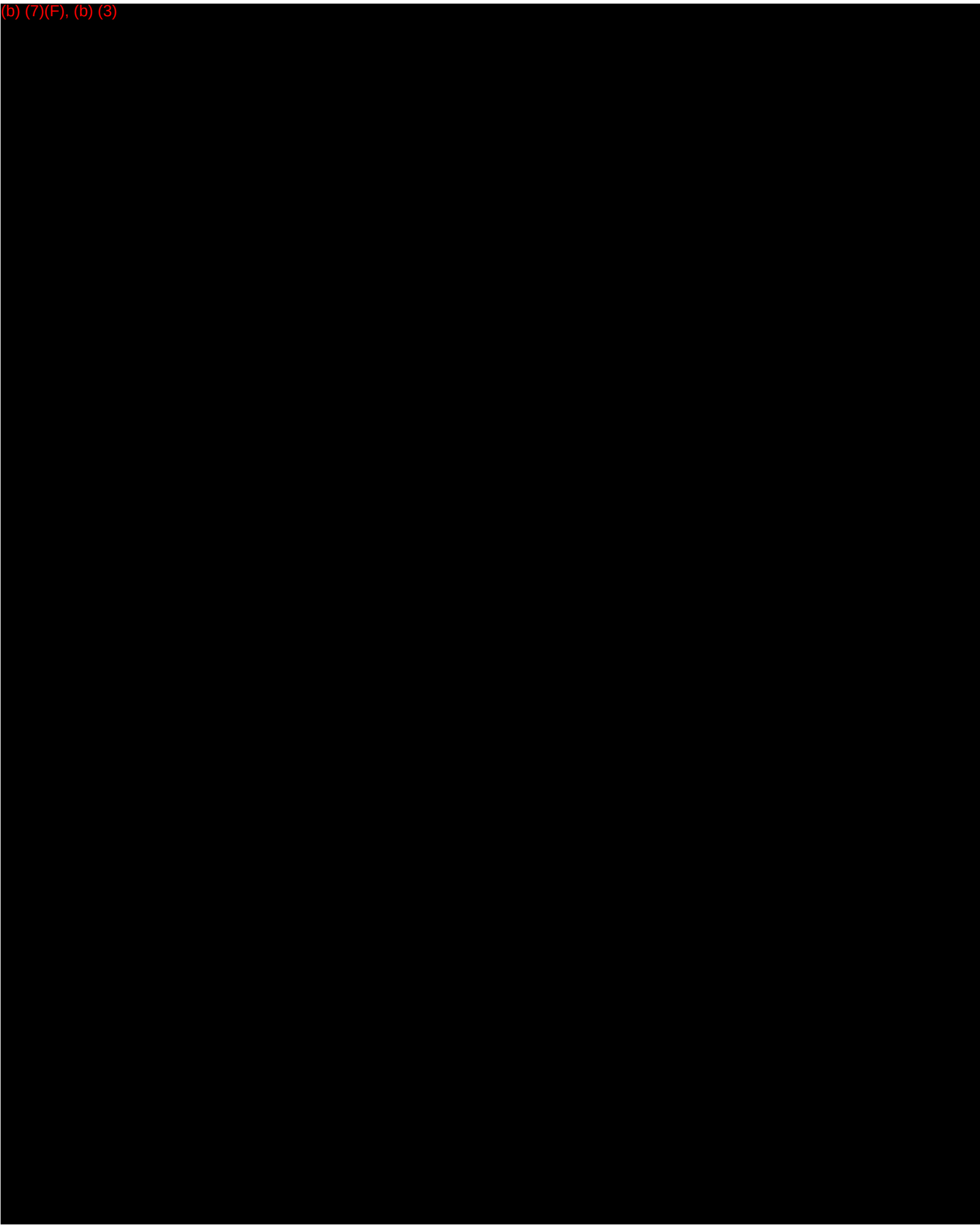



(b) (7)(F), (b) (3)

Open Zone Overview | Open Map 2 of 3 | Open River Overview

(b) (7)(F), (b) (3)




(b) (7)(F), (b) (3)

Open Zone Overview | Open River Overview

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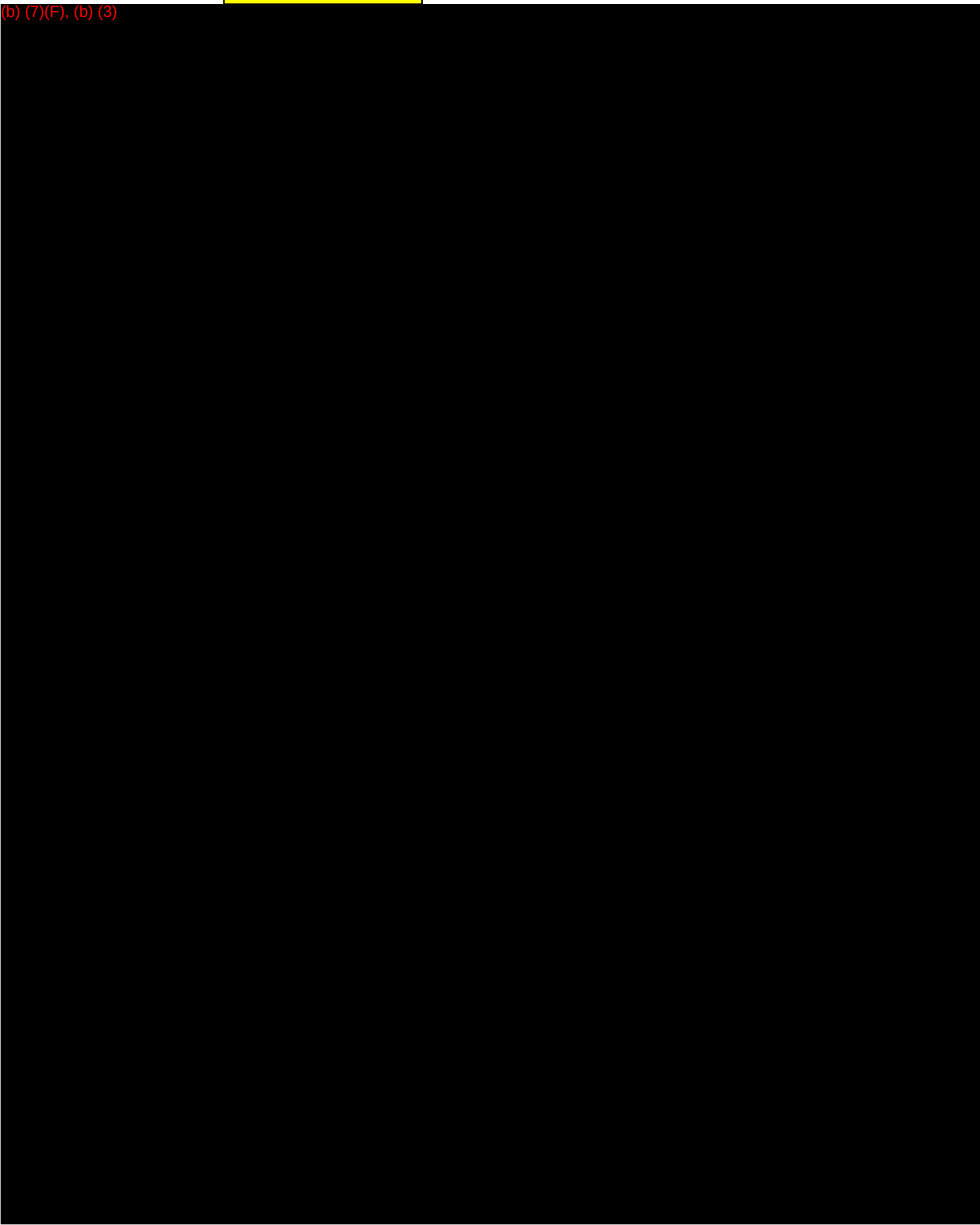
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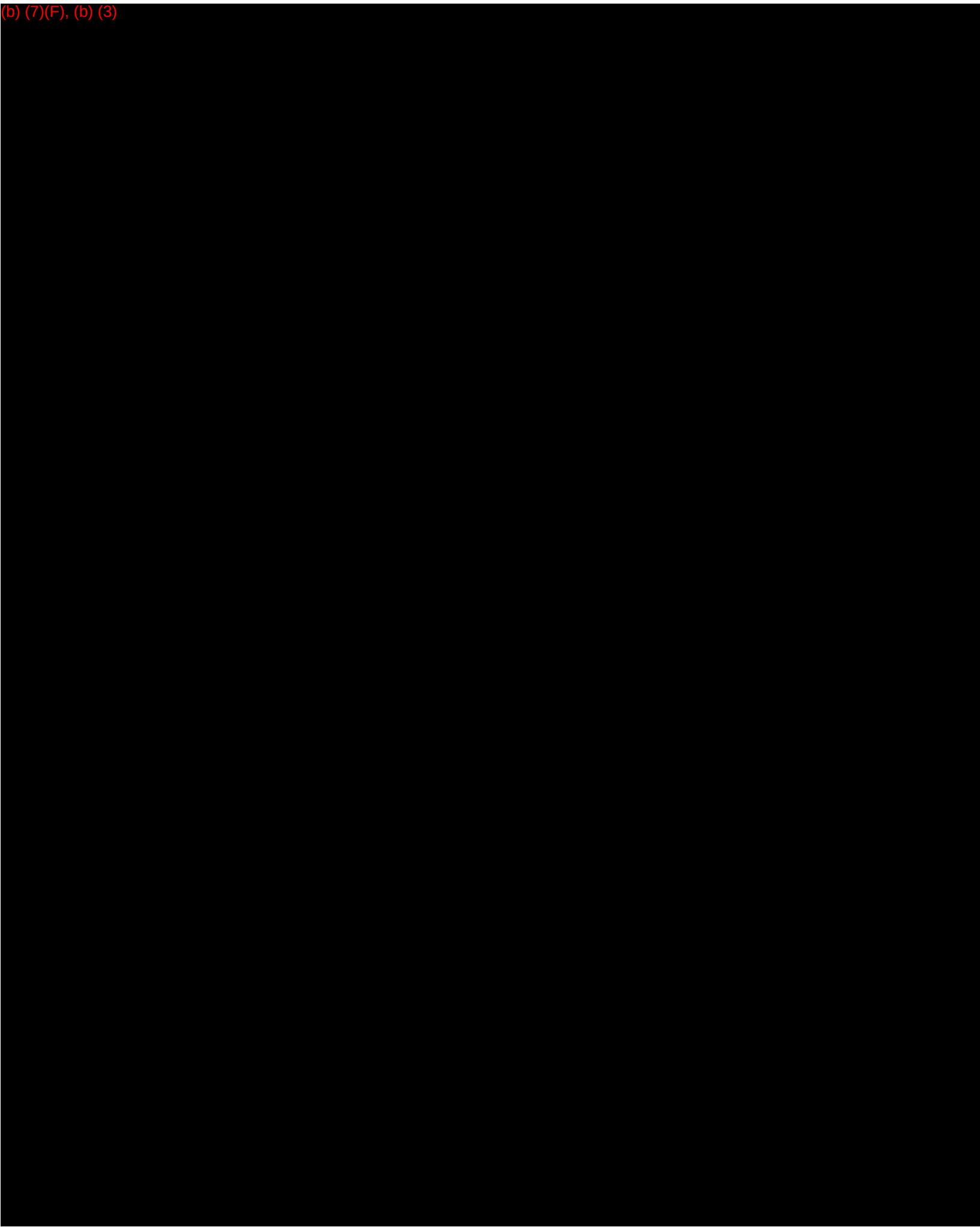
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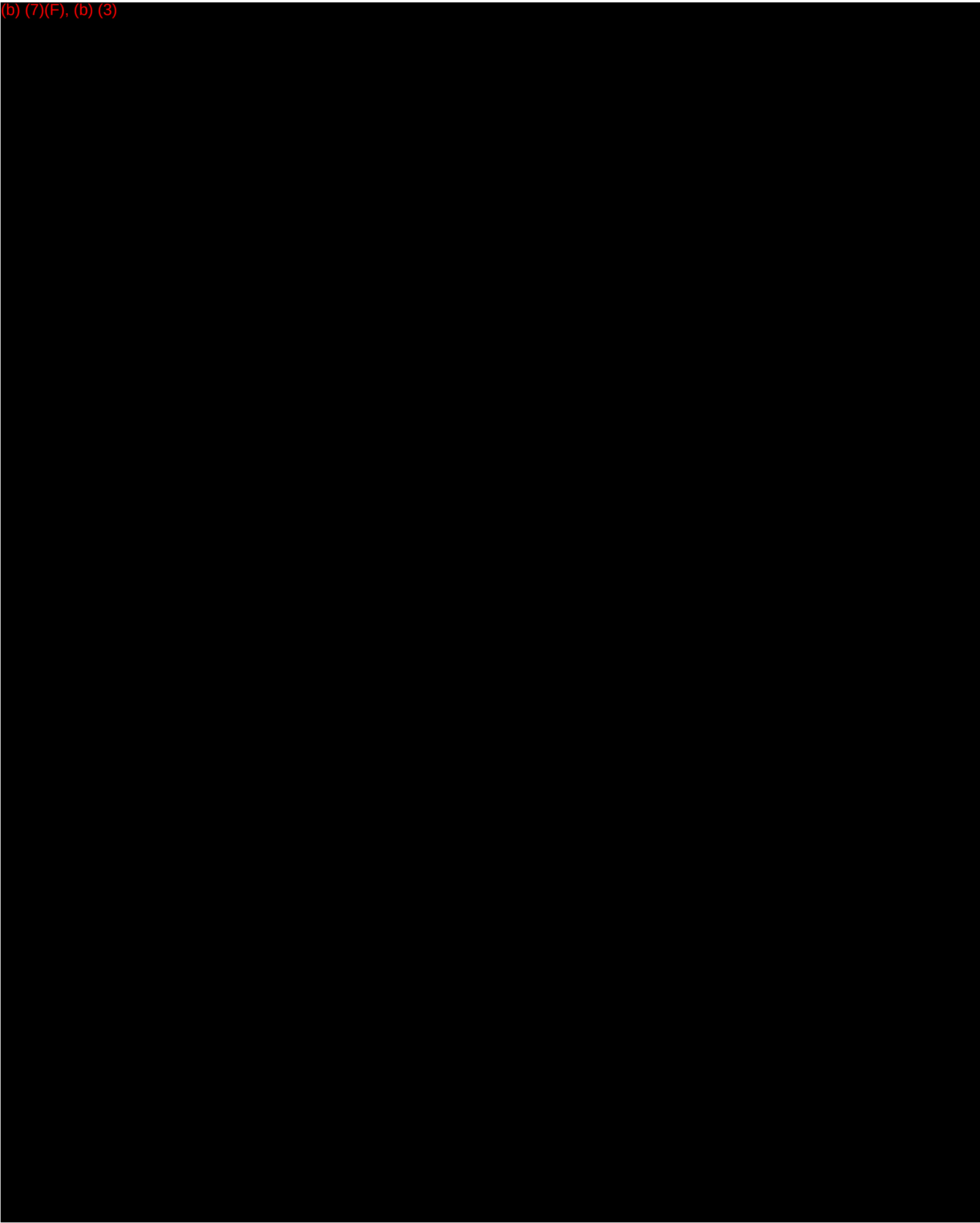
Open Map 2 of 3

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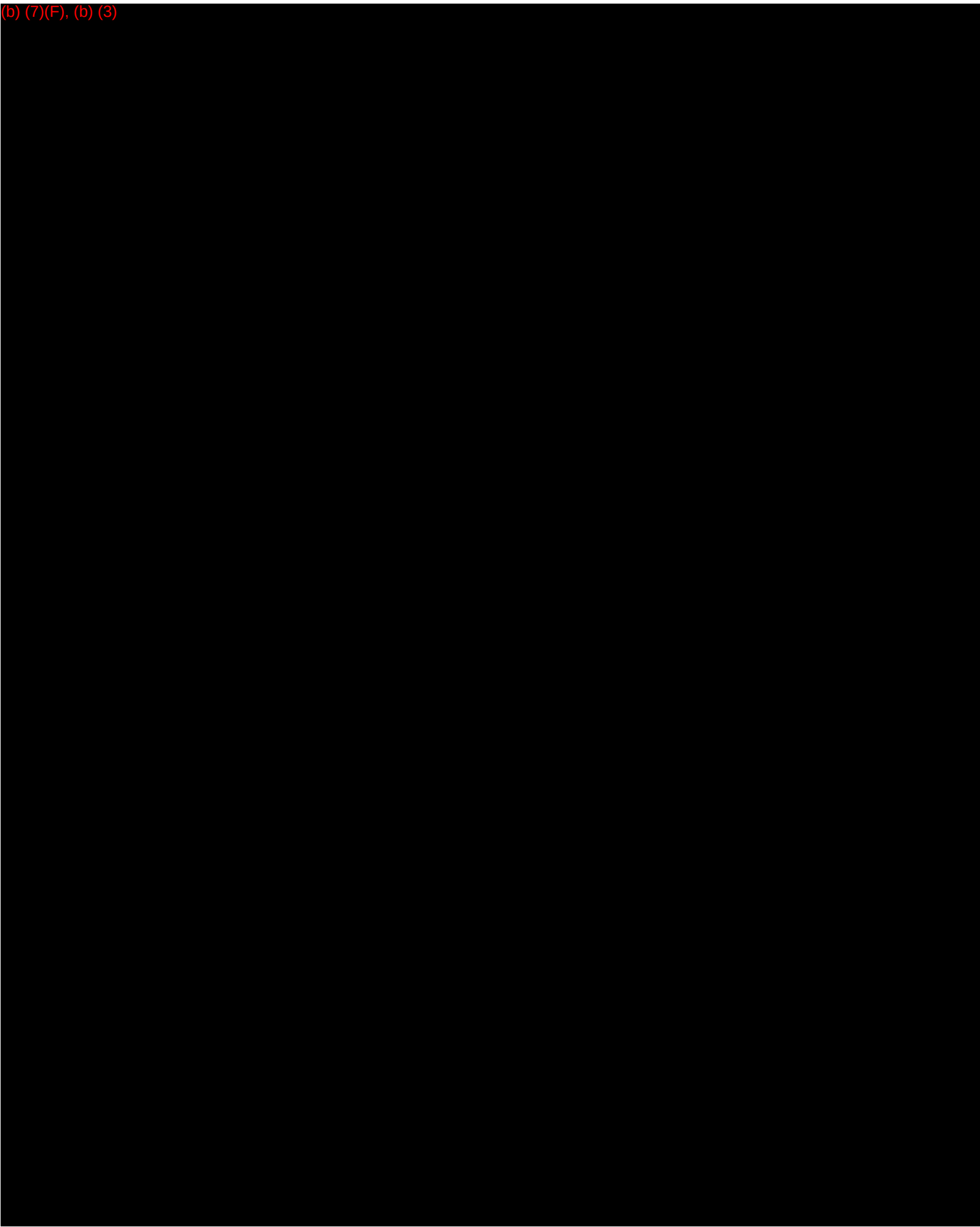
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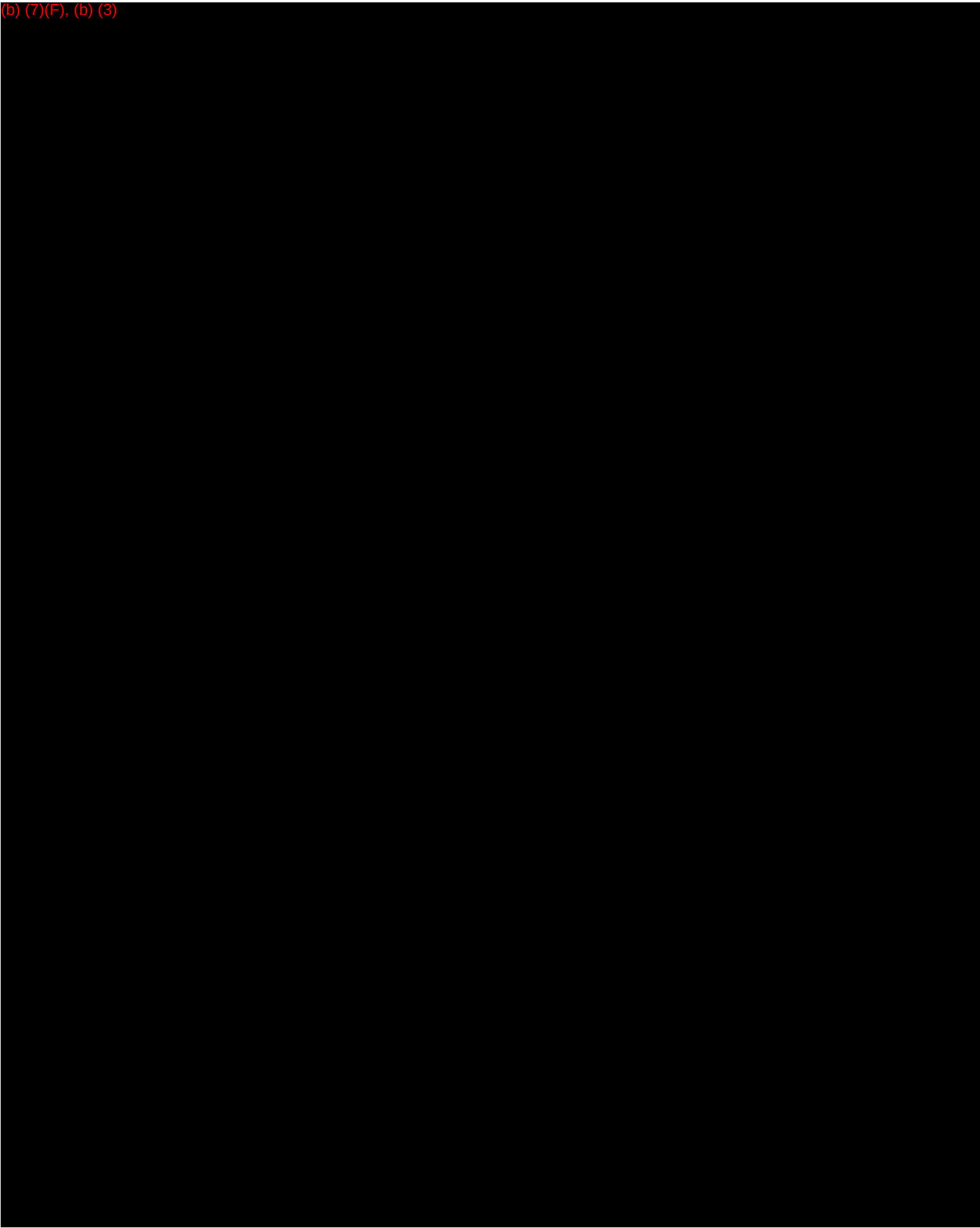



