PLAN FOR APPROVALS IDENTIFIED FOR FURTHER ASSESSMENT

Background

The Hazardous Materials Regulations (HMR) are generally performance-oriented regulations, which provide the regulated community with a certain amount of flexibility in meeting safety requirements. The HMR are promulgated under the Federal Hazardous Materials Transportation Law (Federal hazmat law, 49 U.S.C. 5101 et seq.).

In order to achieve an acceptable level of safety and to provide oversight to various functions under the HMR, certain approvals must be obtained. Requirements identifying conditions for which approvals are necessary are incorporated into the HMR through various rulemaking actions. As defined in 49 CFR 171.8, approval means "a written authorization, including a competent authority approval, from the Associate Administrator or other designated Department official, to perform a function for which prior authorization by the Associate Administrator is required under subchapter C of this chapter (49 CFR parts 171 through 18¹0)".

Conditions or requirements identifying when Competent Authority Approvals are necessary or authorized are incorporated in international regulations issued by International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), which have been incorporated by reference into the HMR. As defined in 49 CFR 171.8, competent authority means "a national agency responsible under its national law for the control or regulation of a particular aspect of the transportation hazardous materials (dangerous goods). The term Appropriate Authority, as used in the ICAO Technical Instructions (Incorporated by Reference, see § 171.7), has the same meaning as Competent Authority. For purposes of this subchapter, the Associate Administrator is the Competent Authority for the United States".

Types of Approvals

PHMSA issues several types of approvals, in response to applications from many different sectors of the hazardous materials industry. Approvals authorize a range of activities, such as the packaging and shipping of certain radioactive materials; the testing of certain types of cylinders; the certifying that agencies are qualified to perform certain functions, inspections, or the classification of materials; and the transporting of lithium batteries. It is important to note that the agency only grants approvals for activities allowed (if approved) under specific conditions identified in the HMR. Applicants seeking to engage in an activity that is not permitted by the HMR must apply to PHMSA for a special permit.

Approvals granted by PHMSA are authorized by different parts of Title 49 of the CFR. Table 1 displays the different approvals granted by PHMSA, and also includes the authorizing sections of the CFR.

Table 1: Approvals Issued by PHMSA

Approval Type	CFR Citation
M numbers for identification of manufacturers	49 CFR 178.3
RIN for visual requalifiers	49 CFR 180.209
Explosives	49 CFR 173.56
Fireworks	49 CFR 173.56
Chemical oxygen generators	49 CFR 173.168 (a)
Self-reactive materials and organic materials	49 CFR 173.124; CFR 173.128
Domestic cylinder requalifiers	49 CFR 107.805
Domestic cylinder repair/rebuild companies	49 CFR 107.805
Foreign cylinder requalifiers	49 CFR 107.805
Foreign cylinder repair/ rebuild companies	49 CFR 107.805
Foreign cylinder manufacturers with Independent Inspection Agencies (IIAs)	49 CFR 107.807
United Nations (UN)/ International Organization for Standardization (ISO) cylinder manufacturers	49 CFR 178.70
Designated approval agencies	49 CFR 107.401
Independent inspection agencies	49 CFR 107.803
Package certification agencies	49 CFR 107.401
Explosive examination agencies	49 CFR 173.56
Lighter testing agencies	49 CFR 173.308
International IMDG/ICA competent authority approval	49 CFR 107.705
General approval	49 CFR 107.705
Lithium batteries	49 CFR 173.185
Fuel cells	49 CFR 173.230
Radioactive materials and packaging	49 CFR 173.471; 49
	CFR 173.472; 49 CFR
	173.473
Radioactive material classifications	49 CFR 173.476

For operational purposes, the approvals identified in the above table are generally grouped into six categories.

