PHMSA Emergency Response Forum
Liquid Transmission Pipelines

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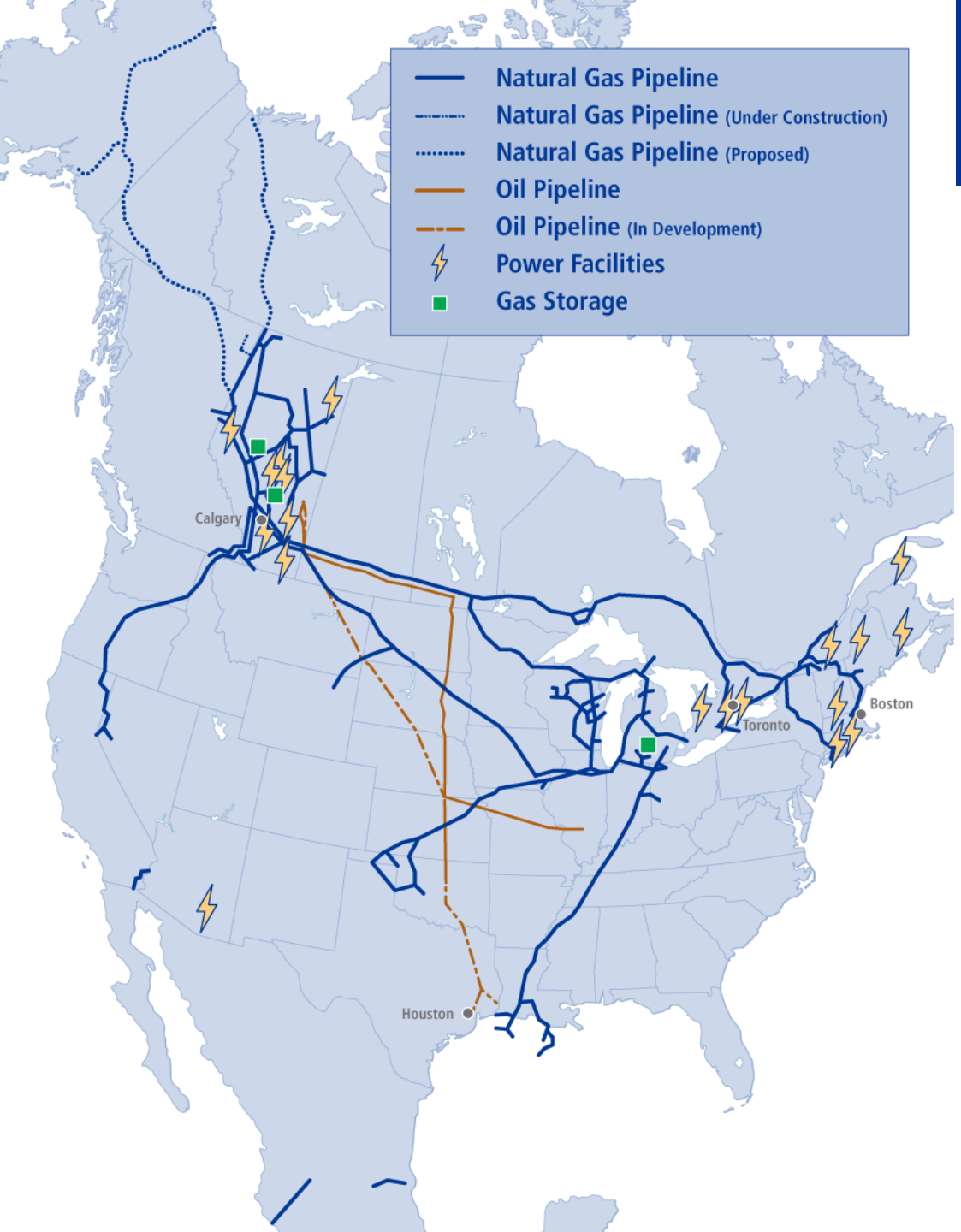
In business to deliver



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One of North America's Largest Natural Gas Pipeline Networks