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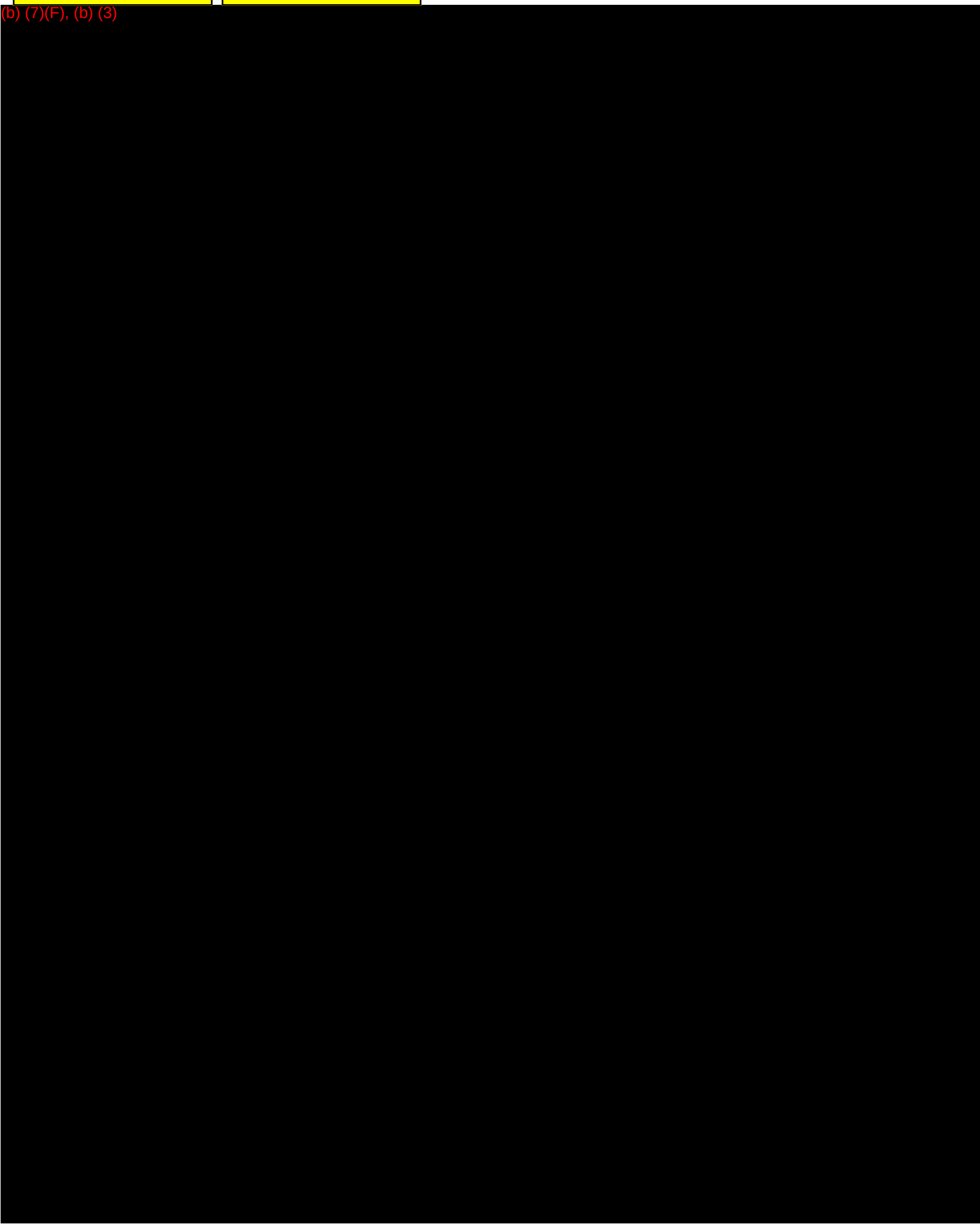
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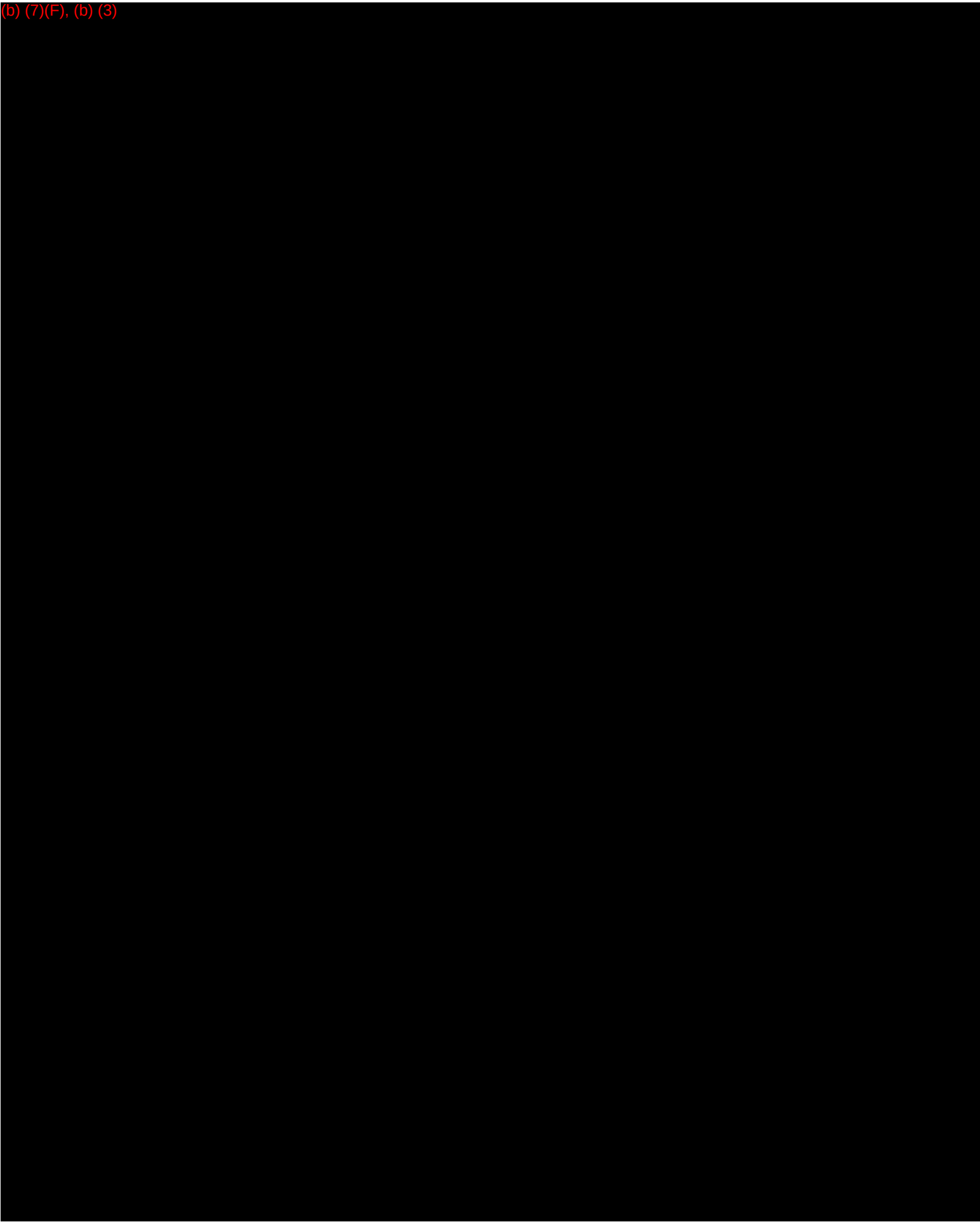

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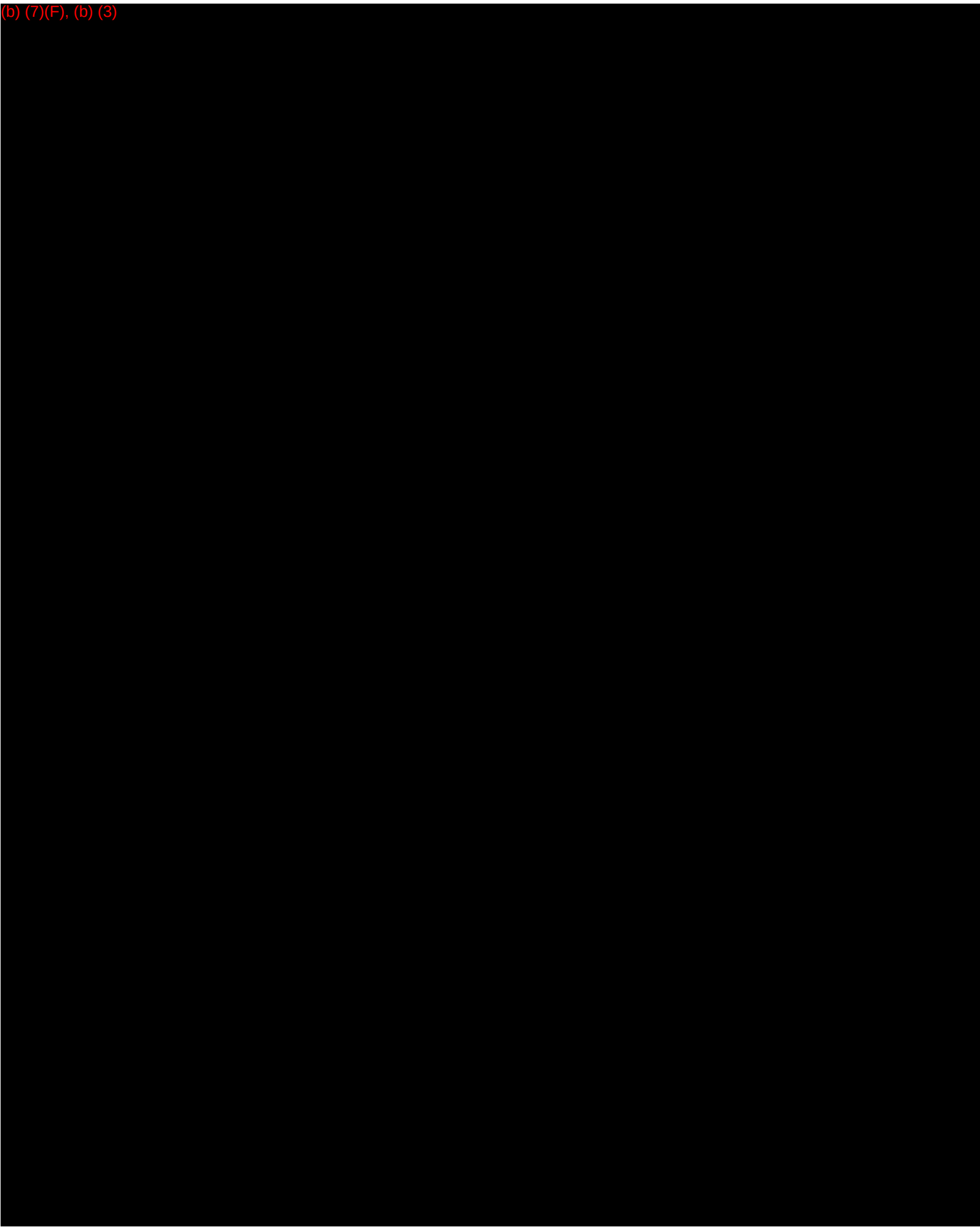
Open Zone Overview | Open River Overview

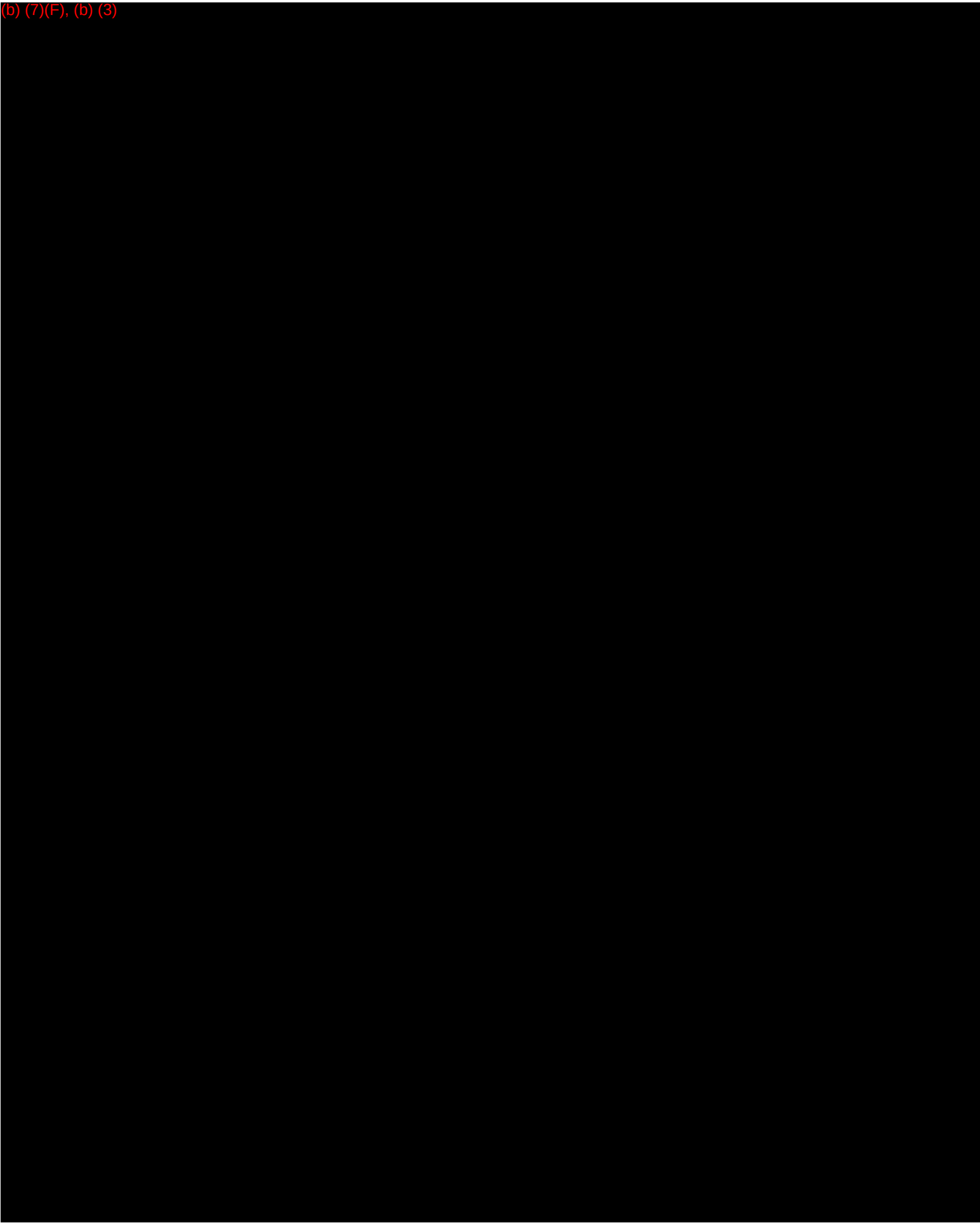
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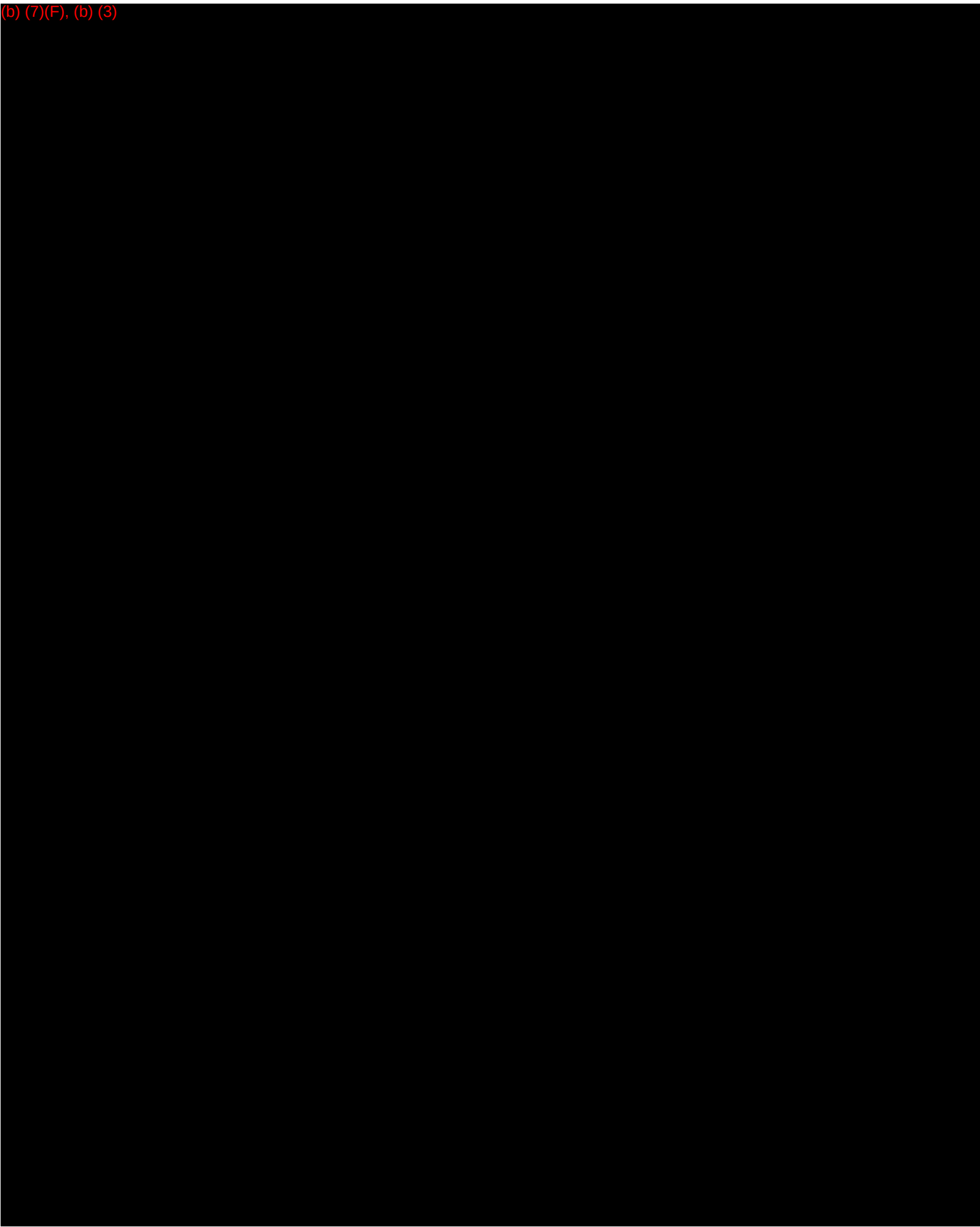
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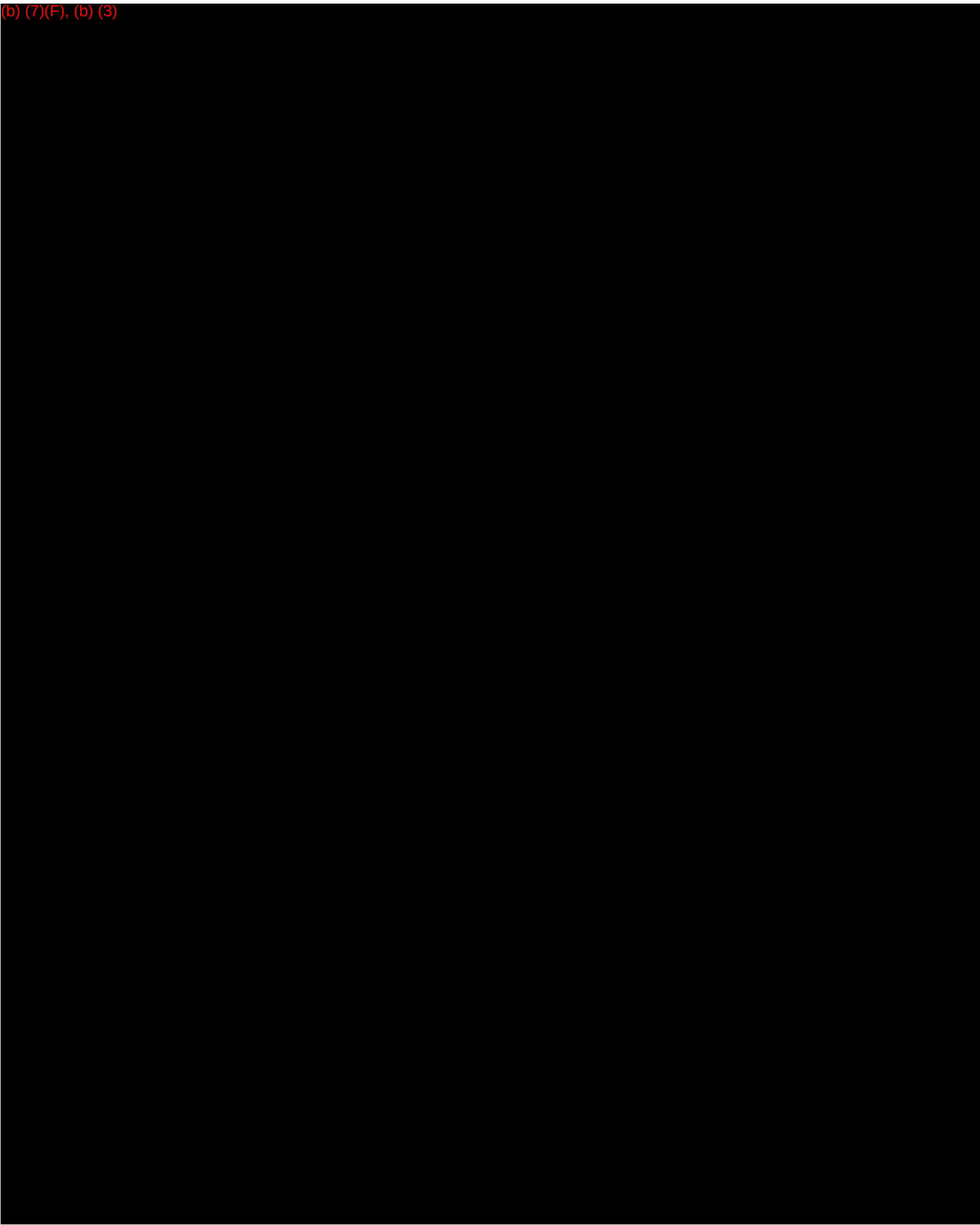