Table 2: Approval Types

Approval Category	Approval Types		
Registration	M numbers for identification of packaging manufacturers		
	RIN for visual requalifiers		
Classification	• Explosives		
	• Fireworks		
	Chemical oxygen generators		
	Self-reactive materials and organic peroxides		
Cylinders	Domestic cylinder requalifiers		
	Domestic cylinder repair / rebuild companies		
	Foreign cylinder requalifiers		
	Foreign cylinder repair/rebuild companies		
	Foreign cylinder manufacturers with Independent Inspection		
	Agencies (IIAs)		
	United Nations (UN)/International Organization for Standardization		
	(ISO) cylinder manufacturers		
Certification	Designated approval agencies		
Agencies	Independent inspection agencies		
	Package certification agencies		
	Explosive examination agencies		
	Lighter testing agencies		
General Approvals	International IMDG/ICAO competent authority approval		
	General approval		
	Lithium batteries		
	Fuel cells		
Radioactive	Radioactive material package designs		
Materials	Radioactive material classifications		

Types of Approvals Not Requiring Further Assessment

Based on review of the above tables and review of the various types of approvals, PHMSA has determined that the following categories of approvals do not require further assessment:

- Registration. It is apparent that several of the approvals are, in effect, registration type approvals. These approvals include M numbers and visual cylinder requalifiers. The HMR specifies that applicants obtain approval prior to the conduct of business. Due to the registration nature of this type of approval, no further assessment is necessary.
- <u>Classification</u>. PHMSA issues classification approvals for commercial explosives, governmental explosives, fireworks, chemical oxygen generators,

self-reactive materials, and organic peroxides. Explosive approvals are based on an evaluation by an approved entity, subsequent review by PHMSA, and the issuance of a classification approval. All fireworks must be in compliance with, and meet the terms and conditions of, the American Pyrotechnic Association Standard 87-1 which is incorporated by reference as part of the HMR, or be submitted to a DOT-approved laboratory for examination and classification. Military explosives are classed by a component of the DOD, appropriate documentation is submitted to PHMSA, and an appropriate classification document is issued to the government agency. PHMSA also issues approvals for alternative types of stabilization of organic peroxides and for oxygen generators. These approval types are specified by regulation and no further assessment is necessary.

- Cylinders and Certification Agencies. These approvals are issued based on an onsite facility inspection by PHMSA, or a third-party inspection agency operating under authority granted by PHMSA. These on-site audits are conducted to ensure that an applicant has the processes, equipment, personnel and training necessary to perform the function for which approval is sought. Approvals include those issued to Independent Inspection Agencies; Designated Agents; cylinder manufacture, repair, and requalification facilities; third party test labs; lighter test labs; and explosive test labs. Requirements for obtaining these approvals are specified in the HMR. Since these approvals are specified by regulation and an on-site inspection is conducted, no further assessment is necessary.
- Radioactive Materials. PHMSA issues competent authority certificates for package designs containing radioactive materials and for special form radioactive materials. These approvals are based upon compliance with regulatory design and performance requirements, and subsequent review by PHMSA. Additionally, before a competent authority certificate for a package design is issued, PHMSA gets a recommendation from the Nuclear Regulatory Commission to grant or deny the application. Both of these approval types are specified by regulation and no further assessment is necessary.

It is important to note that while these types of approvals have not been identified for further assessment, all approvals are reviewed prior to renewal. This review consists of re-evaluating the applicant's fitness and the safety performance of the approval.

Types of Approvals Which May Require Further Assessment

Based on review of the various types of approvals, PHMSA has determined that approvals issued regarding requirements contained in international standards (IMDG/ICAO), and approvals for lithium batteries and fuel cells may require further assessment.

The following plan establishes a systematic process for identifying the approvals meeting the above mentioned criteria and completing assessments, as necessary.

PHH-20 will assign at least one subject matter expert to this project. PHH-30 will assign at least one approvals specialist to this project.

Table 3 and Table 4 identify the types of approvals requiring further assessment.²

Table 3: IMO/ICAO Approvals

Task	Due Date	Status
Identify active IMO/ICAO approvals	7/1/2010	Complete
Identify IMO/ICAO approvals that may require further assessment	10/1/2010	Complete
Complete assessment of IMO/ICAO approvals as identified	8/28/2011	

Table 4: Lithium Battery, Fuel Cell and Other Safety Evaluation Approvals

Task	Due Date	Status
Identify all active lithium battery and fuel cell approvals, and other approvals	8/1/2010	Complete
Identify all active lithium battery and fuel cell approvals, and other approvals needing further assessment	11/1/2010	Complete
Complete assessment of lithium battery, fuel cell and other approvals as identified	9/31/71111	

This plan anticipates that the team may identify a small number of approvals for which its safety analysis will suggest that the approval should be modified in order to achieve an acceptable level of safety and to provide oversight to various functions under the HMR.