- 35,500 mi wholly-owned
- 7,000 mi partially-owned
- Average volume of 14 Bcf/d

North America's 3rd Largest Natural Gas Storage Operator

- 380 Bcf of capacity

Canada's Largest Private Sector Power Generator

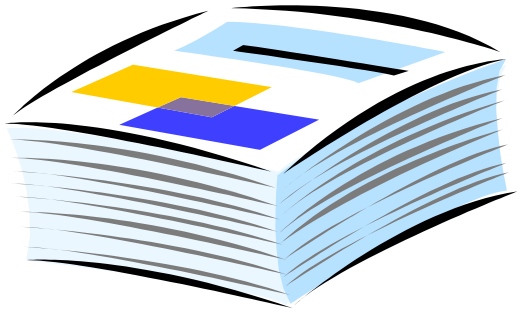
- 19 power plants, 10,800 MW

Premier North American Oil Pipeline System

- 1.4 million Bbl/d ultimate capacity

Elements of a Typical Liquid Pipeline Emergency Response Plan

- **Emergency Response Plan (ERP)**
  - Procedures and list of resources for responding to the maximum extent practicable to a worst case discharge.
  - Pipeline details and route, product and hazards
  - Detection and Mitigation Procedures
  - Notification and Activation Procedures
  - Response Activities and Resources
  - High Consequence and High Volume Areas
  - Incident Command System (ICS) – Unified Command
  - Training Requirements
  - Submitted to DOT PHMSA



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Emergency Responder Engagement

Overall Emergency Responder Process

Educate Emergency Responders

Baseline

Key Messages
- Operator name
- Pipeline purpose
- Product awareness
- General location of pipeline
- MSDS (for gas onlyl)
- NPMS (US only)
- Signs of a leak
- Dos and don'ts
- TransCanada's role
- Emergency phone number
- General contact number

Delivered by mail

Supplemental
- Detailed maps
- HCA information
- TC Regional contact information

Collaboration Outreach
- Look for opportunities to further educate via external associations/ organizations

Establish Personal Contact
- Follow-up to confirm baseline mailing was received
- Update any contact information

Field Exercises
- Generally, one field exercise/ Region/ Year
  - Move from Area to Area in each Region
- Invite ER to participate in various training sessions

ER Guiding Document
- TC will provide a completed ER Guiding Document when ER plan is requested
- Region provides the details for the document

Awareness Presentation
- Provided upon request
- Higher risk areas

Emergency Services

Emergency Response Process

CALL

Emergency Line
(answered by a 3rd party)

Control Center

TransCanada First Responder

Emergency Site/ICP

Region EOC
(tactical)

On-Call Manager

Corp. EOC
(strategy)

EOC Manager

Communication
via Conference LIne

Emergency Response Plan (ERP)
- Developed by regional employees and SMEs
- Internal documents in EDMS
- Specific (valves, isolation points, etc.)

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Elements of a Typical Liquid Pipeline Integrated Public Awareness Program

- **Damage prevention**
- **Public Awareness – Communicating with Emergency Responders**
  - Standard Packages: mail-outs, face-to-face meetings, State Associations
  - National Pipeline Mapping System (N.P.M.S)

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Public Awareness - Dig with C.A.R.E.

- **CALL before you dig**
- **ALLOW required time for marking**
- **RESPECT the marks**
- **EXCAVATE carefully**