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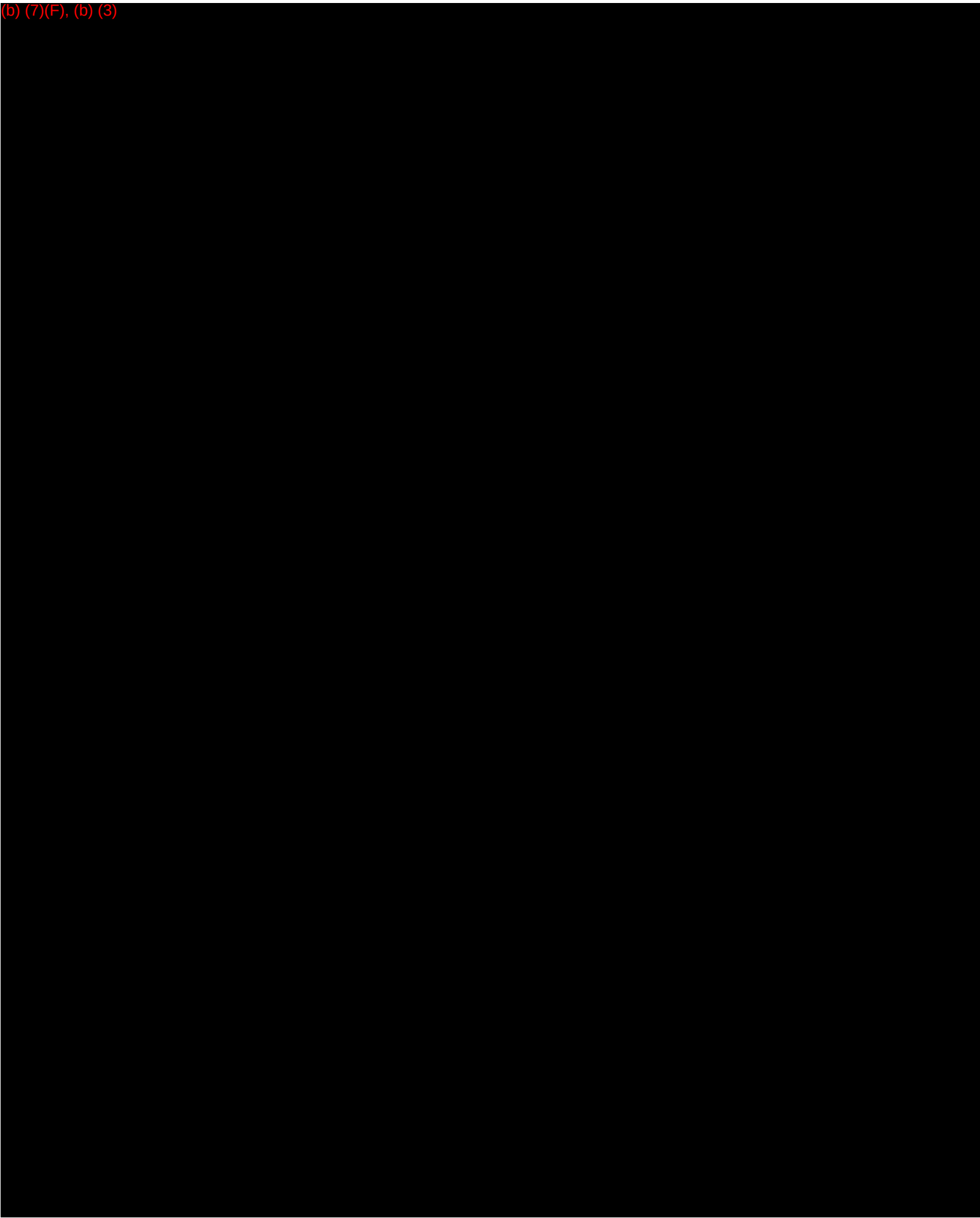


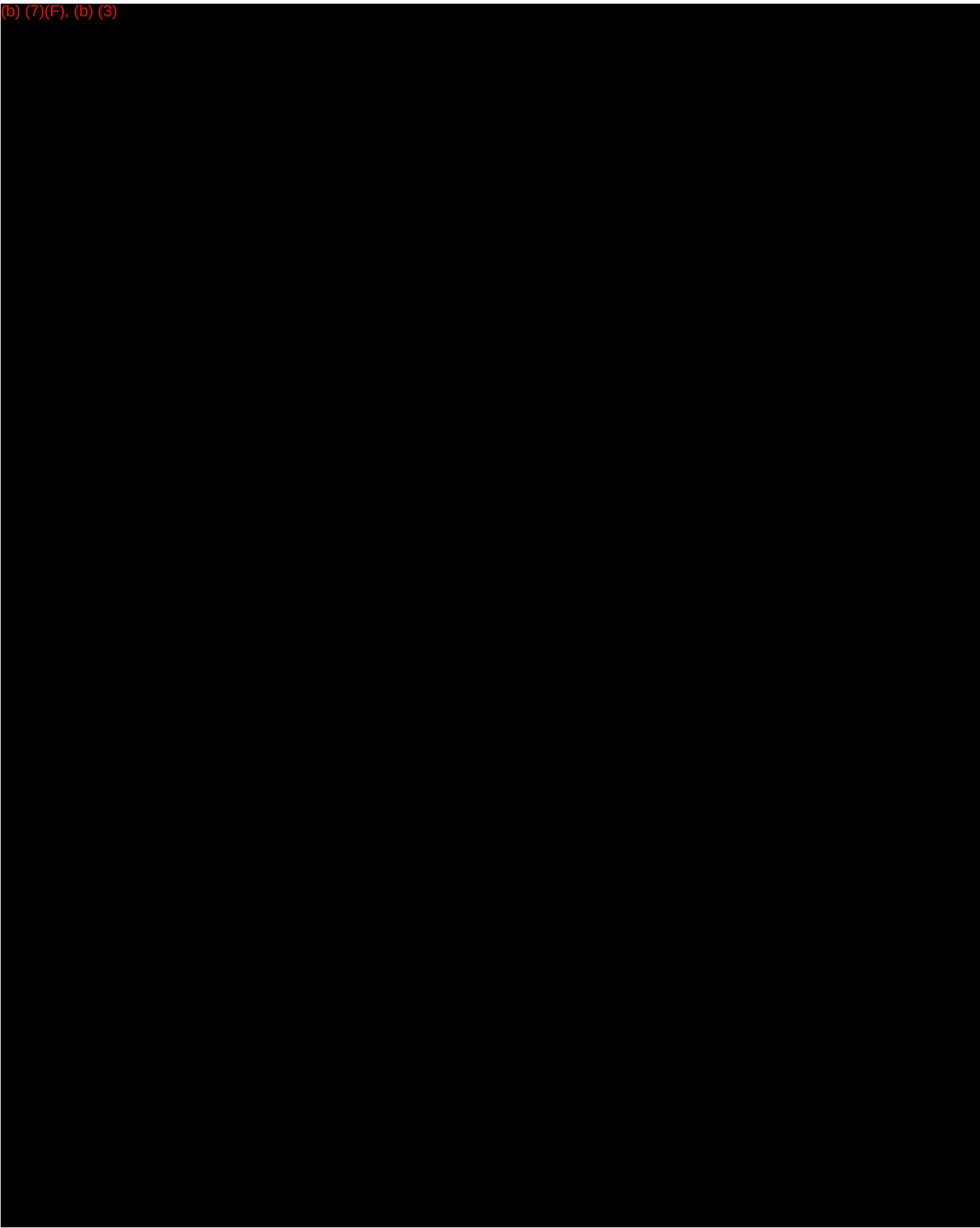

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Open Zone Overview | Open River Overview

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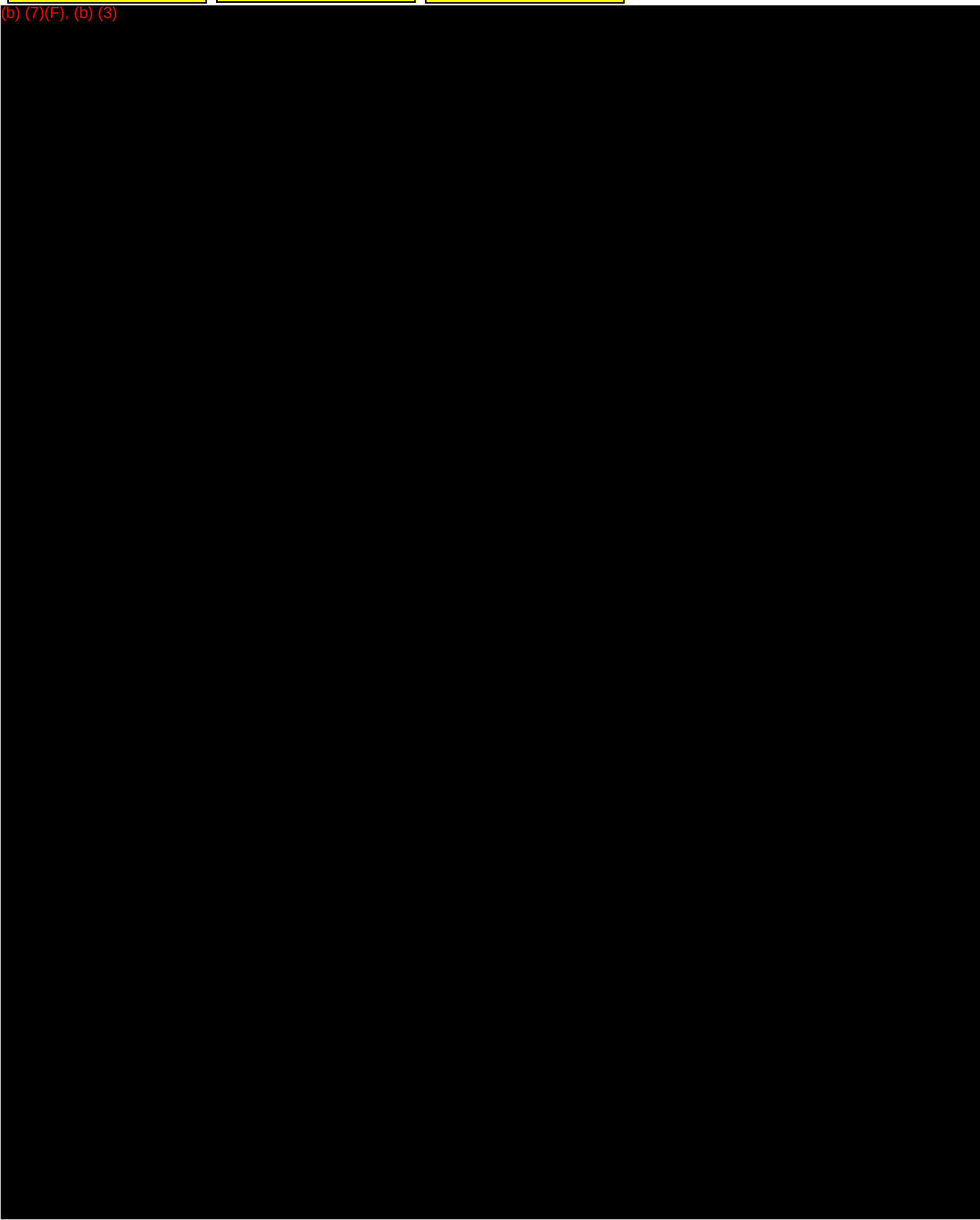
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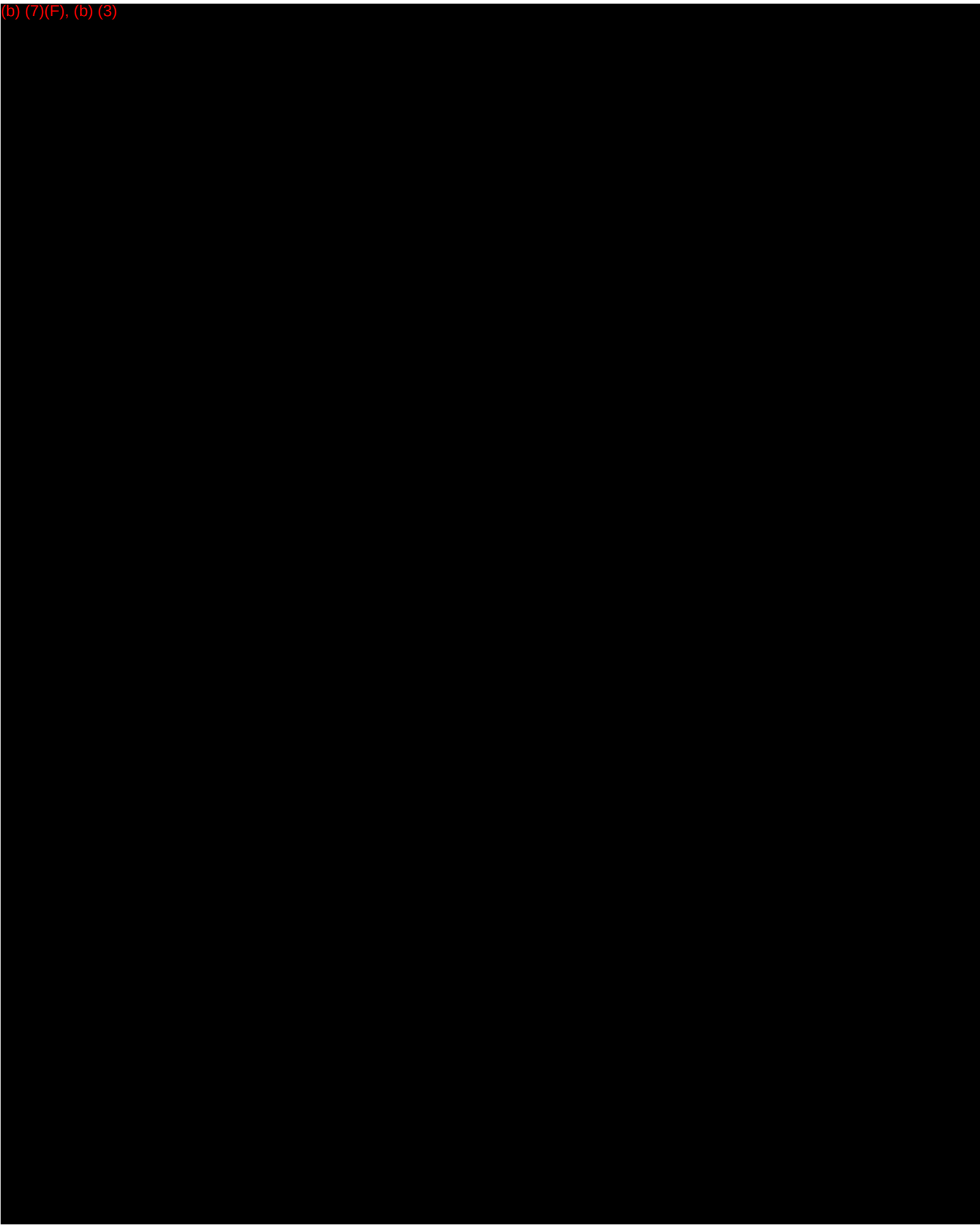



(b) (7)(F), (b) (3)