5

² PHMSA has identified the issued approvals requiring further assessment. It is possible that as PHMSA continues to process and evaluate approvals additional approvals needing assessment may be identified. If so, they will be added to the list and addressed.

The team will refer these approvals, with specific recommendations on necessary modifications, to PHH-30 and PHMSA's Office of the Chief Counsel (PHC). For approvals that expire in 2010-2011, necessary modifications will be handled as part of the renewal process. For approvals with expiration dates in 2012 or later, PHH-30, in consultation with PHC, will initiate action to effect the recommended modifications. A specific schedule for modifying the approval will be developed by PHH-30, in consultation with PHC, once the team completes its review and forwards its recommendations.

Tracking Number	CA Number	Approval Type	CA Type
2010011041	CA1995050011	Comp Authority	ICAO Approval
2010020200	CA2010020005	Comp Authority	ICAO Approval
2010020072 2010070021	CA2010020003 CA2010070002	Comp Authority	ICAO Approval ICAO Approval
2010070021	CA2010070002 CA2010050015	Comp Authority Comp Authority	ICAO Approval
2010030393	CA2010030013	Comp Authority	ICAO Approval
2010020208	CA2010020007	Comp Authority	ICAO Approval
2009080733	CA2010020001	Comp Authority	ICAO Approval
2009050210	CA2009050025	Comp Authority	ICAO Approval
2010010784	CA2010010023	Comp Authority	ICAO Approval
2010120184	CA2010120007	Comp Authority	ICAO Approval
2009090460	CA2008050026	Comp Authority	ICAO Exemption
2010020346	CA2010020012	Comp Authority	ICAO Exemption
2010070713	CA2010070041	Comp Authority	ICAO Exemption
2010030231	CA2010030008	Comp Authority	ICAO Exemption
2010030380	CA2010030007	Comp Authority	ICAO Exemption
2010020181	CA2000100011	Comp Authority	ICAO/IMDG Approval
2010020270	CA2010020009	Comp Authority	ICAO/IMDG Approval
2010041195	CA2010020009	Comp Authority	ICAO/IMDG Approval
2010080601	CA2010080006	Comp Authority	ICAO/IMDG Approval
2010060258	CA2008060022	Comp Authority	ICAO/IMDG Approval
2009090535	CA1992080002	Comp Authority	ICAO/IMDG Approval
2009081389	CA1992080002	Comp Authority	ICAO/IMDG Approval
2010010208	CA2004010013	Comp Authority	ICAO/IMDG Approval
2010020777	CA2010020018	Comp Authority	ICAO/IMDG Approval
2010070780	CA2010070057	Comp Authority	ICAO/IMDG Exemption
2010020543	CA2010020015	Comp Authority	ICAO/IMDG Exemption
2009120583	CA2008120001	Comp Authority	IMDG Approval
2010031502	CA1984040012	Comp Authority	IMDG Approval
2010050919 2010010501	CA2010050022 CA2010010010	Comp Authority Comp Authority	IMDG Exemption IMDG Exemption
2010010301	CA2010010010 CA2009070045	Comp Authority	IMDG Exemption
2010030332	CA2010030011	Comp Authority	IMDG Exemption
2010030332	CA2010030011	Comp Authority	IMDG Exemption
2008110128	CA2008110007	Comp Authority	International
2009030672	CA2008020016	Comp Authority	International
2008120442	CA1998040018	Comp Authority	International
2009050068	CA2008110010	Comp Authority	International
2008110215	CA2008110010	Comp Authority	International
2008110083	CA2008110003	Comp Authority	International
2009040118	CA2009040003	Comp Authority	International
2009050177	CA2009050023	Comp Authority	International
2009020661	CA2009020012	Comp Authority	International
2009030167	CA2009030002	Comp Authority	Lithium Battery
2009050113	CA2005100020	Comp Authority	Lithium Battery
2009060052	CA2009060003	Comp Authority	Lithium Battery
2009050526	CA2009050039	Comp Authority	Lithium Battery
2009070537	CA2004020006	Comp Authority	Lithium Battery
2010010590	CA2008120009	Comp Authority	Lithium Battery
2009010854	CA2009010010	Comp Authority	Lithium Battery
2009050924	CA2009050059	Comp Authority	Lithium Battery
2009040184	CA2009040006	Comp Authority	Lithium Battery
2008120536	CA2007100033	Comp Authority	Lithium Battery
2009020075	CA2009020002	Comp Authority Comp Authority	Lithium Battery
2009020762 2009030732	CA2009020027 CA2001030011	Comp Authority Comp Authority	Lithium Battery Lithium Battery
2009030732	CA2001030011 CA2003070024	Comp Authority	Lithium Battery Lithium Battery
2009040365	CA2003070024 CA2008100021	Comp Authority	Lithium Battery
2009070522	CA2008100021 CA2009070041	Comp Authority	Lithium Battery
2009070322	CA2003070041 CA2002100008	Comp Authority	Lithium Battery Transportation
2009070107	CA2002100008 CA2002100008	Comp Authority	Lithium Battery Transportation
2009100493	CA2002100008	Comp Authority	Lithium Battery Transportation
2010092261	CA2002100008	Comp Authority	Lithium Battery Transportation
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Note: PHMSA is reviewing the approvals listed for consistency. These approvals have not been identified as a major safety concern.