811 Know what's below. Call before you dig.

Call Your Canadian One Call Centre

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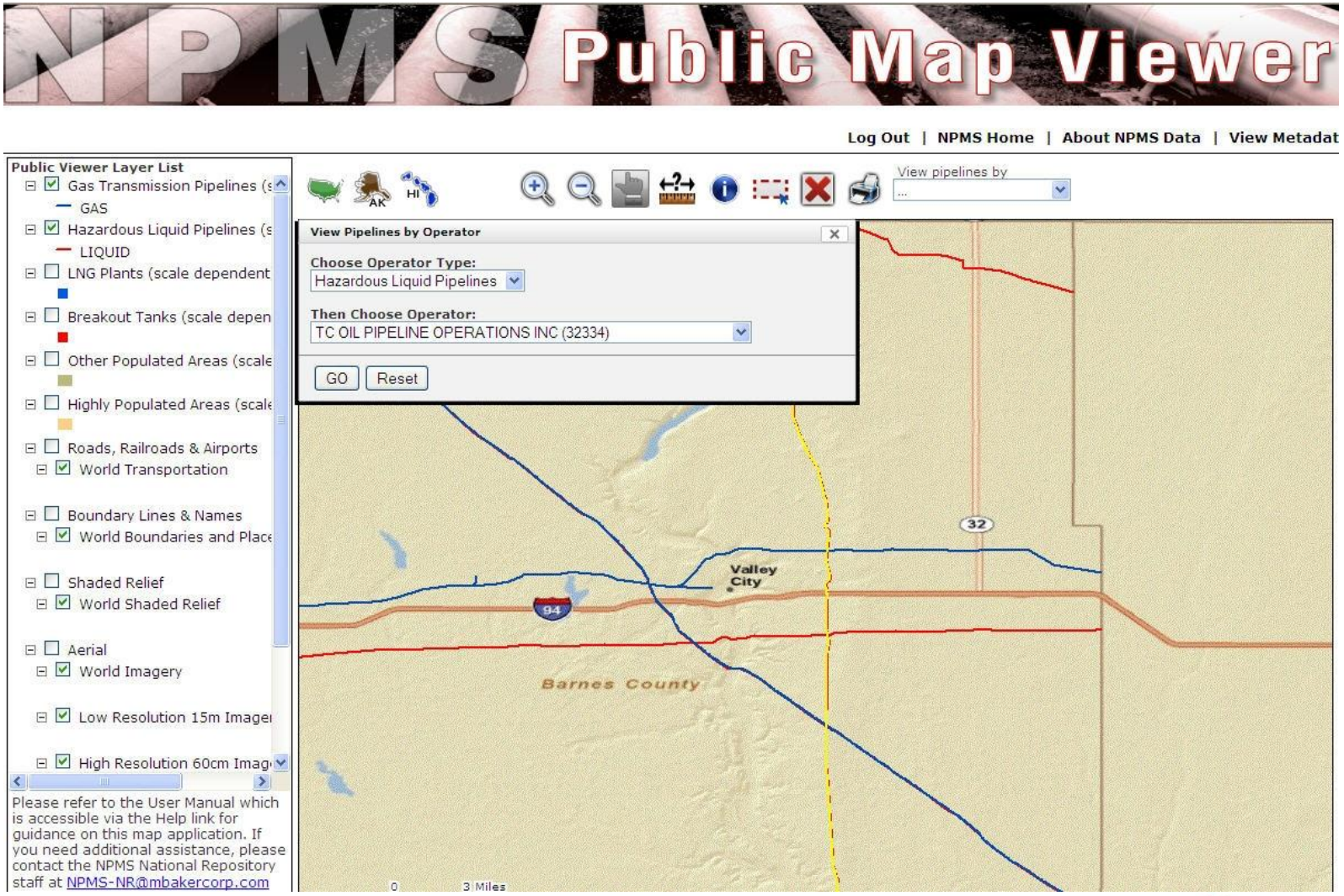
Pipeline Information – Tool for Emergency Responders



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Non-Regulatory Initiatives

- **Community partnering and supporting emergency responder development**
- **Joint planning with emergency responders to store equipment in strategic locations**
- **Purchase of interoperable/multi-use equipment**
- **Involvement in industry wide outreach programs (INGAA, API, State Pipeline Association)**
- **Participation in initiatives to improve leak detection and develop best practices in leak detection and response (AOPL/API)**
- **Tactical control plans**
- **Joint training/exercises**

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Joint Training/Exercises

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Liquid Pipeline Operator Challenges to Conducting an Effective Emergency Response

Challenge 1: Education and Planning

- Effectiveness of outreach: mailings, face to face meetings, video, other
- Collaboration between the pipeline industry and emergency responders on training/response resources
- Effective hazard communication

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Liquid Pipeline Operator Challenges to Conducting an Effective Emergency Response

- **Challenge 2: First responder safety**
  - Immediate link between pipeline operator and emergency responder
  - Hazard Assessment

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Summary and Thank-You

- **We are striving for a robust and effective collaborative relationship with emergency responders and community officials**

- **Partners in Safety**

- **Our goal is to not only meet standards but exceed expectations.**

THANK-YOU!

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