Open Zone Overview | Open Map 3 of 3 | Open River Overview

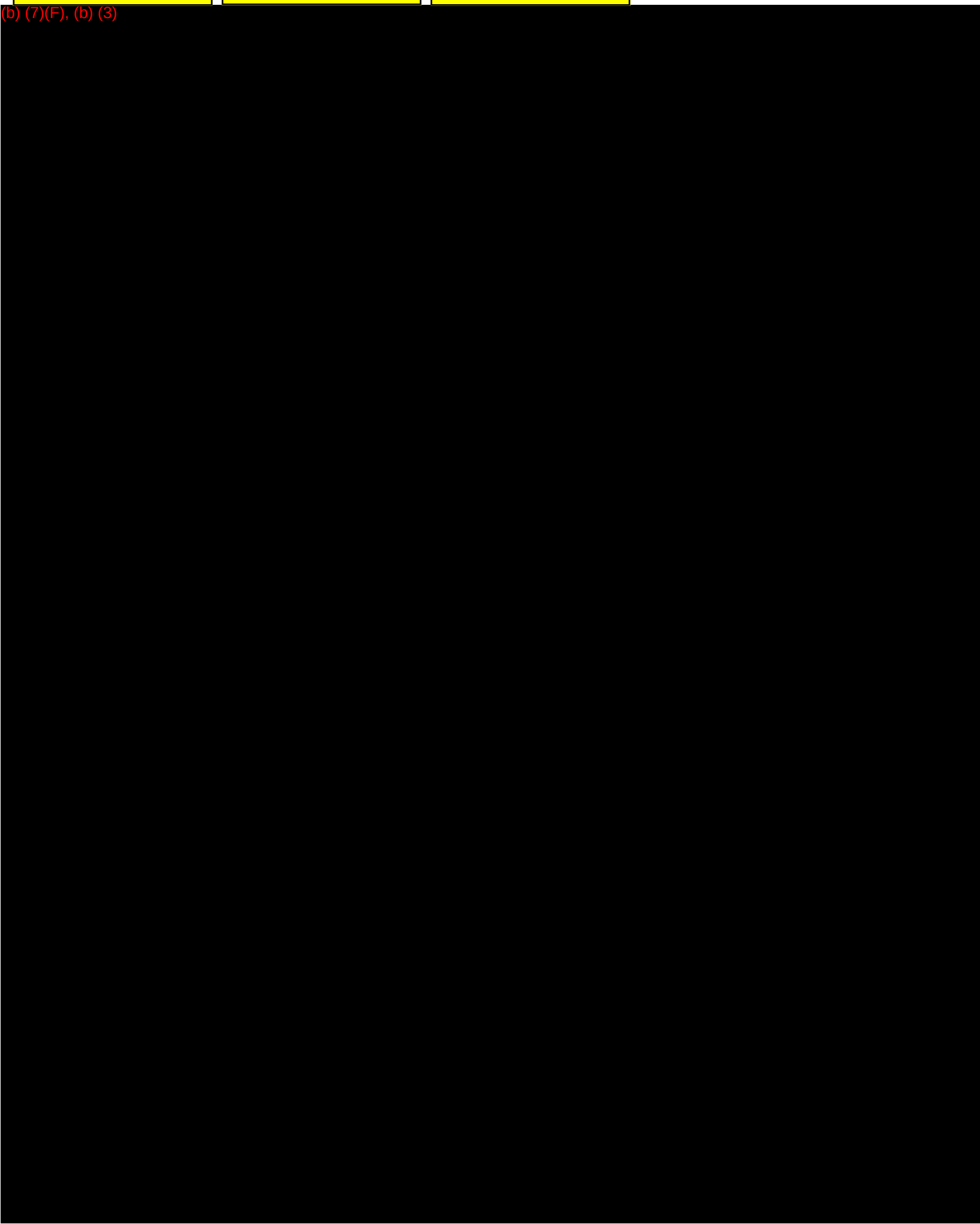
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(b) (7)(F), (b) (3)

Open Zone Overview | Open Map 2 of 2 | Open River Overview

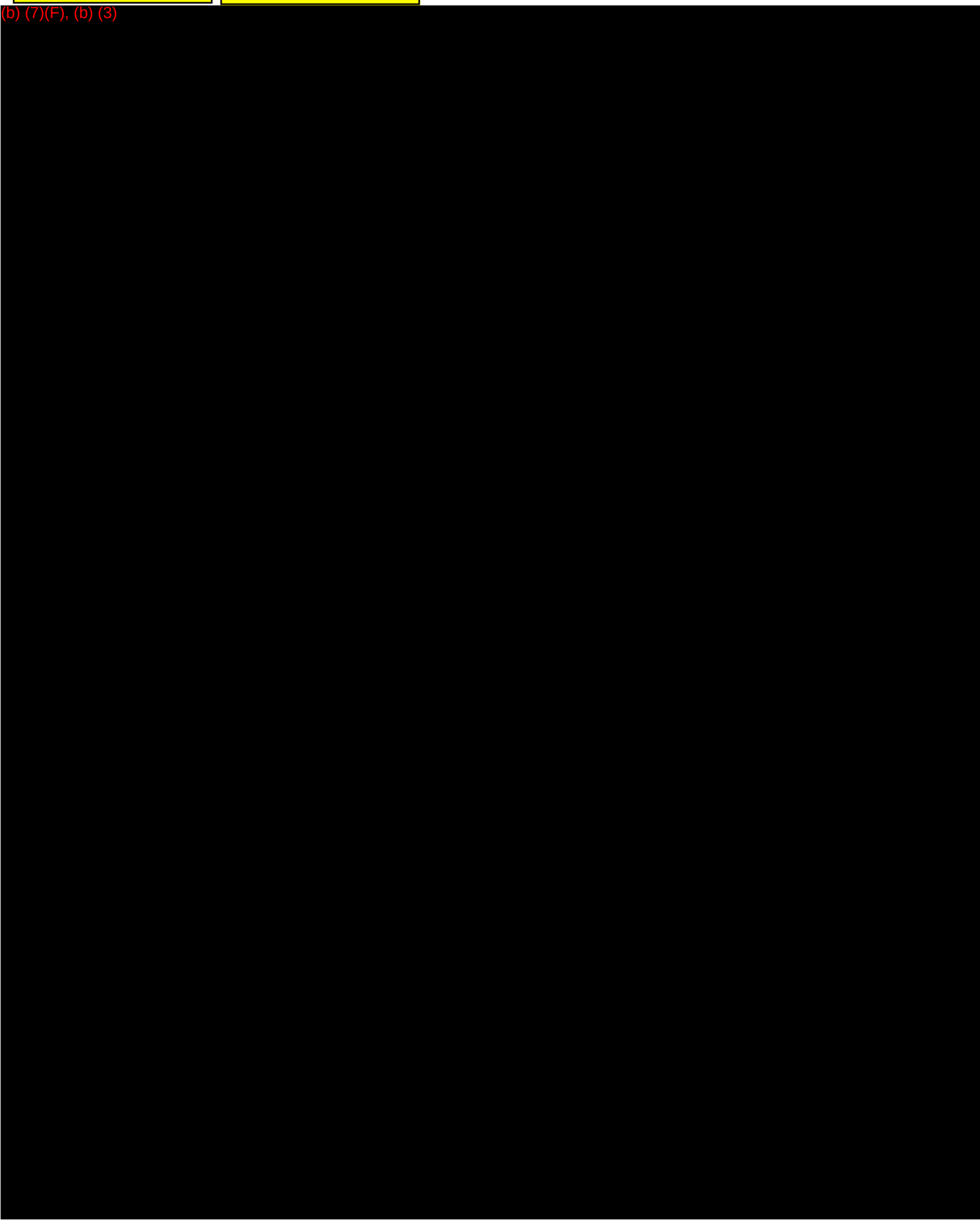
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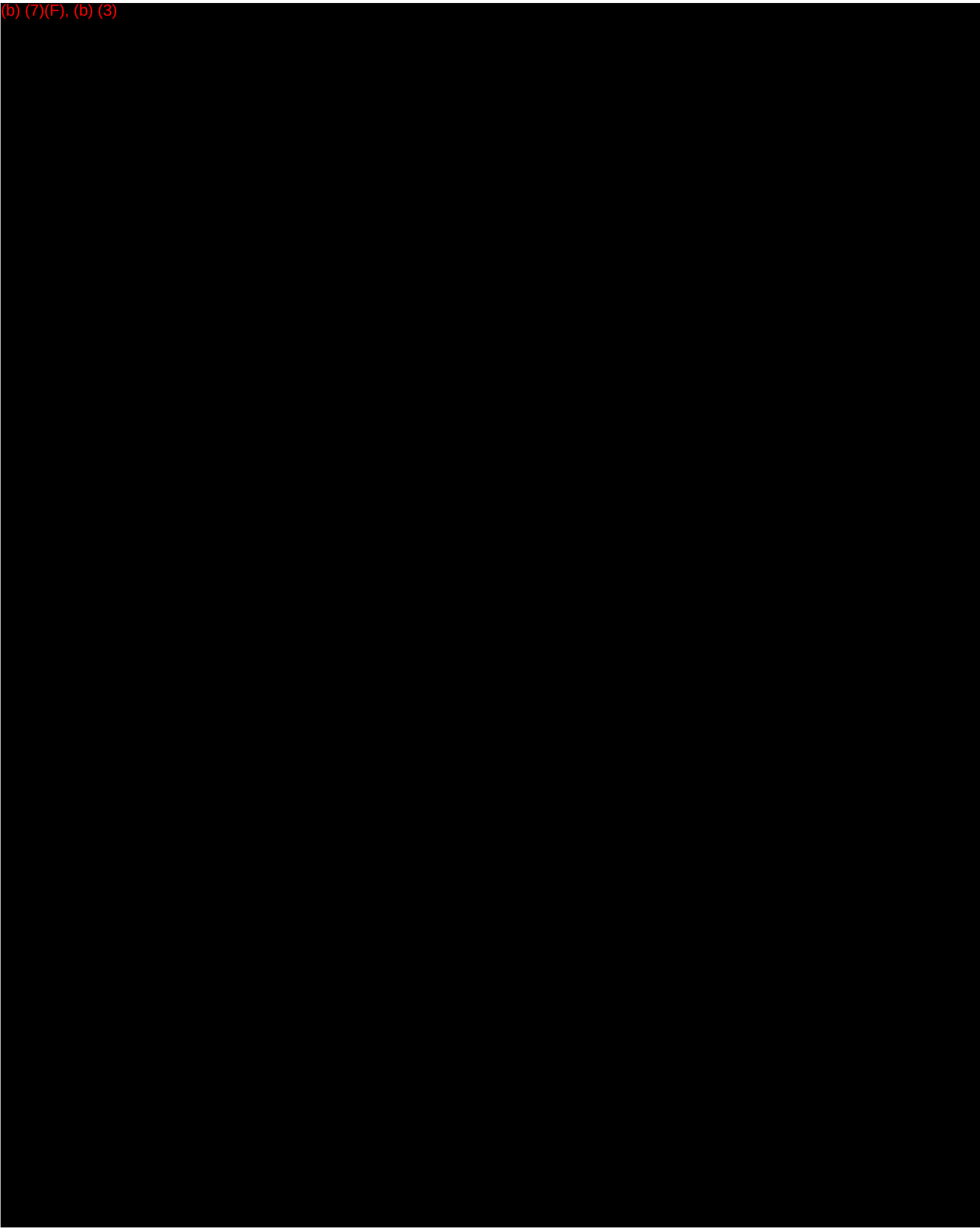