2008100092	CA2008100005	Comp Authority	Lithium Battery Transportation
2010061592	CA2010060096	Comp Authority	Lithium Battery Transportation
2009090504	CA2009050039	Comp Authority	Lithium Battery Transportation
2009100291	CA2009050039	Comp Authority	Lithium Battery Transportation
2009030060	CA2008120009	Comp Authority	Lithium Battery Transportation
2010060713	CA2010060080	Comp Authority	Lithium Battery Transportation
2010010324	CA2005020001	Comp Authority	Lithium Battery Transportation
2010061065	CA2010060067	Comp Authority	Lithium Battery Transportation
2010020468	CA2010020014	Comp Authority	Lithium Battery Transportation
2009030720	CA2009030016	Comp Authority	Lithium Battery Transportation
2009040127	CA2009040005	Comp Authority	Lithium Battery Transportation
2009070093	CA2009070005	Comp Authority	Lithium Battery Transportation
2009070133	CA2009070007	Comp Authority	Lithium Battery Transportation
2009100343	CA2009080001	Comp Authority	Lithium Battery Transportation
2009100243	CA2009030016	Comp Authority	Lithium Battery Transportation
2009100565	CA2009100016	Comp Authority	Lithium Battery Transportation
2009101008	CA2008060015	Comp Authority	Lithium Battery Transportation
2009110081	CA2009110003	Comp Authority	Lithium Battery Transportation
2009110310	CA2009110007	Comp Authority	Lithium Battery Transportation
2009110946	CA2009040005	Comp Authority	Lithium Battery Transportation
2009110970	CA2009110011	Comp Authority	Lithium Battery Transportation
2010020707	CA2009110003	Comp Authority	Lithium Battery Transportation
2010031710	CA2010030026	Comp Authority	Lithium Battery Transportation
2010041401	CA2010040020	Comp Authority	Lithium Battery Transportation
2010050986	CA2010050024	Comp Authority	Lithium Battery Transportation
2010061486	CA2010060092	Comp Authority	Lithium Battery Transportation
2010081516	CA2010030026	Comp Authority	Lithium Battery Transportation
2010091128	CA2010090013	Comp Authority	Lithium Battery Transportation
2010091970	CA2010050024	Comp Authority	Lithium Battery Transportation
2010101993	CA2010100014	Comp Authority	Lithium Battery Transportation
2010110244	CA2009110011	Comp Authority	Lithium Battery Transportation
2010010810	CA2010010024	Comp Authority	Lithium Battery Transportation
2010060182	CA2010010008	Comp Authority	Lithium Battery Transportation
2010080428	CA2010010008	Comp Authority	Lithium Battery Transportation
2010060155	CA2010060007	Comp Authority	Lithium Battery Transportation
2010031668	CA2010030025	Comp Authority	Lithium Battery Transportation
2010060170	CA2010030025	Comp Authority	Lithium Battery Transportation
2010112020	CA2010030025	Comp Authority	Lithium Battery Transportation
2008080407	CA2008080021	Comp Authority	Lithium Battery Transportation
2010060673	CA2008080021	Comp Authority	Lithium Battery Transportation
2009080780	CA2003100024	Comp Authority	Lithium Battery Transportation
2009110945	CA2009110010	Comp Authority	Lithium Battery Transportation
2009090445	CA2008050016	Comp Authority	Lithium Battery Transportation
2010060745	CA2010060045	Comp Authority	Lithium Battery Transportation
2010030073	CA2010030002	Comp Authority	Lithium Battery Transportation
2010060824	CA2010060050	Comp Authority	Lithium Battery Transportation
2010071908	CA2010060050	Comp Authority	Lithium Battery Transportation
2010070738	CA2010070043	Comp Authority	Lithium Battery Transportation
2010070749	CA2010070049	Comp Authority	Lithium Battery Transportation
2010010489	CA2003030003	Comp Authority	Lithium Battery Transportation
2010031032	CA2006040001	Comp Authority	Lithium Battery Transportation
2009040037	CA2009040002	Comp Authority	Lithium Battery Transportation
2010060615	CA2007050027	Comp Authority	Lithium Battery Transportation
2010071561	CA2004040007	Comp Authority	Lithium Battery Transportation
2009060394	CA2004040007	Comp Authority	Lithium Battery Transportation
2010111994	CA2010110013	Comp Authority	Lithium Battery Transportation
2010111719	CA2010110006	Comp Authority	Lithium Battery Transportation
2009100844	CA2008100009	Comp Authority	Lithium Battery Transportation
2009084030	CA2009080006	Comp Authority	Lithium Battery Transportation
2010020433	CA2009080006	Comp Authority	Lithium Battery Transportation
2010050514	CA2009080006	Comp Authority	Lithium Battery Transportation
2009060560	CA2009060034	Comp Authority	Lithium Battery Transportation
2009081646	CA2009080028	Comp Authority	Lithium Battery Transportation
2009110805	CA2009080028	Comp Authority	Lithium Battery Transportation

2010050526	CA2008060012	Comp Authority	Lithium Battery Transportation
2009120319	CA2008110009	Comp Authority	Lithium Battery Transportation
2010050437	CA2008110009	Comp Authority	Lithium Battery Transportation
2010010220	CA2010010004	Comp Authority	Lithium Battery Transportation
2010110246	CA2010110004	Comp Authority	Lithium Battery Transportation
2010110300	CA2010060085	Comp Authority	Lithium Battery Transportation
2010091881	CA2010060094	Comp Authority	Lithium Battery Transportation
2010061489	CA2010060094	Comp Authority	Lithium Battery Transportation
2010031406	CA2008030002	Comp Authority	Lithium Battery Transportation
2009030331	CA2007070005	Comp Authority	Lithium Battery Transportation
2009031096	CA2008060012	Comp Authority	Lithium Battery Transportation
2009050298	CA2009050030	Comp Authority	Lithium Battery Transportation
2009060639	CA2009060035	Comp Authority	Lithium Battery Transportation
2009060725	CA2009060039	Comp Authority	Lithium Battery Transportation
2009070538	CA2002120008	Comp Authority	Lithium Battery Transportation
2009080066	CA2009080001	Comp Authority	Lithium Battery Transportation
2009080658	CA2009080009	Comp Authority	Lithium Battery Transportation
2009090228	CA2009090007	Comp Authority	Lithium Battery Transportation
2009090568	CA2008060010	Comp Authority	Lithium Battery Transportation
2009100391	CA2009100011	Comp Authority	Lithium Battery Transportation
2009100564	CA2009100015	Comp Authority	Lithium Battery Transportation
2009110021	CA2009110001	Comp Authority	Lithium Battery Transportation
2009110205	CA2009110005	Comp Authority	Lithium Battery Transportation
2009120501	CA2009120008	Comp Authority	Lithium Battery Transportation
2010010374	CA2010010008	Comp Authority	Lithium Battery Transportation
2010010490	CA2003070001	Comp Authority	Lithium Battery Transportation
2010031536	CA2007070005	Comp Authority	Lithium Battery Transportation
2010040338	CA2000020006	Comp Authority	Lithium Battery Transportation
2010070234	CA2010070019	Comp Authority	Lithium Battery Transportation
2010071942	CA2009080009	Comp Authority	Lithium Battery Transportation
2009090589	CA2003100009	Comp Authority	Modification
2008110176	CA2008110009	Comp Authority	New Request
2010090819	CA2006080012	Comp Authority	Packaging
2010030619	CA1999110024	Comp Authority	Packaging
2010050199	CA2007100011	Comp Authority	Packaging
2010060755	CA2010060047	Comp Authority	Packaging
2010080997	CA2009080011	Comp Authority	Packaging
2010090025	CA2006050031	Comp Authority	Packaging
2010113270	CA2009070017	Comp Authority	Packaging
20100113270	CA2010090014	Comp Authority	Packaging
2010051450	CA2010050014 CA2010060065	Comp Authority	Packaging
2010001042	CA2010080003	Comp Authority	Packaging
2010080538	CA2010080011	Comp Authority	Packaging
2010101390	CA2010000023	Comp Authority	Packaging
2010101390	CA2010100010 CA2010110012	Comp Authority	Packaging
2010111984	CA2010110012 CA2007100035	Comp Authority	Packaging
2010090639	CA2007100033 CA2006080013	Comp Authority	Packaging
2009120431	CA1998120013	Comp Authority	Packaging
2010010483	CA1995090017	Comp Authority	Packaging
2009060219	CA2009060009	Comp Authority	Packaging
2010050837	CA2010050018	Comp Authority	
2010030837	CA2010030018 CA2010040025	Comp Authority	Packaging
2010041529	CA2010040025 CA2004040015	Comp Authority	Packaging
	CA2004040015 CA2006060006		Packaging
2010010412	CA2006020030	Comp Authority	Packaging Packaging
2010010652		Comp Authority	
2009120111	CA2009120002	Comp Authority	Packaging Packaging
2010100583	CA2010100006	Comp Authority	Packaging
2010102205	CA2010100021	Comp Authority	Packaging
2010113379	CA2010110018	Comp Authority	Packaging
2010122040	CA2010070083	Comp Authority	Packaging
2010112864	CA2004090037	Comp Authority	Packaging
2010112872	CA1999110024	Comp Authority	Packaging
2009070095 2009020768	CA2003050001 CA2009020030	Comp Authority Comp Authority	Packaging
2003020700	CU50207020	Comp Authority	Packaging