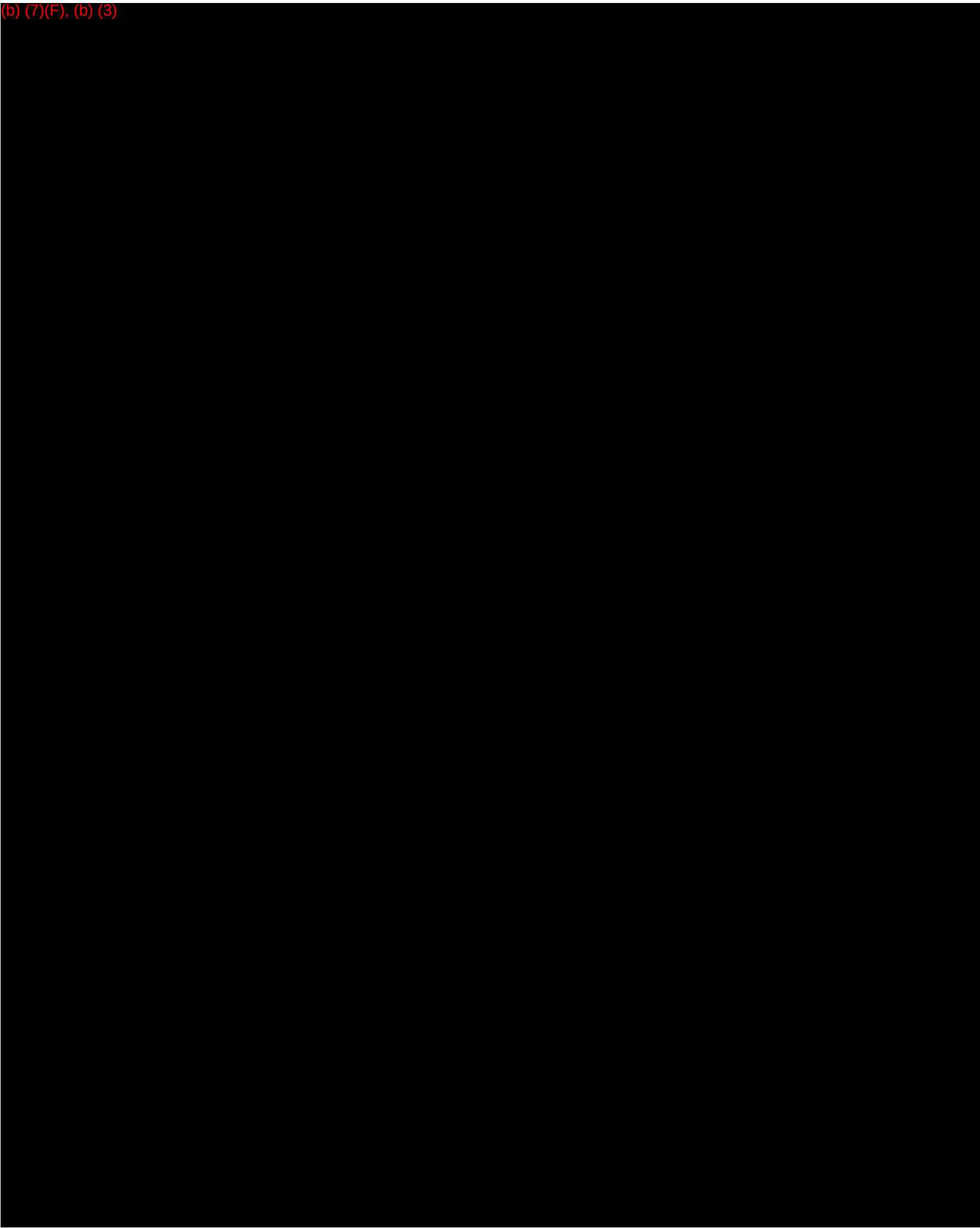
Open Zone Overview

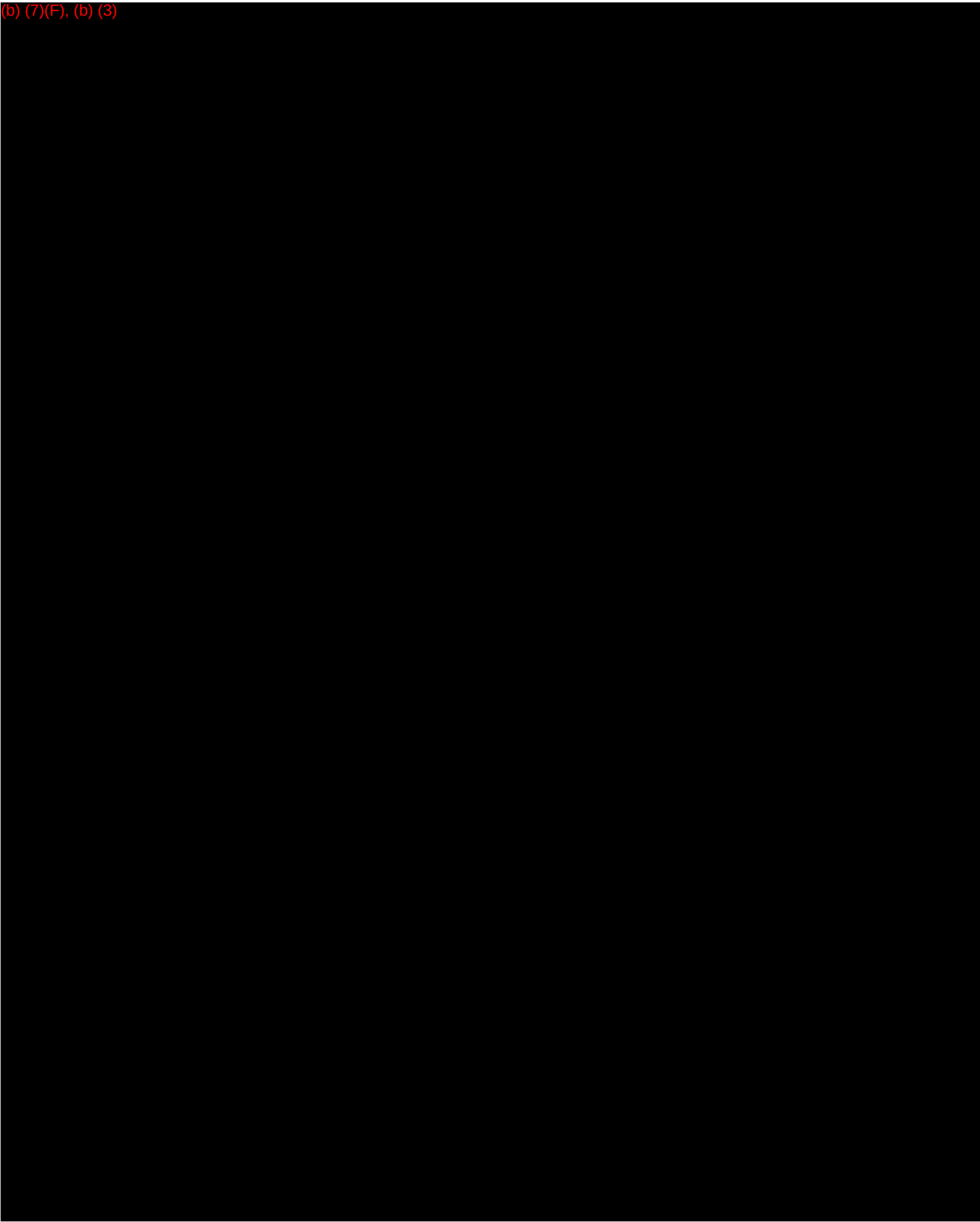
Open River Overview

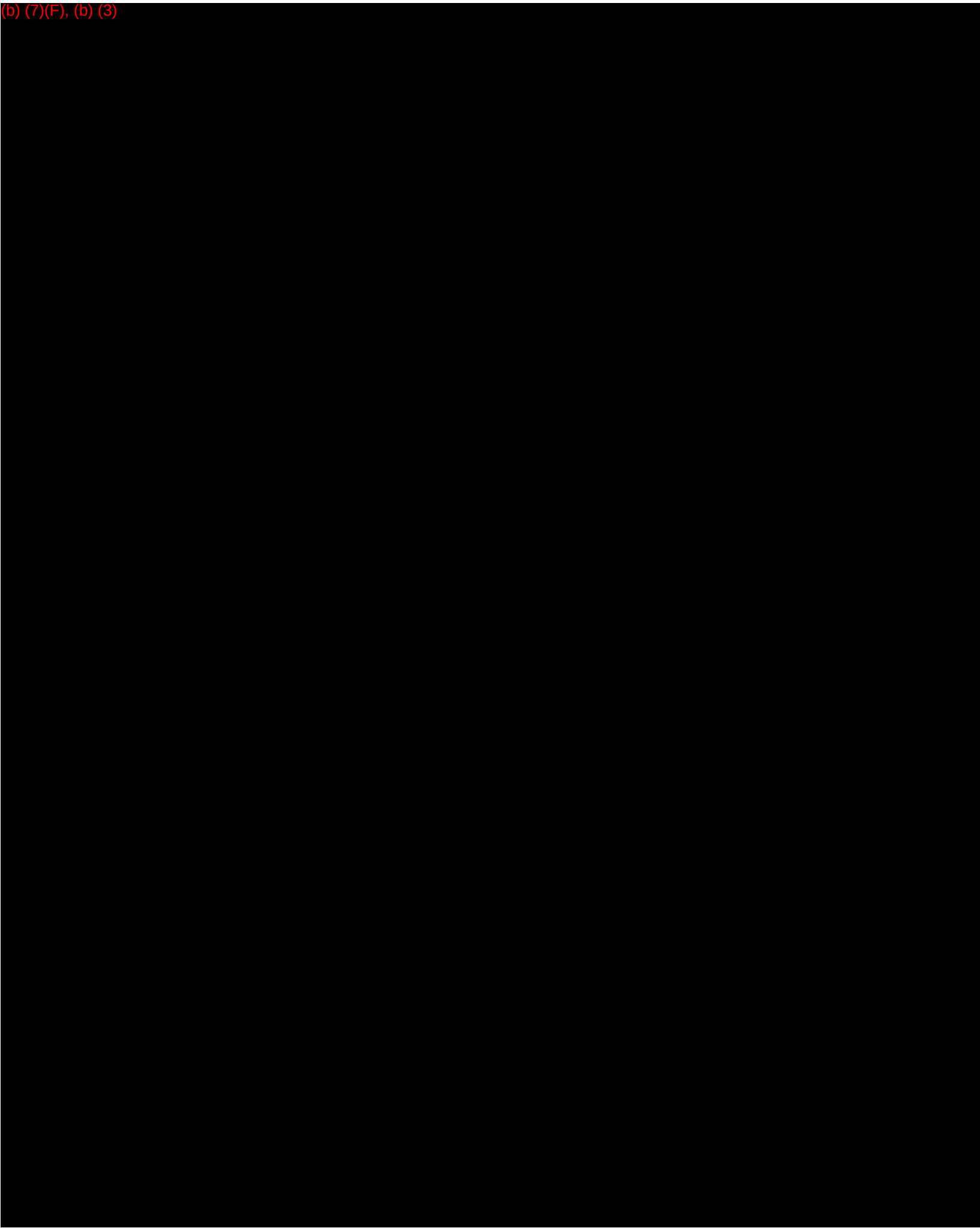
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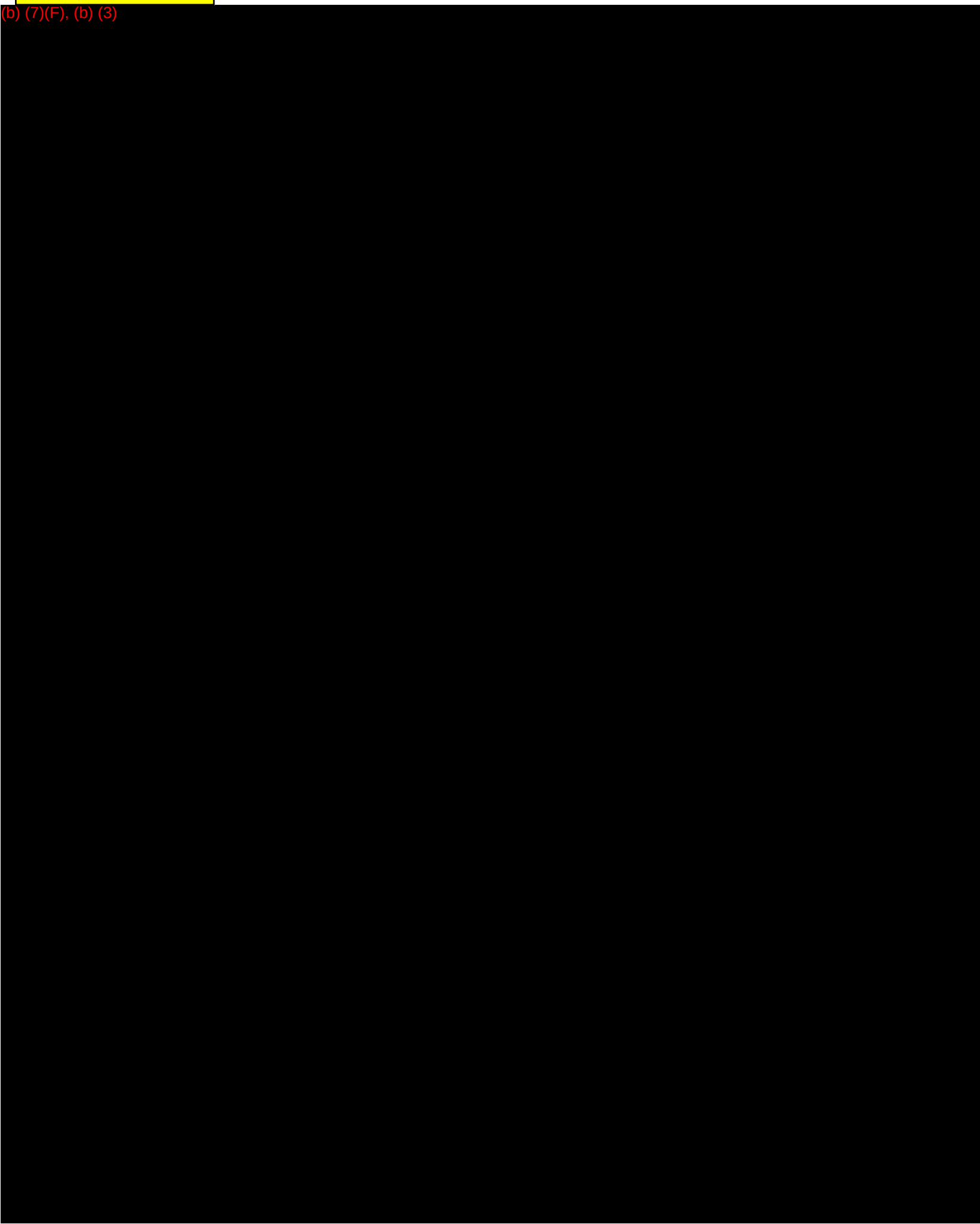

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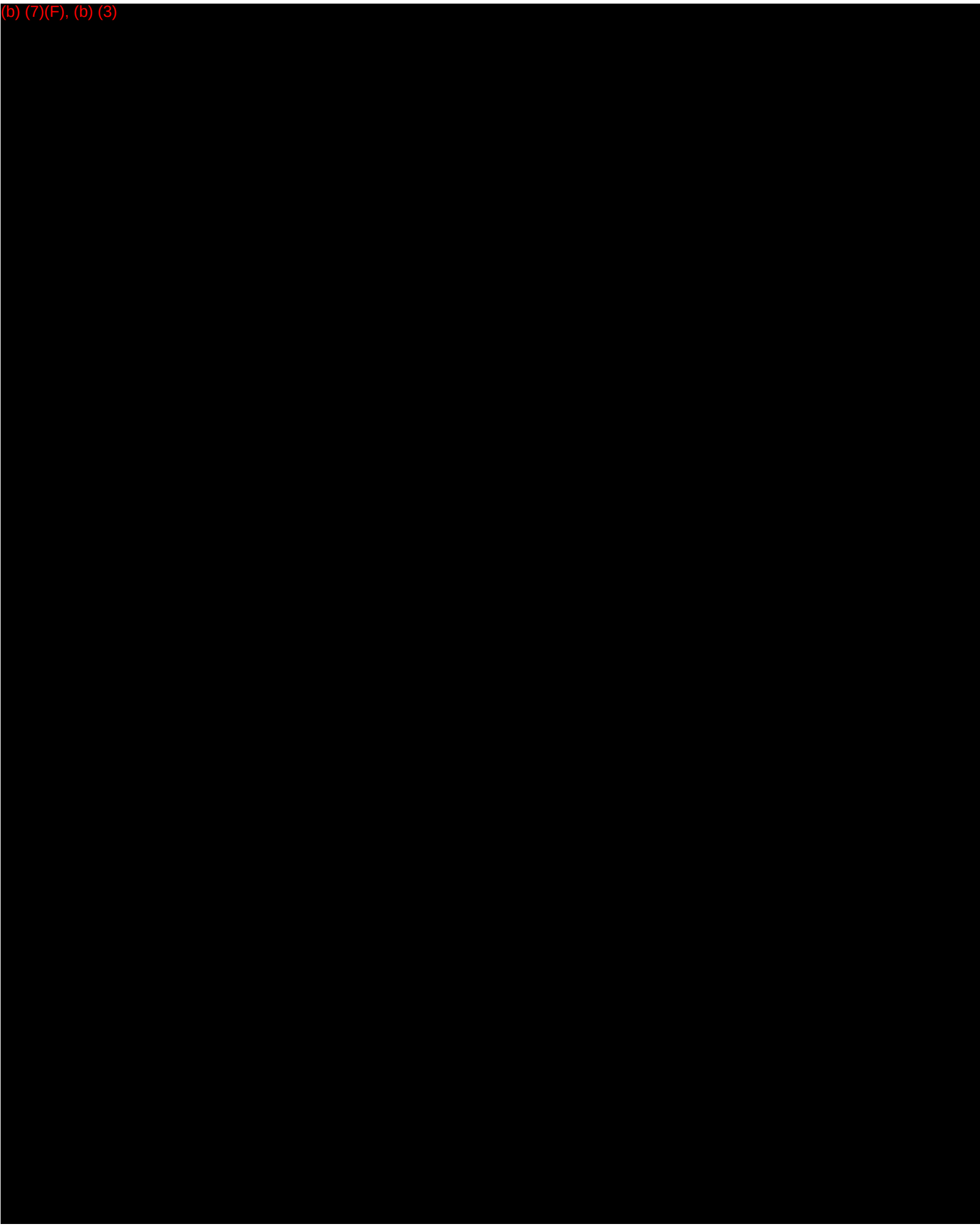

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Open Zone Overview

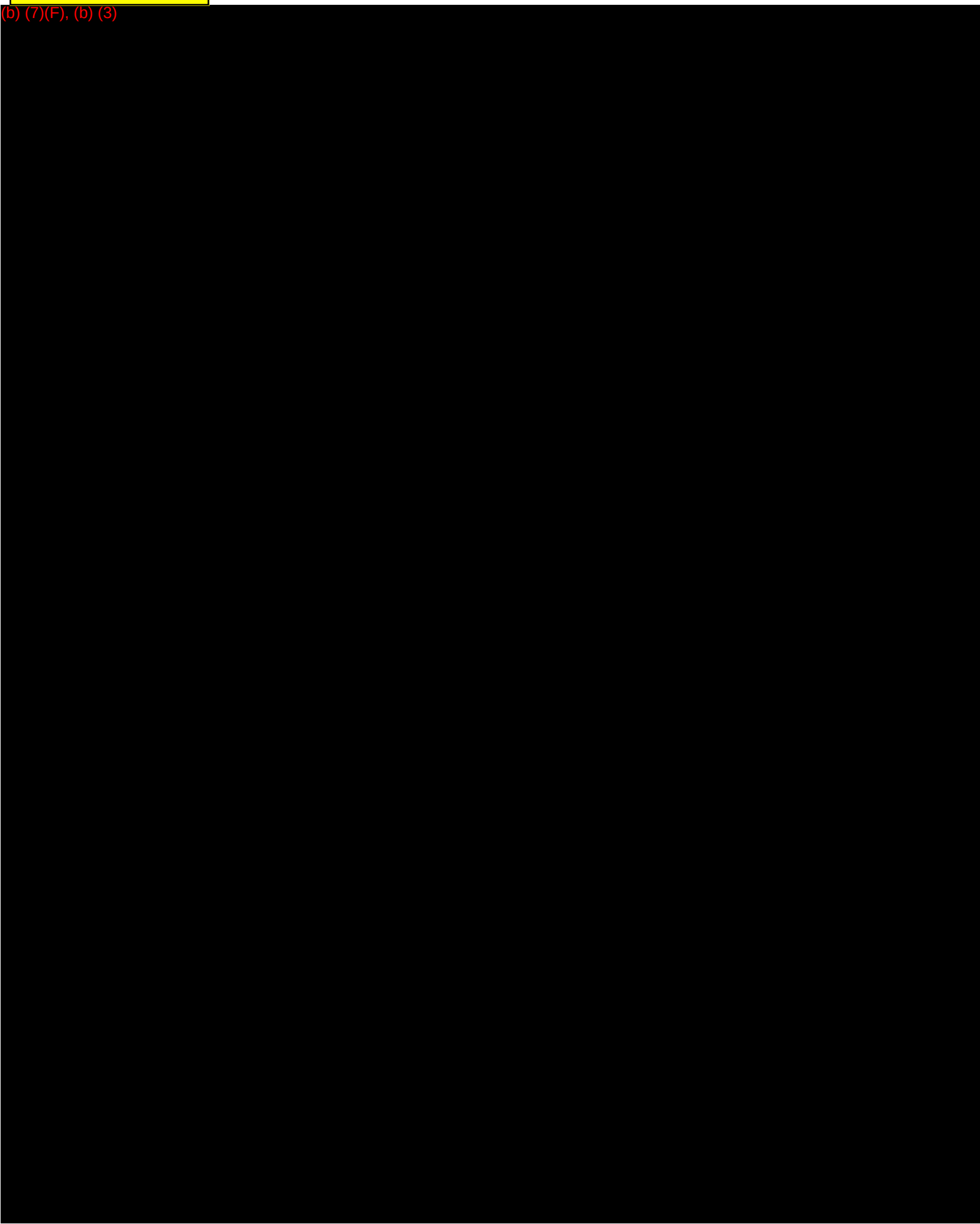
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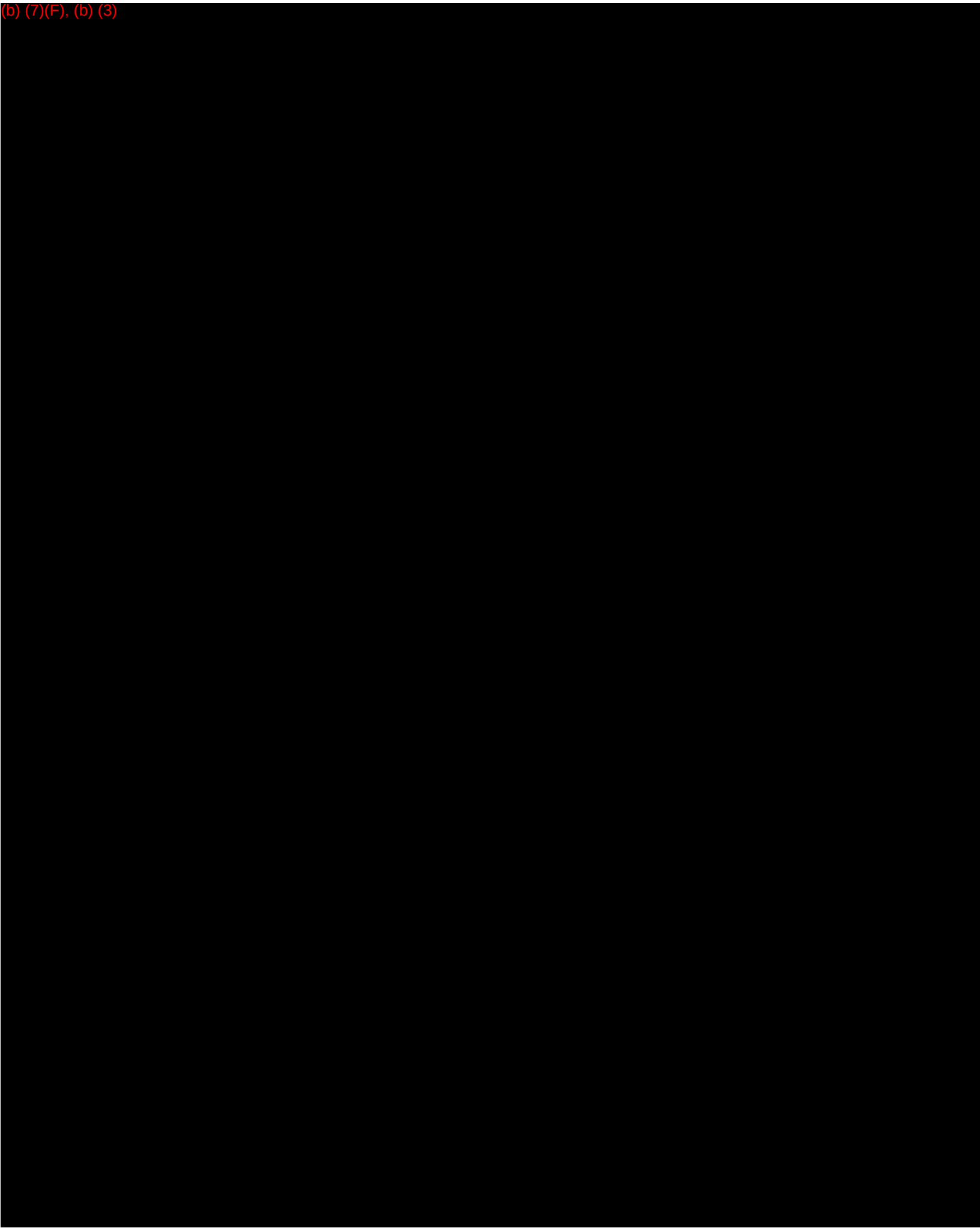

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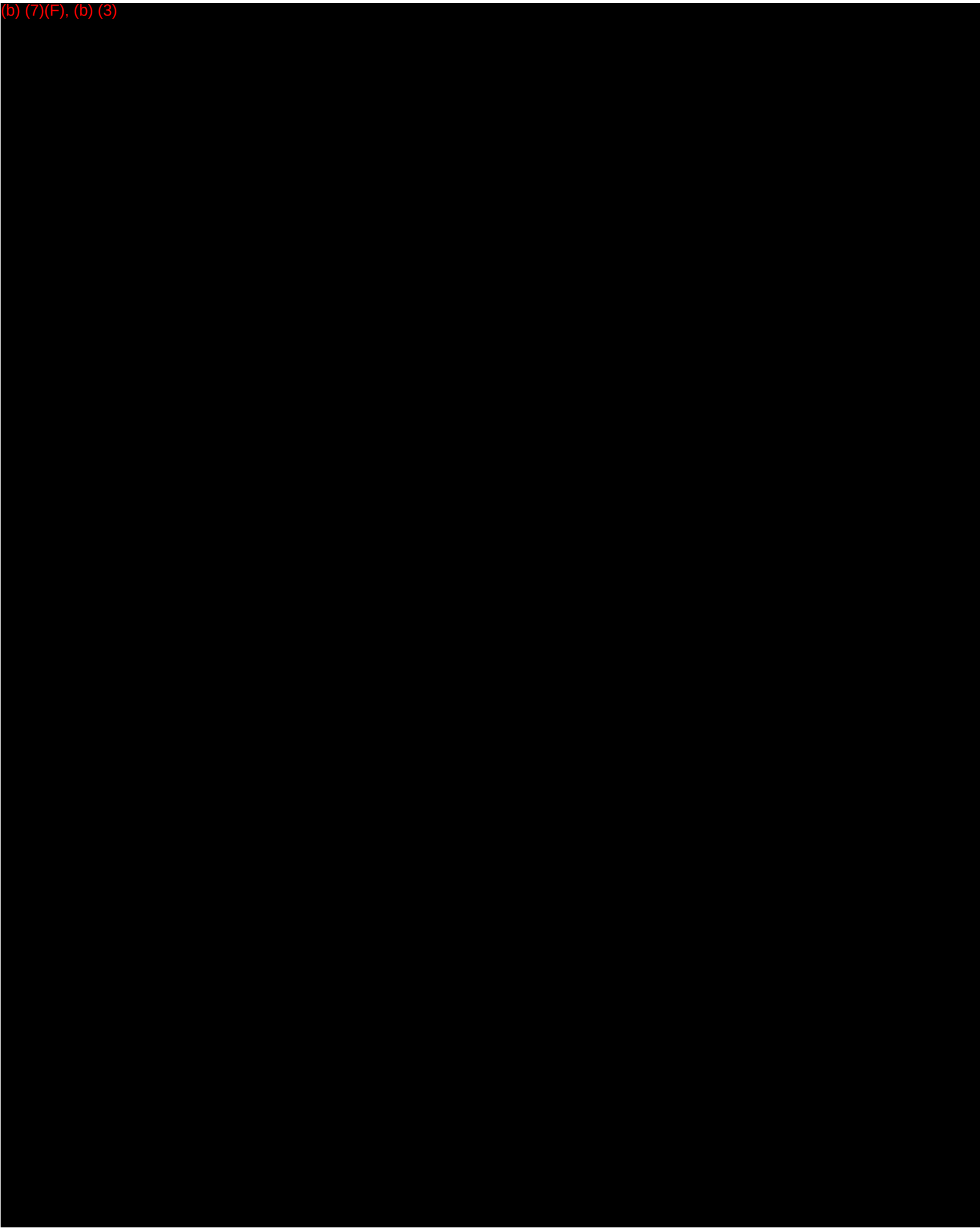
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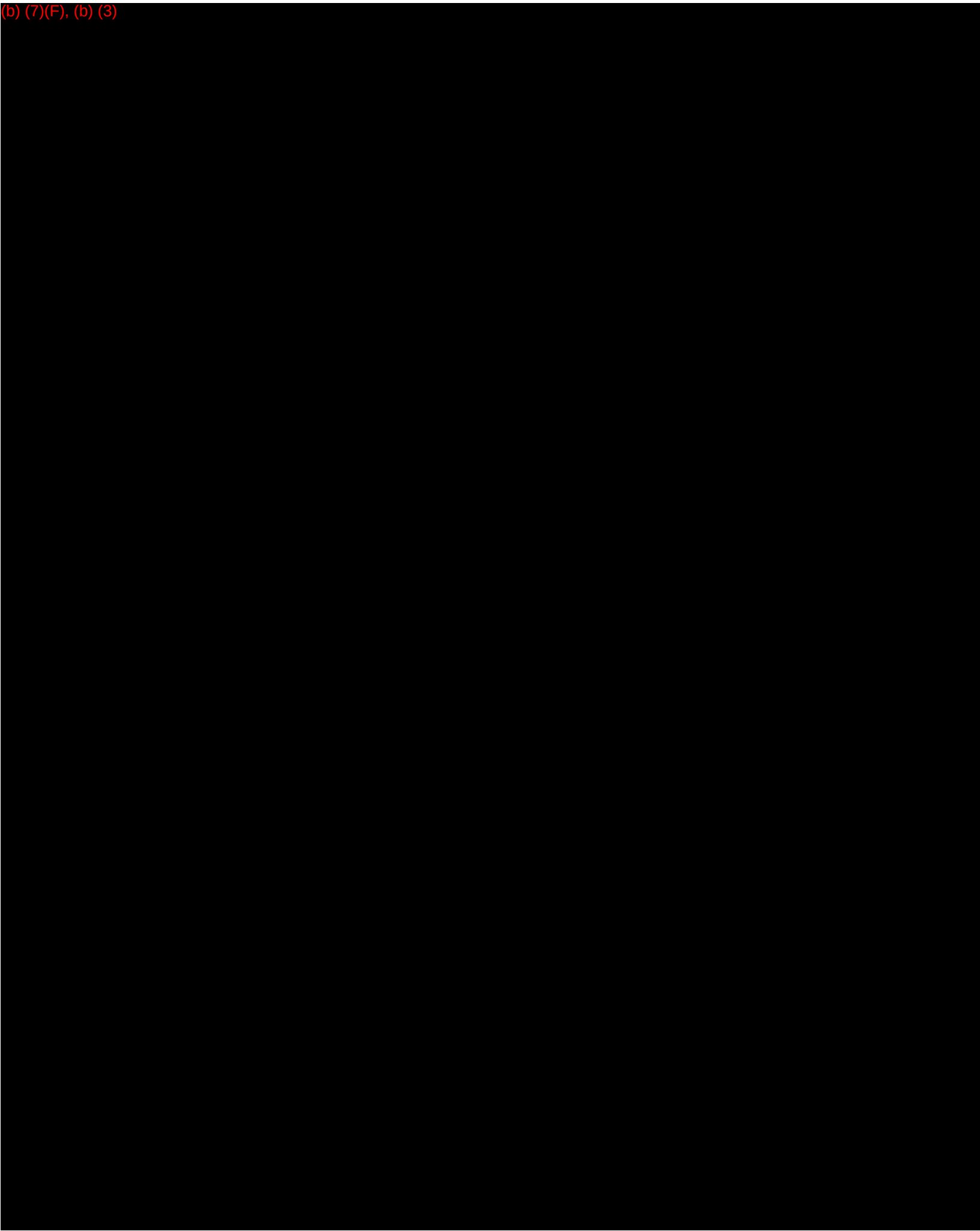


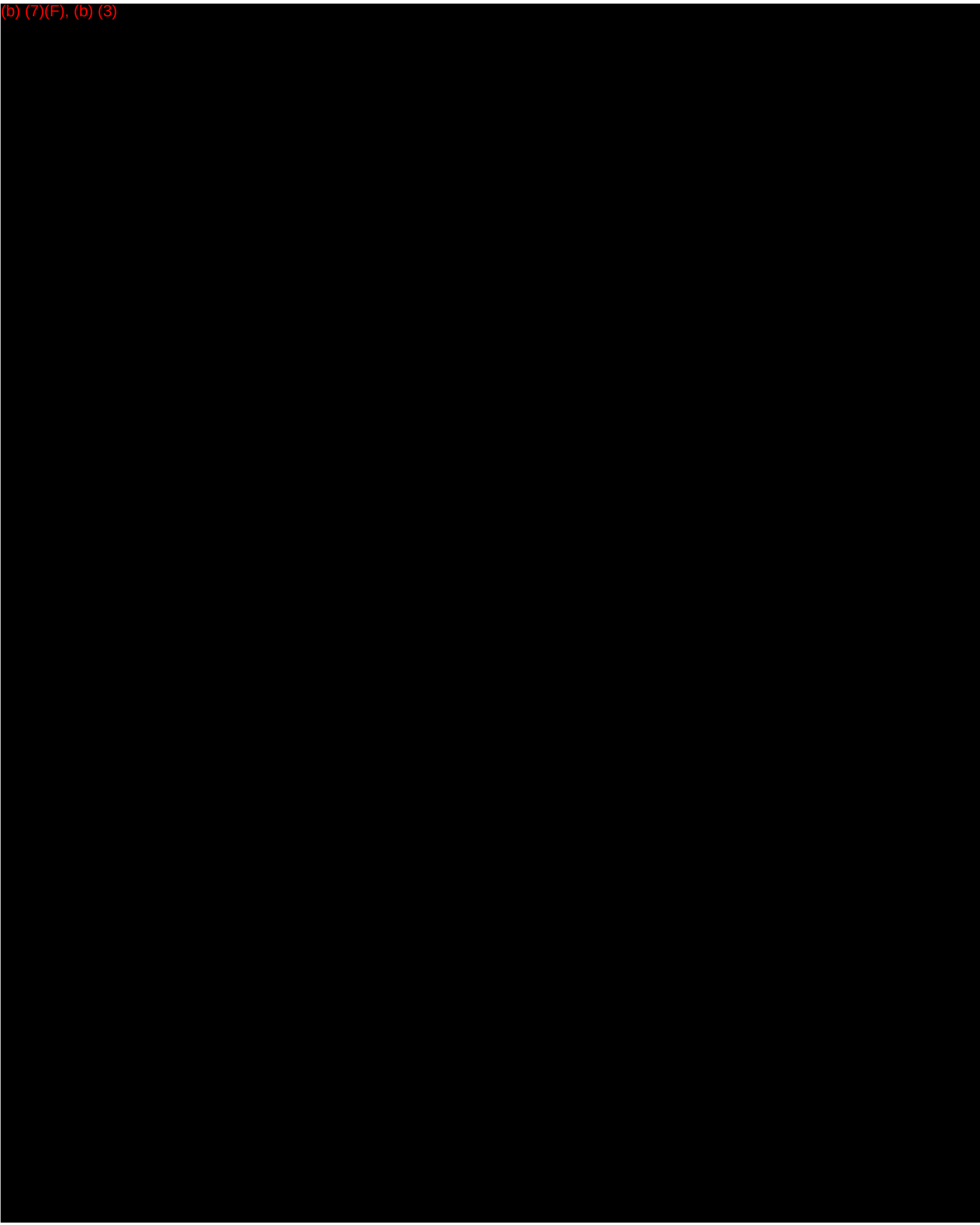
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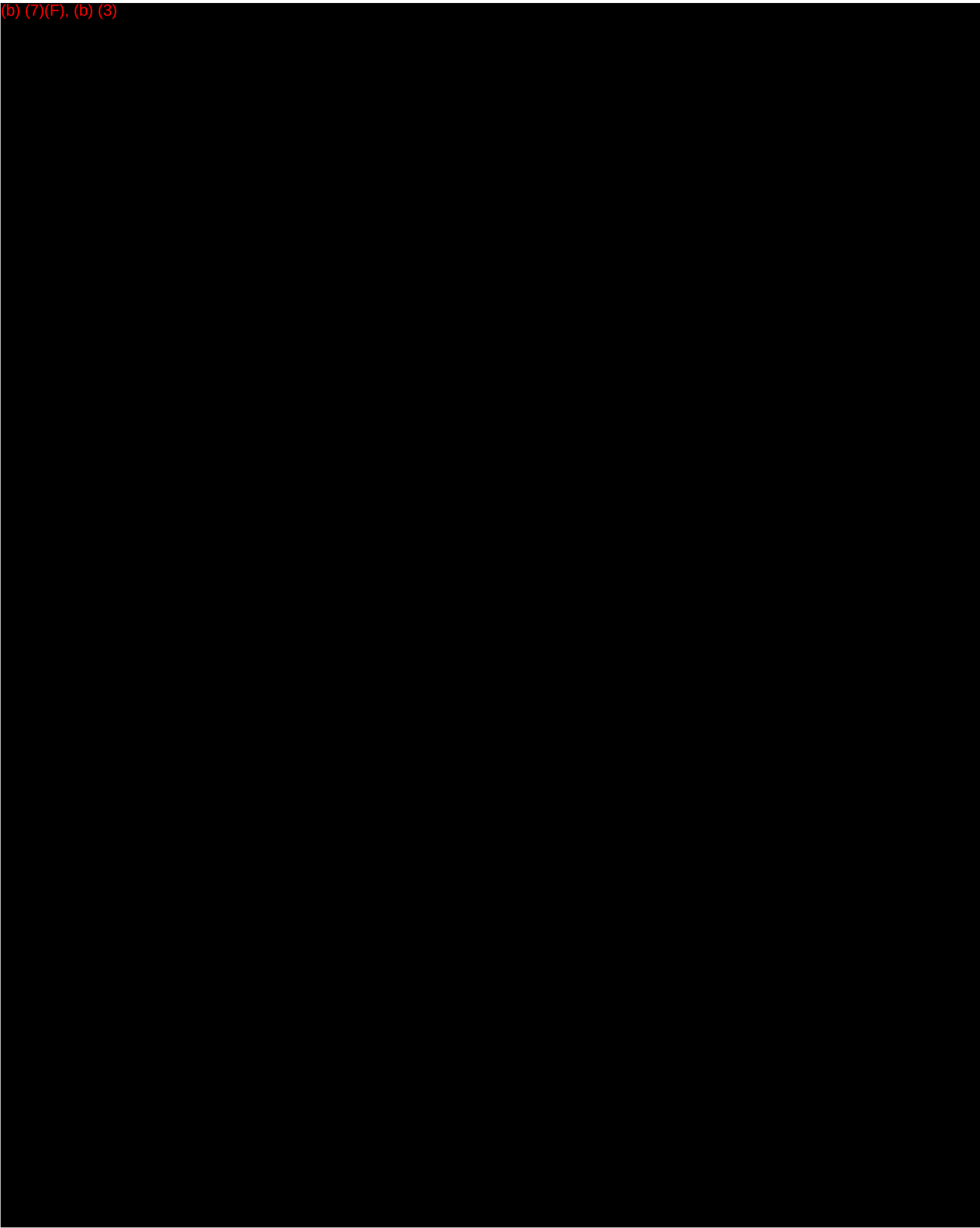


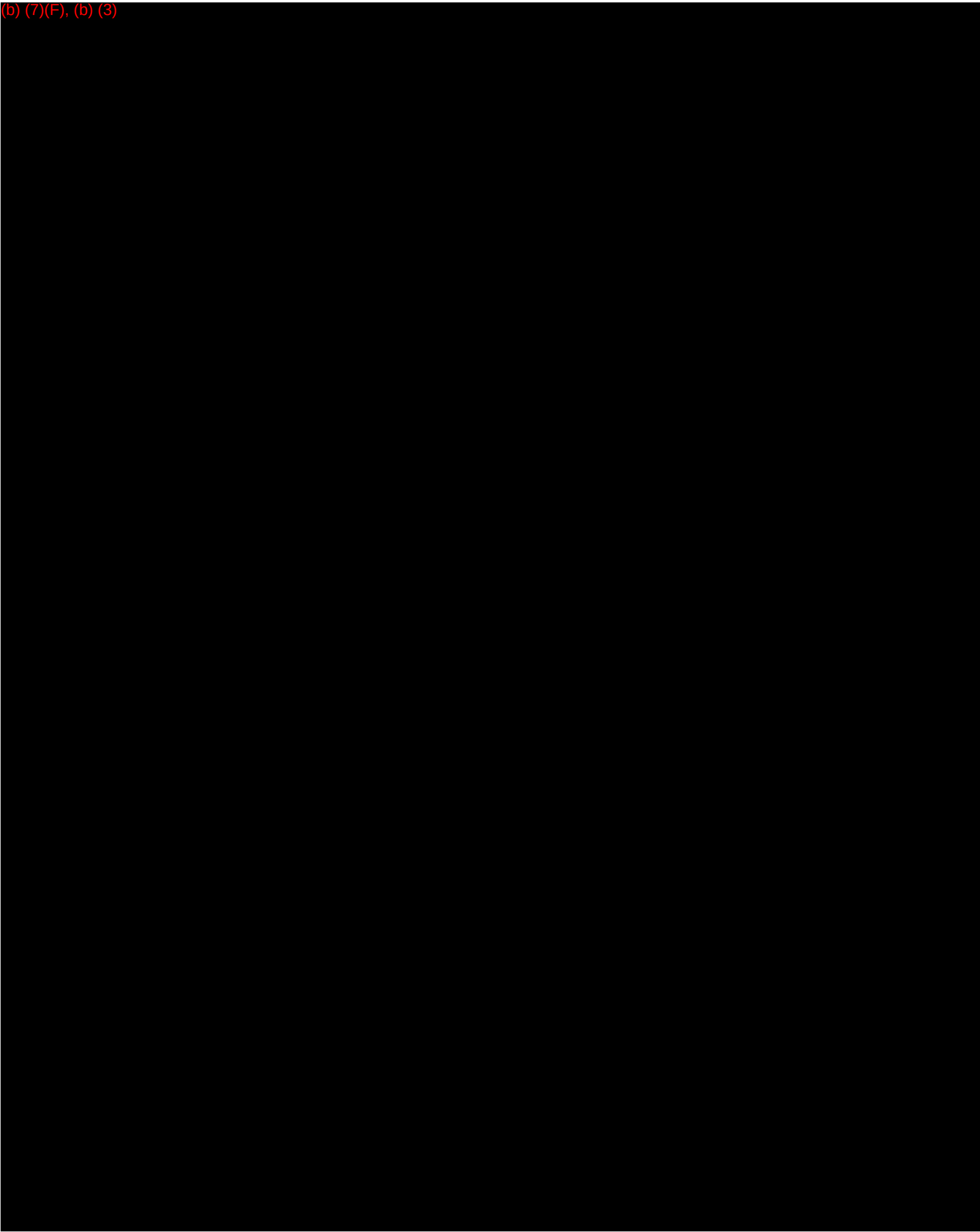
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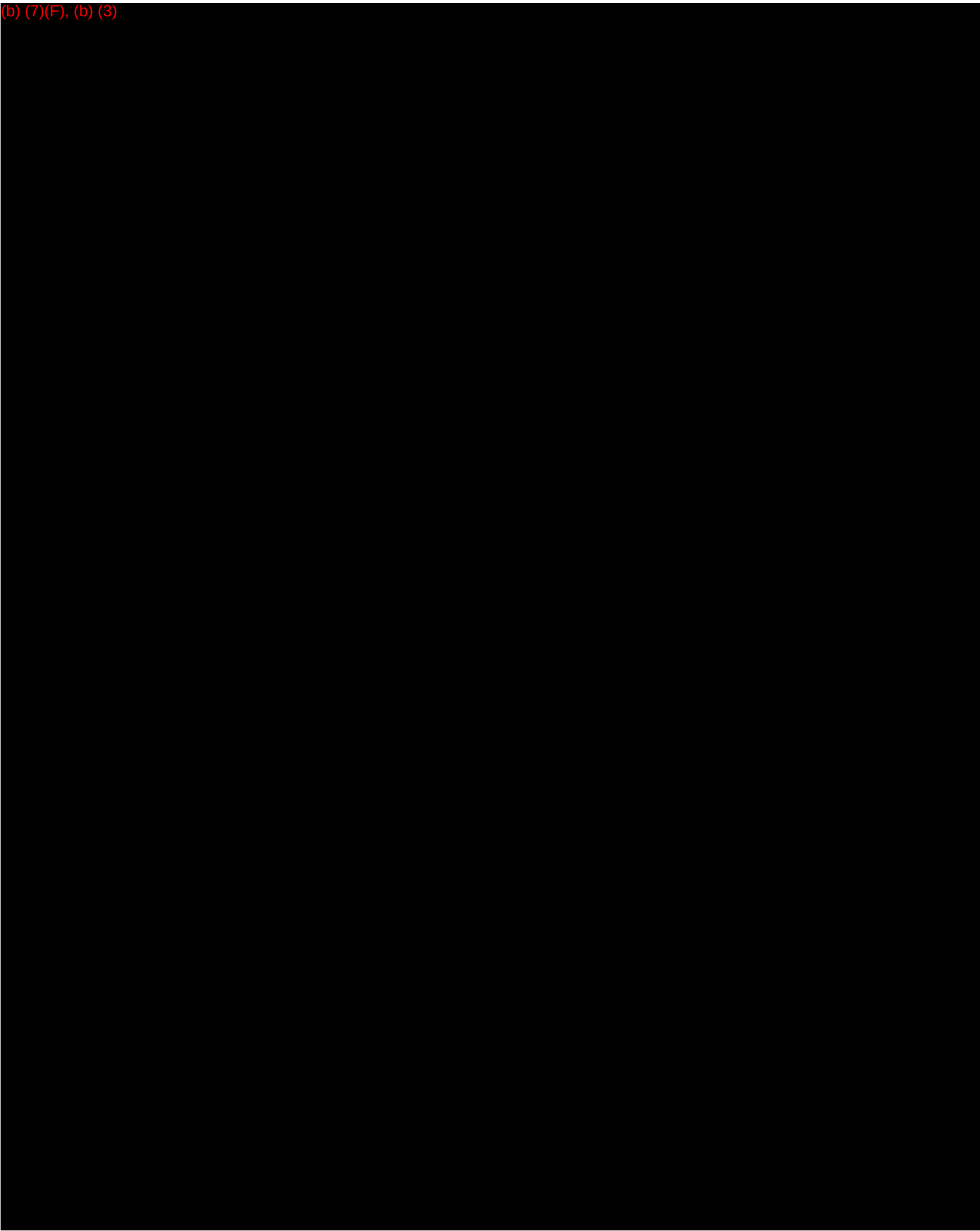



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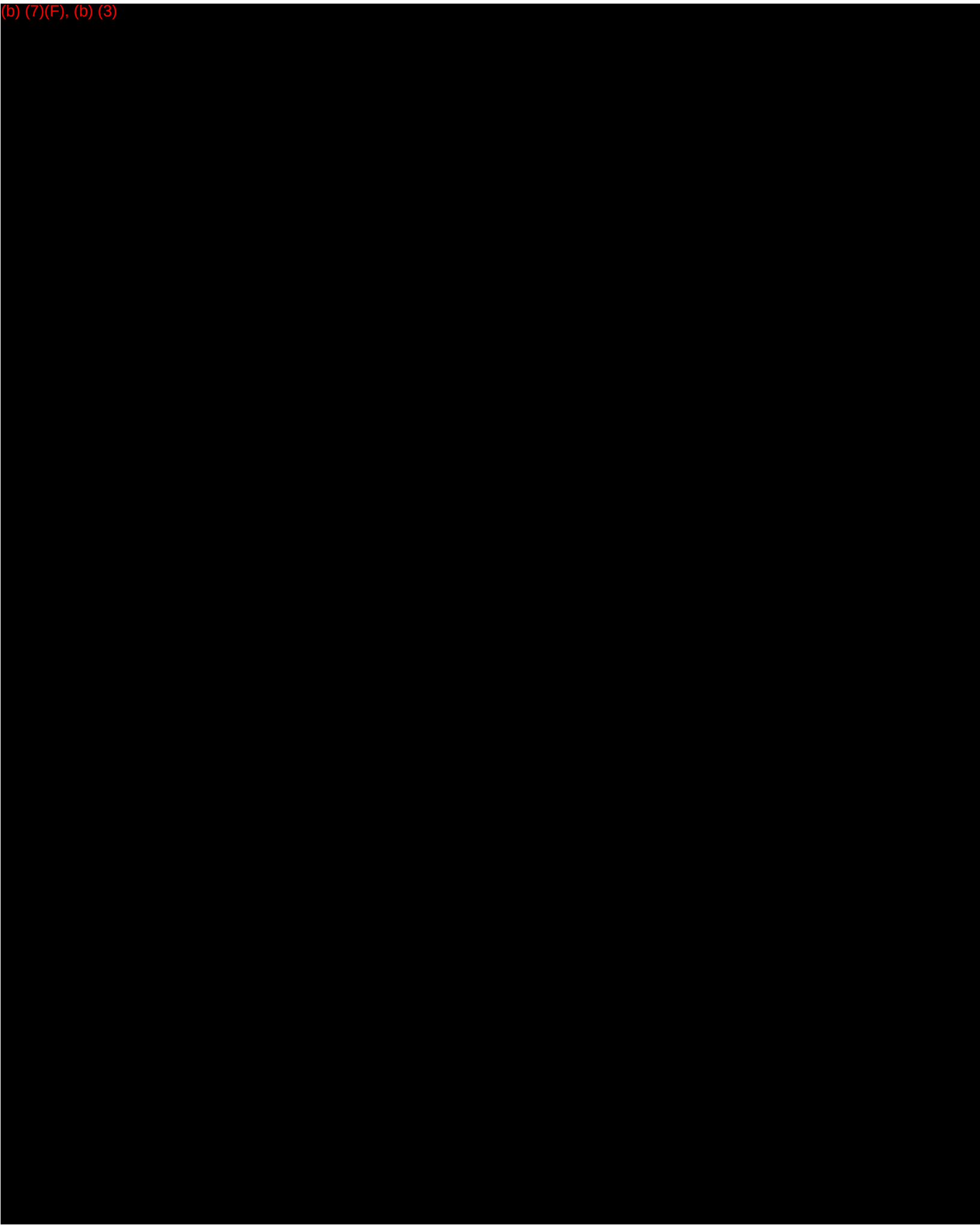