2009081475	CA2009080021	Comp Authority	Packaging
2010030880	CA2010030018	Comp Authority	Packaging
2010010496	CA2008020018	Comp Authority	Packaging
2010010644	CA2008020018	Comp Authority	Packaging
2010010645	CA2003070001	Comp Authority	Packaging
2010010646	CA2003030003	Comp Authority	Packaging
2010010647	CA1995090017	Comp Authority	Packaging
2010010649	CA2005120010	Comp Authority	Packaging
2010010650	CA1999030022	Comp Authority	Packaging
2010010651	CA2006010012	Comp Authority	Packaging
2010020365	CA2007100011	Comp Authority	Packaging
2010041485	CA2007100011	Comp Authority	Packaging
2010071964	CA2010070089	Comp Authority	Packaging
2010081609	CA2010080024	Comp Authority	Packaging
2010110515	CA2010110005	Comp Authority	Packaging
2010113542	CA1999060006	Comp Authority	Packaging
2010122193	CA2010110005	Comp Authority	Packaging
2009030667	CA2004070009	Comp Authority	Renewal
2009020077	CA2006010005	Comp Authority	Renewal
2010050968	CA2006070009	Comp Authority	Third Party Packaging Lab
2010090850	CA2006070019	Comp Authority	Third Party Packaging Lab
2009040468	CA2009040021	Comp Authority	
2009050256	CA2007090036	Comp Authority	
2009020690	CA2008120001	Comp Authority	
2009070536	CA2002090015	Comp Authority	

Note: PHMSA is reviewing the approvals listed for consistency. These approvals have not been identified as a major safety concern.