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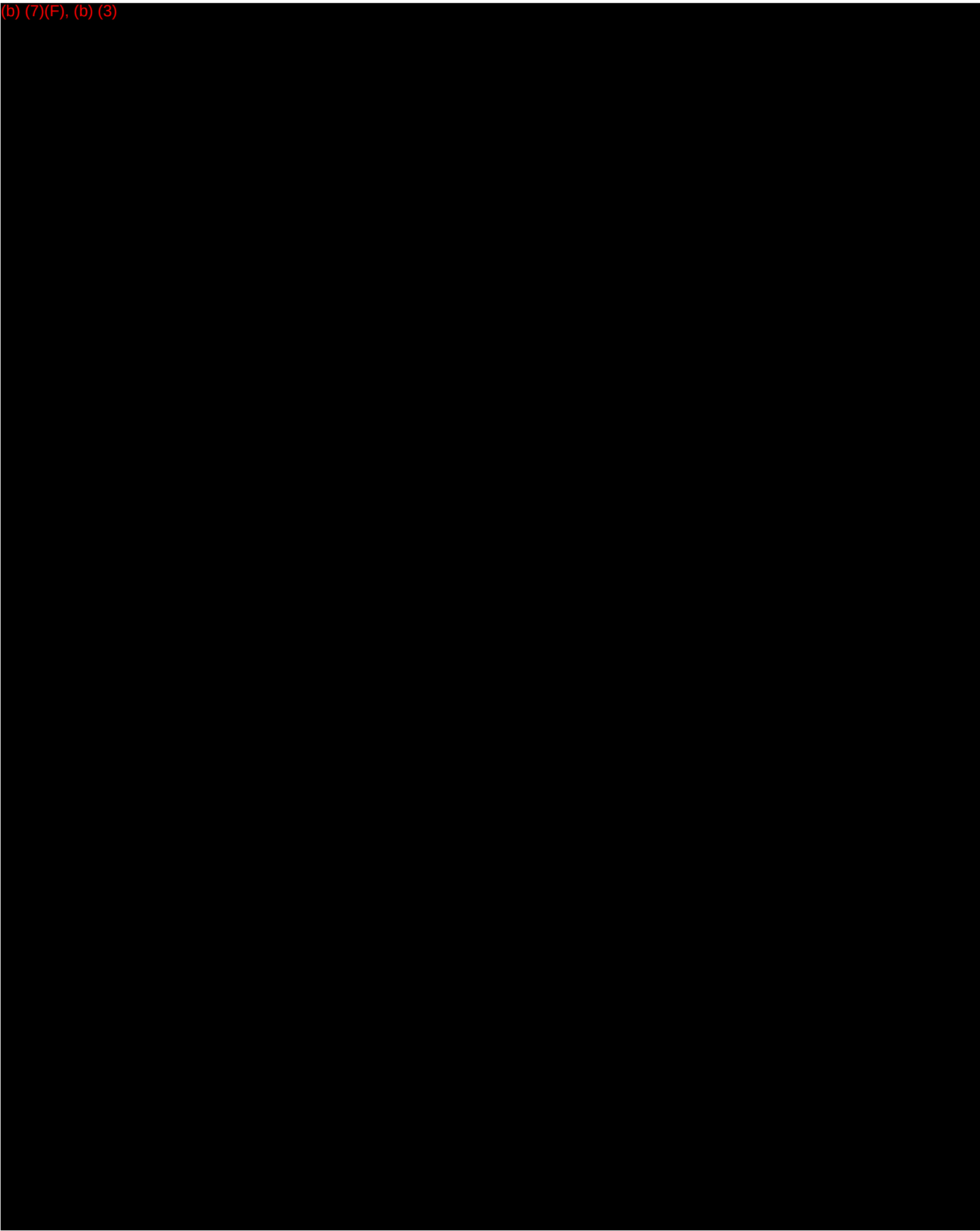

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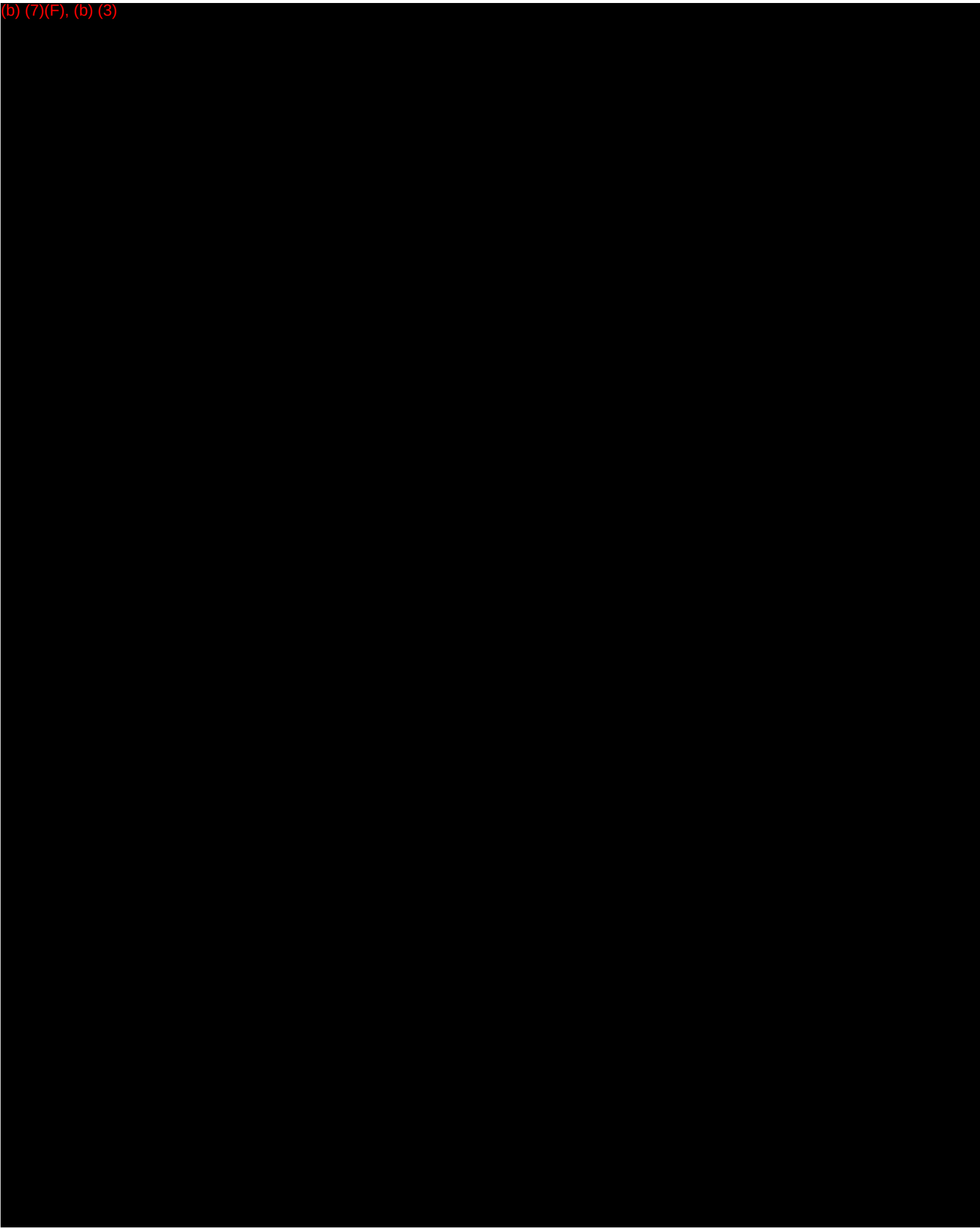


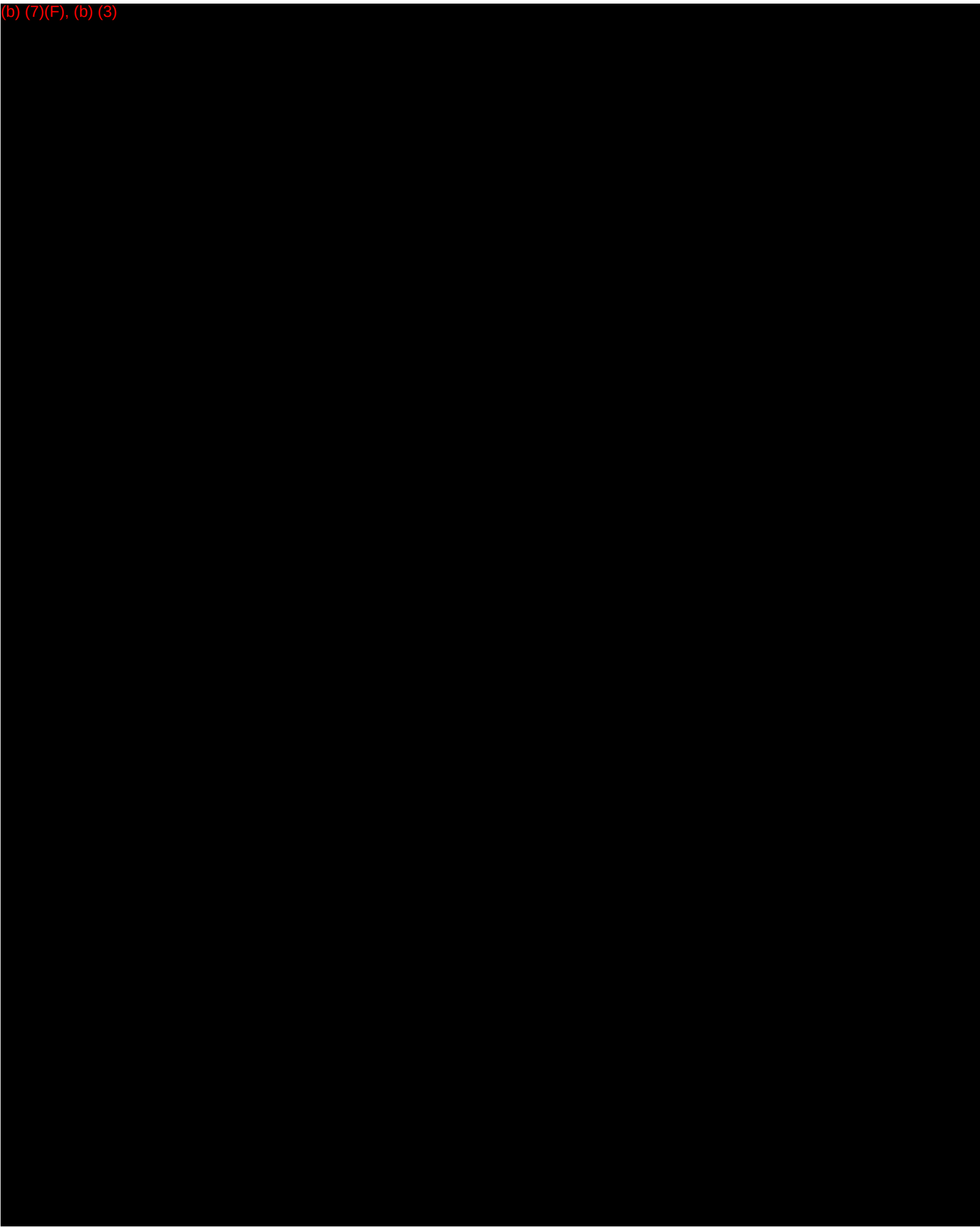

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Open Zone Overview

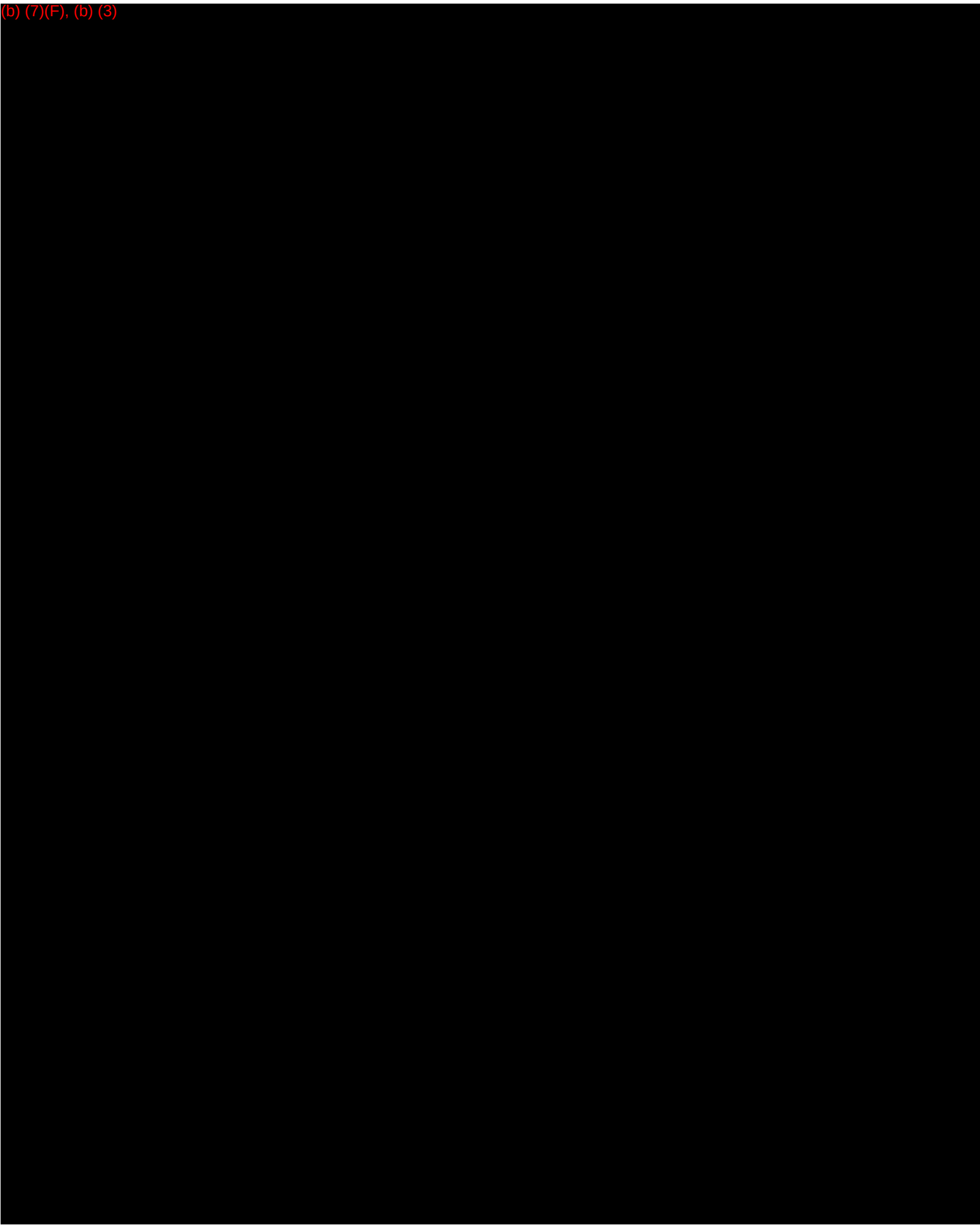
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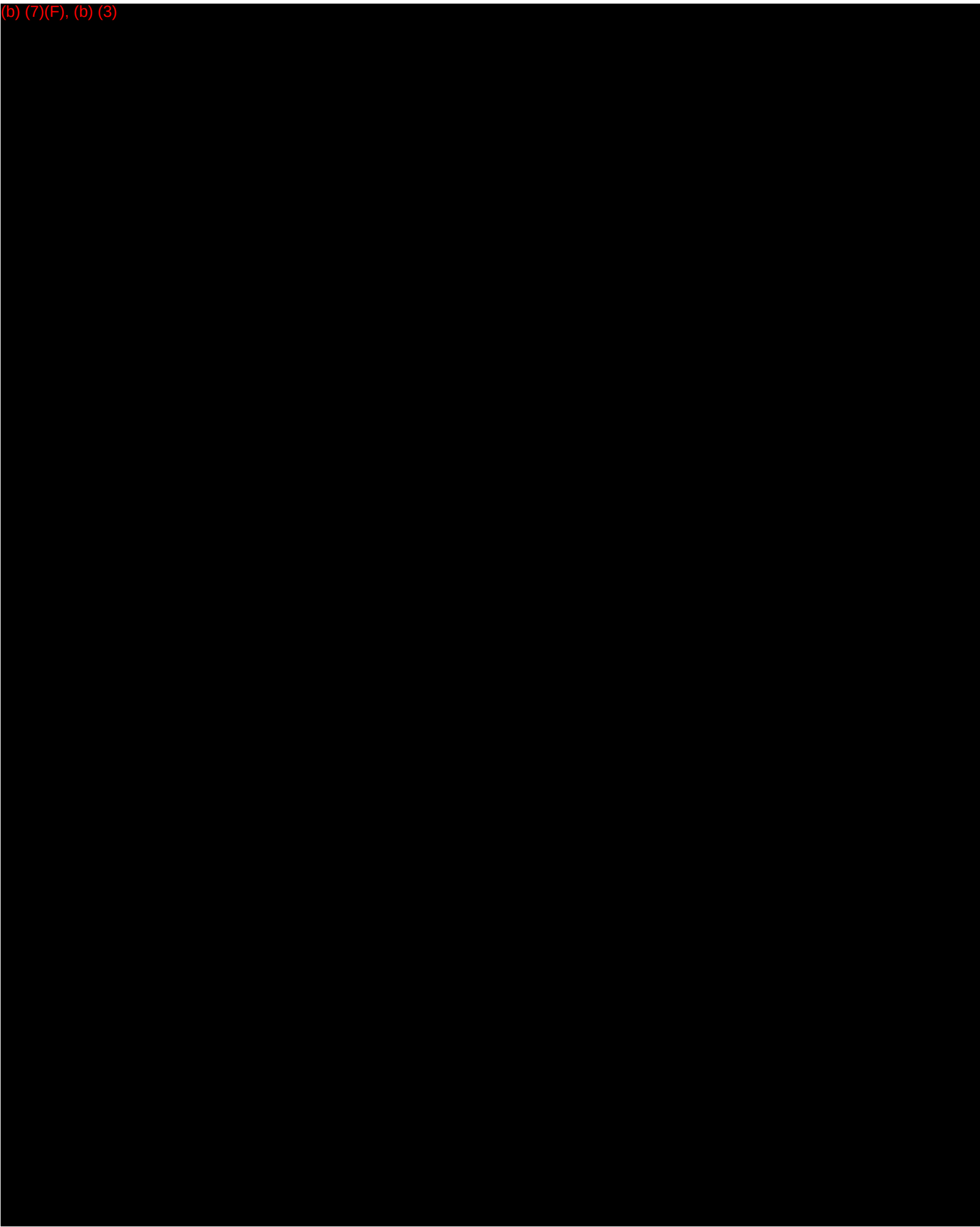



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(b) (7)(F), (b) (3)

VEOLIA
ENVIRONMENTAL SERVICES

2011 OSRO PREP Documentation

DATE	CLIENT	LOCATION	MARINE ENVIRONMENT	SERVICES PROVIDED	COMMENTS
2/24/11	Caterpillar	Peoria, IL	10 Mile Creek	Deployed 900 feet of VES containment boom w/ two dual drum skimmer	Diesel fuel spill
4/14/11	Milwaukee Boat Line	Milwaukee, WI	Milwaukee River/ Harbor	Deployed 200 feet of VES containment boom	Sunken vessel
5/11/11	WDNR	Appleton, WI	Apple Creek	Deployed 100 feet of VES containment boom	Grease spill
6/5/11	WDNR	Edgerton, WI	Wet Land & Inland Tributary	Deployed 300 feet of VES containment boom w/ wier skimmer	Diesel fuel spill
6/22/11	Marquis Marine	Hennepin, IL	Illinois River	Participated in a drill deploying 1,000 feet of site containment boom	Spill Drill
7/16/11	IMTT	Lemont, IL	Sanitary shipping canal	Participated in a drill deploying 1,000 feet of site containment boom	Spill Drill
7/28/11	WDNR	Milwaukee, WI	Canal to Kinickinic River	Deployed 200 feet of VES containment boom	Diesel fuel spill
8/11/11	City of Chicago	Chicago, IL	Chicago River	Deployed 700 feet of VES containment boom	Special Olympics of Illinois Duck Derby
9/29/11	WDNR	Waterford, WI	Inland Lake	Deployed 100 feet of VES containment boom	Gasoline spill
10/6/11	US Oil	Green Bay, WI	Fox River	Deployed 150 feet of VES containment boom	Spill Drill
10/25/11	Shell Oil	Lockport, IL Terminal	Drainage canal on site	Depolyed 100 feet of VES containment boom	Spill Drill

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VEOLIA
ENVIRONMENTAL SERVICES

INDUSTRIAL SERVICES
NORTH AMERICA

December 15th, 2011

Koch Pipeline Company LP
Attn: Gabriel Lugo
8606 IH 37
Corpus Christi, TX 78409

Re: National Preparedness for Response Exercise Program (NPREP) Guidelines

Dear Mr. Lugo:

Veolia ES Special Services, Inc. would like to confirm that we have met the equipment deployment, training, and maintenance requirements as set forth in the National Preparedness for Response Exercise Program (NPREP) Guidelines for 2011.

Veolia ES Special Services, Inc. covers the following locations for Koch Pipeline Company LP:

Koch Pipeline Company LP-Southern Operating Group
8606 IH 37, Corpus Christi, TX 78409

Koch Pipeline Company LP-Northern Operating Group
13775 Clark Rd., Rosemount, MN 55068

Koch Pipeline Company LP-South Texas Operating Group
4221 Savannah Ave., Port Arthur, TX 77640

More specifically, our response equipment has been deployed at least once in the 2010 calendar year. In the case of containment boom and skimmers, we have deployed at least the minimum NPREP required amounts of each type of boom and one of each type of skimming system. Enclosed is our 2010 NPREP report showing deployment records, times, and events surrounding the deployments. Please use this information to bring your files regarding our services up to date.

This equipment is properly maintained and response ready. Personnel deploying this equipment have received appropriate training including HAZWOPER and OPA Competency.

We maintain records of the above for a minimum of three years. We also agree to and encourage verification of the above by your company or the United States Coast Guard.

If any further information is desired, please contact our Dispatch Office at (800) 688-4005.

Veolia ES Special Services, Inc.
N 104 W 13275 Donges Bay RD, Germantown, WI 53022
tel: 262 236 8130 - fax: 262 236 8140
www.VeoliaES.com

Sincerely,



Jon Zielieke
Technical Services Manager, Emergency Services
Veolia ES Special Services, Inc.

Company Legal Name
Address, City, STATE, Zip
tel: xxx xxx xxxx - fax: xxx xxx xxxx
www.VeoliaES.com

VEOLIA
ENVIRONMENTAL SERVICES

INDUSTRIAL SERVICES
NORTH AMERICA

Major Oil Spill Equipment and Personnel List by Location

Neenah, WI

Personnel

Seven Response Managers
Ten Foreman and Technicians

Equipment

One Emergency Response trailer with full equipment
Two Response Manager Trucks
One five ton stake trucks
One 1 ton stake truck
Two Hydrographic survey boats
Hydraulic power packs and pumps
Two weir Skimmers- SKIMPAC 4300, 50 gpm
400' absorbent boom
25 bale absorbent pads
One 20' boom boat with 90hp outboard

Green Bay, WI

Equipment

2200 feet 18" Containment Boom
One Boom Trailer
One 14' boat w/ 9.9 hp motor
One zodiac boat w/40 hp motor
1000' absorbent boom
13 absorbent rolls
25 bale absorbent pads

Sheboygan, WI

Personnel

Three Response Managers
Twelve Foreman/Technicians/Drivers

Equipment

One Emergency Response Trailer with full equipment
Five Pick-up Trucks
Ten Vacuum Trucks/Trailers*
100' 18" Containment boom
250' absorbent boom
10 bale absorbent pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Germantown, WI (Milwaukee)

Personnel

Six Response Managers
Thirty-two Foreman/Technicians

Equipment

One Emergency Response Truck and Trailer with full equipment
Ten Pick-up Trucks
One Vacuum Truck, 2500 gallons- 50-60 gpm w/ 4" hose
Ten Vacuum Trucks/Trailers*
Four Boom Trailers
One Water Treatment Trailer
One Dual drum oil skimmer- Elastec TDS-136, 70 gpm
Two Weir skimmers- SKIMPAC 4300, 50 gpm
One 19' foot boom boat with 115hp outboard
Four 12 to 18' jon boat w/ 15-25 hp outboards
Fifteen – Rolloff Trucks
Thirty Sealed Roll off Boxes
15,400' 18" containment boom
1000' 36" containment boom
2000' absorbent boom
85 bale absorbent pads

Fort Atkinson, WI

Personnel

One Response Manager
Seven Drivers/Technicians

Equipment

Five vacuum trucks or trailers*
250' Absorbent boom
10 Bale absorbent pads

Wausau, WI

Personnel

One Response Managers
Three Foreman and Technicians

Equipment

One Emergency Response Truck and Trailer
One Response Managers Truck
One Pick-up Truck
Two vacuum trucks or trailers*
One Jon Boat w/15 hr motor
One Power Pack with Three Pumps
500' Absorbent Boom
20 Bale Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Norway, MI

Personnel

Three Response Managers
Four Foreman and Technicians

Equipment

One Emergency Response Truck and Trailer
One Vacuum Truck- 3000 gallon, 50-60 gpm w/ 4" hose
One Roll off Truck
Four Sealed Rolloff Boxes- 25 yard
One Frac Tank, 18000 gallon Capacity
600' Absorbent Boom
5 Bale Absorbent Pads

New Lenox, IL (Southwest Chicago)

Personnel

Three Response Managers
Fifteen Foreman and Technicians

Equipment

One Emergency Response Trailer (Full Equipment)
One Emergency Response Truck w/lift-gate- 4x4
Four Vacuum Trucks*
One roll-off truck
Four Sealed Roll off Boxes
One 18' Response Boat w/60 hp motor
One 14' jon boat- w/10 hp motor
Six Pick-up Trucks
One Cube Van
One Elastec TDS-118 Skimmer, 35 GPM Recovery
2200' 18 containment boom
600' Absorbent Boom
20 Bale of Absorbent Pads

Whiting, IN (BP Amoco)

Personnel

Two Response Managers
Thirty-six Foreman and Technicians

Equipment

Eleven Vacuum Trucks*
Two Trailer Mounted Pressure Washers
One 14' boat w/10 hp motor
500' Absorbent Boom
10 Bale Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Mitchell, IL (St. Louis)

Personnel

3 Response Managers
27 Foreman and Technicians

Equipment

One Emergency Response Trailer – Full Equipment
One Emergency Response Truck- 4x4
Seventeen Support Trucks
Seventeen Vacuum Trucks*
Four Combination Jet/Vac Trucks
Eight 10k+ Hydro Blasters
Two Steam Pressure Washers
One 18' Boat w/40 hp motor
One Elastec TDS-118 Skimmer, 35 GPM Recovery
One Intrinsically Safe Sewer Inspection Unit
400' Absorbent Boom
1000' 18" Containment Boom
15 Bale Absorbent Pads

Dayton, OH

Personnel

Five Response Managers
45 Foreman and Technicians

Equipment

Twenty Five Vacuum Trucks*
Two Jet/Vac Combination Units
One Intrinsically Safe Sewer Inspection Unit
Thirty Two Support Trucks
One 4x4 Emergency Response truck w/liftgate
One Emergency Response Trailer (Full Equipment)
One Emergency Response Rehab/Office Trailer
Three Rolloff Trucks
Twelve Semi Tractor/Tanker/Roll off Units*
Thirty Five Water Blaster Units
Six Frac Tanks – Avg 18,000 gallons each
Thirty Sealed Rolloff Boxes
One 20' Pontoon/Boom Boat w/90 hp motor
One Jon Boat w/15 hr motor
One Elastec Magnum 100 Skimmer w/hydraulic power-pack, 100 gpm Recovery Rate
One Elastec TDS-118 Skimmer, 35 GPM Recovery
One Half-Disk Mantaray Skimmer, 56" w/ 3' coupling, 80 gpm
One Weir Skimmer- SKIMPAC 4300, 50 gpm
2,200' 18" Containment Boom
50' 8" Containment Boom
800' Absorbent Boom
20 Bale of Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Nitro, WV (Charleston)

Personnel

2 Response Managers
25 Foreman and Technicians

Equipment

Six Vacuum Trucks*
Four Transport Tankers*
Two Roll off Trucks
Twelve Support Trucks
Twenty-five Sealed Rolloff Boxes
200' of Absorbent Boom
20 bale of Absorbent Pads

Louisville, KY

Personnel

3 Response Managers
22 Foreman and Technicians

Equipment

Five Vacuum Trucks*
One Emergency Response Trailer – Full Equipment
Fifteen Water Blaster Units
100' of Absorbent Boom
Four Bale Absorbent Pads

Long Beach, CA

Personnel

5 Response Managers
82 Foreman and Technicians

Equipment

One Emergency Response Trailer – Full Equipment
2000 feet – 18" Containment Boom
One Boom Trailer
Thirty-two Vacuum Trucks*
Fourteen Tanker-Trucks*
Twelve 130-bbl Vacuum Tankers*
One Drum Skimmer- Elastec TDS-118, 35 gpm
Two 14 ' jon boats w/ 15 hp motor
Five 10k Hydro Blasters
2000' Absorbent Boom
15 Bales Absorbent Pad

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Denver, CO

Personnel

2 Response Managers
10 Foreman and Technicians

Equipment

One Emergency Response Trailer- Full Equipment
One 4x4 Emergency Response truck w/liftgate
One Vacuum Truck*
One 14' Jon Boat- no motor
One 3" Trash Pump
25 Bale Absorbent Pads
100' Absorbent Boom

Jacksonville, FL

Personnel

2 Response Managers
10 Foreman and Technicians

Equipment

One Emergency Response Trailer- Full Equipment
One Vacuum Truck*
One Emergency Response Truck w/lift-gate- 4x4
One 14' Jon Boat- no motor
One 3" Trash Pump
25 Bale Absorbent Pads
100' Absorbent Boom
1500' 18" containment boom

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

VEOLIA
ENVIRONMENTAL SERVICES

VEOLIA ES SPECIAL SERVICES NORTH AMERICA

2009

Major Oil Spill Equipment and Personnel List by Location

Neenah, WI

Personnel

Seven Response Managers
Thirty Foreman and Technicians

Equipment

One Emergency Response semi tractor trailer with full equipment
Two Response Manager Trucks
Two five ton stake trucks
One 1 ton stake truck
Two Hydrographic survey boats
Hydraulic power packs and pumps
Two weir Skimmers- SKIMPAC 4300, 50 gpm
1000' absorbent boom
25 bale absorbent pads

Green Bay, WI

Equipment

2000 feet 18" Containment Boom
One Boom Trailer
One 14' boat w/ 9.9 hp motor
One zodiac boat w/40 hp motor
500' absorbent boom
13 absorbent rolls
25 bale absorbent pads

Sheboygan, WI

Personnel

Three Response Managers
Twelve Foreman/Technicians/Drivers

Equipment

One Emergency Response Trailer with full equipment
Five Pick-up Trucks
Ten Vacuum Trucks/Trailers*
100' 18" Containment boom
250' absorbent boom
10 bale absorbent pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Veolia ES Special Services, Inc.
N 104 W 13275 Donges Bay RD, Germantown, WI 53022
tel: 262 236 8130 - fax: 262 236 8140
www.VeoliaES.com

Germantown, WI (Milwaukee)

Personnel
Eight Response Managers
Fifty-two Foreman/Technicians
Equipment
One Emergency Response Truck and Trailer with full equipment
Ten Pick-up Trucks
One Vacuum Truck, 2500 gallons- 50-60 gpm w/ 4" hose
Two Boom Trailers
One Water Treatment Trailer
One Command Center
One Dual drum oil skimmer- Elastec TDS-136, 70 gmp
Two Weir skimmers- SKIMPAC 4300, 50 gpm
One 19' foot boom boat with 115hp outboard
Three 16' jon boat w/ 15 hp outboard
Fifteen – Rolloff Trucks
2100' 18" containment boom
1500' 36" containment boom
2000' absorbent boom
35 bale absorbent pads

Fort Atkinson, WI

Personnel
Two Response Manager
Seven Drivers/Technicians
Equipment
Five vacuum trucks or trailers*
250' Absorbent boom
10 Bale absorbent pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Wausau, WI

Personnel
Two Response Managers
Six Foreman and Technicians
Equipment
One Emergency Response Truck and Trailer
One Response Managers Truck
One Pick-up Truck
One Jon Boat w/15 hr motor
One Power Pack with Three Pumps
400' Containment Boom
500' Absorbent Boom
20 Bale Absorbent Pads

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Norway, MI

Personnel
Three Response Managers
Four Foreman and Technicians
Equipment
One Emergency Response Truck and Trailer
One Vacuum Truck- 3000 gallon, 50-60 gpm w/ 4" hose
One Rolloff Truck
Four Sealed Rolloff Boxes- 25 yard
One Frac Tank, 18000 gallon Capacity
600' Absorbent Boom
5 Bale Absorbent Pads

New Lenox, IL (Southwest Chicago)

Personnel
Four Response Managers
Twenty-two Foreman and Technicians
Equipment
One Emergency Response Trailer (Full Equipment)
One Emergency Response Truck w/lift-gate- 4x4
Four Vacuum Trucks*
One Semi-Tractor w/roll-off trailer
Fourteen Sealed Rolloff Boxes
One 18' Response Boat w/60 hp motor
One 14' jon boat- no motor
Six Pick-up Trucks
One Cube Van
One Elastec TDS-118 Skimmer, 35 GPM Recovery
1000' 18" Containment Boom
600' Absorbent Boom
20 Bale of Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Whiting, IL (BP Amoco)

Personnel
Two Response Managers
Thirty-six Foreman and Technicians
Equipment
Eleven Vacuum Trucks*
Two Trailer Mounted Pressure Washers
1000' 18" Containment Boom
One 14' boat w/10 hp motor
500' Absorbent Boom
10 Bale Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

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Mitchell, IL (St. Louis)

Personnel

1 Response Manager
27 Foreman and Technicians

Equipment

One Emergency Response Trailer – Full Equipment
One Emergency Response Truck- 4x4
Seventeen Support Trucks
Seventeen Vacuum Trucks*
Four Combination Jet/Vac Trucks
Eight 10k+ Hydro Blasters
Two Steam Pressure Washers
One 18' Boat w/40 hp motor
One Elastec TDS-118 Skimmer, 35 GPM Recovery
One Intrinsically Safe Sewer Inspection Unit
400' Absorbent Boom
15 Bale Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

Dayton, OH

Personnel

Five Response Managers
45 Foreman and Technicians

Equipment

Seventeen Vacuum Trucks*
Two Jet/Vac Combination Units
One Intrinsically Safe Sewer Inspection Unit
Twenty-one Support Trucks
One 4x4 Emergency Response truck w/liftgate
One Emergency Response Trailer (Full Equipment)
One Emergency Response Rehab/Office Trailer
Three Rolloff Trucks
Twelve Semi Tractor/Tanker/Rolloff Units*
Twenty Water Blaster Units
Four Frac Tanks – Avg 18,000 gallons each
Thirty Sealed Rolloff Boxes
One Elastec Magnum 100 Skimmer w/hydraulic power-pack, 100 gpm Recovery Rate
420' 12" Containment Boom
1,500' 18" Containment Boom
One 16' boat With 10 hp motor
50' 8" Containment Boom
500' Absorbent Boom
15 Bale of Absorbent Pads

*Vacuum Truck pumping capacities range from 50-120 gpm w/ 4" hose
*Vacuum trucks range in size from 2000-6000 gallons

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KOCH

KOCH RISK MANAGEMENT SERVICES

MICHELLE P. BUTTERFIELD
MANAGER, CONTRACT RISK

June 30, 2006

Mr. Richard Burgard
Veolia ES Special Services, Inc.
2905 Paine Avenue
Sheboygan, WI 53081

Via Email: richard.burgard@veoliaes.com

Re: Amendment of Intermittent Services Agreement 9501056-A
Flint Hills Resources, LP, Koch Pipeline Company, L.P., Minnesota Pipe Line Company

Dear Mr. Burgard:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated September 26, 1995, as amended, with the above referenced companies. It has been brought to our attention that your company's name is now Veolia ES Special Services, Inc. rather than Onyx Special Services, Inc. as presently evidenced on the ISA.

The purpose of this letter is to amend the term "Contractor", as that term is used in the ISA, as follows:

Veolia ES Special Services, Inc..

Under this proposed amendment letter, future work/services performed by Veolia ES Special Services, Inc. for any of the above referenced companies will be done pursuant to the ISA dated September 26, 1995, as amended, and this amendment dated June 30, 2006.

Please ask your agent to provide a certificate of insurance to evidence your current insurance coverage and the required endorsements. We require the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Michelle P. Butterfield, Contract Risk Manager, Koch Industries, Inc., P.O. Box 2256, Bldg. T5G, Wichita, Kansas 67201 or by fax to (316) 828-9726.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
Contract Risk Manager

MPB/bb

AGREED AND ACCEPTED:
Veolia ES Special Services, Inc.

Federal ID No.: 39-1432114
By: [signature] 7-6-06
Printed Name: Chris Hohol
Title: VP General Mgr.
Date: 7-6-06

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 12, 2005

Via Facsimile: 920-458-0936

Mr. Richard Burgard
Onyx Special Services, Inc.
2905 Paine Avenue
Sheboygan, WI 53081

Re: Agreement #9501056-A

Dear Mr. Burgard:

Your company currently has in effect an Agreement dated September 26, 1995 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Pipeline Company, L.P., Minnesota Pipe Line Company. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-5675 • FAX 316/828-9063 or 316/828-9824

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

April 16, 2003

LYNDA L. WENINGER
LEGAL ASSISTANT

VIA FACSIMILE: 920-458-0936
Mr. Richard Burgard
Onyx Special Services, Inc.
2905 Paine Avenue
Sheboygan, Wisconsin 53081

Re: Intermittent Services Agreement 9501056-A
Koch Materials Company Koch Pipeline Company, L.P.
Minnesota Pipe Line Company
Flint Hills Resources, LP (f/n/a Koch Petroleum Group, L.P.)

Dear Mr. Burgard:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated September 26, 1995, as amended April 17, 1998 and January 16, 2001, with the above referenced Koch companies. It has been brought to our attention that your company's name is **Onyx Special Services, Inc.**, rather than Superior Special Services, Inc, as presently evidenced on the ISA. Koch proposes amending the term "Contractor" as that term is used in the ISA dated September 26, 1995, to include **Onyx Special Services, Inc.**

In addition, Koch proposes adding certain clarification language to the ISA. For the convenience of the parties, and in order to reduce the necessity of having multiple agreements, the term "Company," as used in the ISA, currently includes multiple entities. Koch proposes adding the following language as a new last paragraph to the ISA, effective upon your company's execution of this letter amendment:

> "The parties recognize and acknowledge that 'Company,' as defined above, includes more than one entity. Contractor agrees that each such entity will be separately, not jointly, responsible for the obligations hereunder as relating to work performed for such entity."

Under this proposed amendment letter, future work/services performed by Onyx Special Services, Inc. for any of the above referenced Koch companies will be done pursuant to the ISA dated September 26, 1995, the amendments dated April 17, 1998 and January 16, 2001, and this amendment dated April 16, 2003.

A copy of the enclosed Exhibit C-Certificate of Insurance reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your

current insurance coverage and the required endorsements. Koch requires the alternate employer and waiver of subrogation endorsements under the workers compensation-employer liability policy, and the additional insured endorsement (CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, ISA Legal Assistant, Koch Legal Services, Koch Industries, Inc., P O. Box 2256, Bldg. T4F, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
ISA Legal Assistant

AGREED AND ACCEPTED:
Onyx Special Services, Inc.

By:
Printed Name: Richard P. Bracco
Title: Contract Administrator
Date: