Breakout Tank Inspection - Design and New Construction

1. New Aboveground Breakout Tanks Are new aboveground breakout tanks required to be designed and constructed to the specifications required by §195.132? (DC.TSNEW.BOSPEC.P) (detail) 195.132(a) (195.132(b))

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
</tr>
<tr>
<td>(2) Welded, low-pressure (i.e., internal vapor space pressure not greater than 15 psig (103.4 kPa)), carbon steel tanks that have wall shapes that can be generated by a single vertical axis of revolution must be designed and constructed in accordance with API Standard 620.</td>
</tr>
</tbody>
</table>

Section 2.1.1

Breakout Tank Inspection - Tank Repair

1. Repair, Alteration and Reconstruction of Aboveground Breakout Tanks that have Been in Service Are breakout tanks required to be repaired, altered, or reconstructed in compliance with the requirements of §195.205? (DC.TS.BOMODIFY.P) (detail) 195.205(a) (195.205(b))

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
</tr>
<tr>
<td>(2) For tanks built to API Specification 12F or API Standard 620, the repair, alteration, and reconstruction must be in accordance with the design, welding, examination, and material requirements of those respective standards.</td>
</tr>
</tbody>
</table>

MIP 603 1.0, 2.4

Breakout Tank Inspection - Protection

1. Breakout Tank Impoundment Are new aboveground breakout tank impoundments, protection against entry, normal/emergency venting or pressure/vacuum reliefs required to comply with the requirements of §195.264? (DC.TSNEW.BOIMPOUNDPROTECT.P) (detail) 195.202 (195.264(a); 195.264(b); 195.264(c); 195.264(d); 195.264(e))

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
</tr>
<tr>
<td>Section 2.1.1</td>
</tr>
</tbody>
</table>

Breakout Tank Inspection - Pressure Test

1. Pressure Testing - New Breakout Tanks Have written test procedures been developed for testing new breakout tanks in accordance with §195.307? (DC.PTBO.BOPRESSTEST.P) (detail) 195.202 (195.307(a); 195.307(b); 195.307(c); 195.307(e); 195.310; API Specification 12F; API 620; API 650)

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) For aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 7.18 of API Standard 620 (incorporated by reference, see §195.3).</td>
</tr>
</tbody>
</table>

MIP 604 Hydrostatic Testing of Atmospheric Storage Tanks
2. Breakout Tank Pressure Testing - Repairs, Alterations, and Reconstructions

Have written test procedures been developed for testing repaired, altered, or reconstructed breakout tanks that were returned to service after October 2, 2000? (DC.PTBO.BOPRESSTESTMODIFY.P) (detail) 195.402(c) (195.307(d); 195.310(a); 195.310(b); API 653)

Notes
MIS 603 - remove all references to API 650 and 653 as all tanks are 620 tanks.

Breakout Tank Inspection - Procedures

1. Normal Maintenance and Operations - History

Does the process include procedures for making construction records, maps, and operating history available as necessary for safe operation and maintenance? (MO.LO.OMHISTORY.P) (detail) 195.402(a) (195.402(c)(1); 195.404(a); 195.404(a)(1); 195.404(a)(2); 195.404(a)(3); 195.404(a)(4); 195.404(c)(1); 195.404(c)(2); 195.404(c)(3))

Notes
SAT
Section 4.17

2. Protection Against Ignitions During O&M of Breakout Tanks

Does the process describe how the operator protects against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities of aboveground breakout tanks? (FS.TS.IGNITIONBO.P) (detail) 195.402(c)(3) (195.405(a))

Notes
N/A
Do not have internal floating roofs

3. Floating Roof Access/Egress Hazards

Does the process associated with access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance or repair activities of in-service tanks indicate that the operator has reviewed and considered the potentially hazardous conditions, safety practices and procedures in API Publication 2026? (FS.TS.FLOATINGROOF.P) (detail) 195.402(c)(3) (195.405(b))

Notes
N/A
Do not have internal floating roofs

4. Safety - Maintenance Construction and Testing

Does the process ensure that pipeline maintenance construction and testing activities are made in a safe manner and are made so as to prevent damage to persons and property? (DC.MO.SAFETY.P) (detail) 195.402(a) (195.422(a); 195.402(c)(14))

Notes
SAT
MIP 601 Above Ground Storage Tank Inspection

5. Breakout Tank Overfill Protection

Does the process require adequate testing and inspection of overfill devices on aboveground breakout tanks at the required interval? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.] (FS.TS.OVERFILLBO.P) (detail) 195.402(c)(3) (195.428(a); 195.428(c); 195.428(d))

Notes
SAT
Section 4.13

6. Testing HVL Breakout Tank Reliefs

Does the process require inspection and testing of pressure relief valves on HVL pressure breakout tanks at the required frequency? (FS.TS.PRVTESTHVLBO.P) (detail) 195.402(c)(3) (195.428(b))

Notes
Section 4.13
### 7. Firefighting Equipment

*Does the process require firefighting equipment at pump station/breakout tank areas?*

**(FS.FG.FIREPROT.P) (detail) 195.402(c)(3) (195.430(a); 195.430(b); 195.430(c))**

**Notes**

**SAT**

Section 2.6 lays out fire control system. Map shows fire control at breakout tank areas and pump area.

### 8. Breakout Tank Inspection - In-service

*Does the process describe the interval and method for performing routine in-service inspections of steel atmospheric or low pressure breakout tanks?*

**(FS.TSAPINSPECT.BOINSRVCINSP.P) (detail) 195.402(c)(3) (195.432(b))**

**Notes**

**SAT**

Section 4.16, MIP 601

### 9. Breakout Tank Inspection - External

*Does the process describe the interval and method for performing external inspections of breakout tanks that are steel (atmospheric or low pressure) tanks?*

**(FS.TSAPINSPECT.BOEXTINSP.P) (detail) 195.402(c)(3) (195.432(b))**

**Notes**

**SAT**

Section 4.32(b), MIP 601

### 10. Breakout Tank Inspection - External UT

*Does the process describe the interval and method for performing external, ultrasonic thickness inspections of breakout tanks that are steel (atmospheric or low pressure) tanks?*

**(FS.TSAPINSPECT.BOEXTUTINSP.P) (detail) 195.402(c)(3) (195.432(b))**

**Notes**

**SAT**

Section 2.MIP 601

### 11. Breakout Tank Inspection - Internal

*Does the process describe the interval and method for performing formal internal inspections of breakout tanks that are steel (atmospheric or low pressure) tanks?*

**(FS.TSAPIINSPECT.BOINTINSP.P) (detail) 195.402(c)(3) (195.432(b))**

**Notes**

**SAT**

MIP 601.

### 12. Breakout Tank Inspection - External Visual

*Does the process describe the interval and method for performing visual external inspections of in-service pressure steel aboveground breakout tanks built to API Standard 2510?*

**(FS.TSAPIINSPECT.BOEXTINSPAPI2510.P) (detail) 195.402(c)(3) (195.432(c))**

**Notes**

**SAT**

MIP 601

### 13. Breakout Tank Inspection - Internal In-service

*Does the process describe the interval and method for performing internal inspections of in-service pressure steel aboveground breakout tanks built to API Standard 2510?*

**(FS.TSAPIINSPECT.BOINTINSPAPI2510.P) (detail) 195.402(c)(3) (195.432(c))**

**Notes**

**N/A**

no API 2510 tanks
14. **Signage**  Does the process require operator signs to be posted around each pump station and breakout tank area? (FS.FG.SIGNAGE.P) (detail) 195.402(c)(3) (195.434)

**Notes**
- SAT
- Section 4.2

15. **Facility Protection**  Does the process require facilities to be protected from vandalism and unauthorized entry? (FS.FG.PROTECTION.P) (detail) 195.402(c)(3) (195.436)

**Notes**
- SAT
- Section 4.2

16. **Smoking/Open Flames**  Does the process prohibit smoking and open flames in each pump station and breakout tank area or where there is the possibility of the leakage of a flammable hazardous liquid or of the presence of flammable vapors? (FS.FG.IGNITION.P) (detail) 195.402(c)(3) (195.438)

**Notes**
- SAT
- EOHS 102

### Breakout Tank Inspection - Corrosion

1. **Cathodic Protection for Breakout Tanks**  Does the process describe when cathodic protection must be installed on breakout tanks? (TD.CPBO.BO651.P) (detail) 195.402(c)(3) (195.565, 195.563(d))

**Notes**
- N/A
- Section 2.3.

2. **Cathodic Protection for Breakout Tanks**  Is cathodic protection on breakout tanks required to be installed in accordance with API RP 651? (DC.TS.BOCP.P) (detail) 195.402(c)(3) (195.565; 195.563(d))

**Notes**
- N/A
- Section 2.3.

* 3. **Cathodic Protection Monitoring Criteria**  Does the process require that CP monitoring criteria be used that is acceptable? (TD.CPMONITOR.MONITORCRITERIA.P) (detail) 195.402(c)(3) (195.571)

**Notes**
- SAT
- Section 2.1.1, MIP 501

4. **Cathodic Protection for Breakout Tanks**  Does the process adequately detail when and how cathodic protection systems will be inspected on breakout tanks? (TD.CPBO.BO.P) (detail) 195.402(c)(3) (195.573(d))

**Notes**
- SAT
- Section 2.3
5. Interference Currents  Does the process give sufficient guidance and detail for identifying and testing areas of potential stray current, and minimizing the detrimental effects of stray currents? (TD.CPMONITOR.INTFRCURRENT.P) (detail) 195.402(c)(3) (195.577(a); 195.577(b))

Notes
SAT
MIP 501 2.2

6. Installing Bottom Linings in Aboveground Breakout Tanks  Are bottom linings required to be installed in aboveground breakout tanks to meet the requirements specified in §195.579(d)? (DC.TS.BOBOTTOM.P) (detail) 195.402(c) (195.579(d))

Notes
N/A
No lining are used

7. Atmospheric Corrosion Coating  Does the process give adequate instruction for the protection of pipeline against atmospheric corrosion? (TD.ATM.ATMCORRODECOAT.P) (detail) 195.402(c)(3) (195.581(a); 195.581(b); 195.581(c))

Notes
SAT
MIP 504

8. Atmospheric Corrosion Monitoring  Does the process give adequate instruction for the inspection of aboveground pipeline segments exposed to the atmosphere? (TD.ATM.ATMCORRODEINS.P) (detail) 195.402(c)(3) (195.583(a); 195.583(b); 195.583(c))

Notes
SAT
EOHS 601, MIP 504

Breakout Tank Inspection - Field Review

1. Valve Accessibility  Are valves accessible to authorized employees and protected from damage or tampering? (DC.CO.VALVEPROTECT.O) (detail) 195.258(a)

Notes
SAT

2. Valve Locations  Are valves located as specified by §195.260? (DC.CO.VALVELOCATION.O) (detail) 195.260(a) (195.260(b); 195.260(c); 195.260(d); 195.260(e); 195.260(f))

Notes
SAT

3. Breakout Tank Impoundments  If a breakout tank first went into service after October 2, 2000 does it have an adequate impoundment? (FS.TS.IMEPOUNDBO.O) (detail) 195.264(b)

Notes
N/A
Tanks were constructed prior to October 2, 2000, but do have impoundment areas.
### 4. Breakout Tank Overfill Protection

**Question:** Do selected overfill protection systems on aboveground breakout tanks that were constructed or significantly altered after October 2, 2000 function properly and are they in good mechanical condition? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.]

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tanks were constructed prior to October 2, 2000, but do have overfill protection.</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 5. Pump Station Fire Protection

**Question:** Has adequate fire protection equipment been installed at pump station/breakout tank areas and is it maintained properly?

<table>
<thead>
<tr>
<th>Notes</th>
<th>SAT</th>
</tr>
</thead>
</table>

### 6. Signage

**Question:** Are there operator signs around each pumping station, breakout tank area, and other applicable facilities?

<table>
<thead>
<tr>
<th>Notes</th>
<th>SAT</th>
</tr>
</thead>
</table>

### 7. Facility Protection

**Question:** Are facilities adequately protected from vandalism and unauthorized entry?

<table>
<thead>
<tr>
<th>Notes</th>
<th>SAT</th>
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</thead>
</table>

### 8. Smoking/Open flames

**Question:** Is there signage that prohibits smoking and open flames around pump stations, launchers and receivers, breakout tank areas, or other applicable facilities?

<table>
<thead>
<tr>
<th>Notes</th>
<th>SAT</th>
</tr>
</thead>
</table>

### 9. Cathodic Protection for Breakout Tanks

**Question:** Is cathodic protection on breakout tanks being installed in accordance with API RP 651?

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakout tanks do not have cathodic protection due to design of foundation and HVL tank.</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 10. Cathodic Protection for Breakout Tanks

**Question:** Are cathodic protection monitoring tests performed correctly on breakout tank bottoms?

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakout tanks do not have cathodic protection due to design of foundation and HVL tank.</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 11. Atmospheric Corrosion Monitoring

**Question:** Is aboveground pipe that is exposed to atmospheric corrosion protected?

<table>
<thead>
<tr>
<th>Notes</th>
<th>SAT</th>
</tr>
</thead>
</table>
Breakout Tank Inspection - Records Review

1. New Aboveground Breakout Tanks Do records indicate new aboveground breakout tanks designed and constructed to the specifications required by §195.132(b)? (DC.TSNEW.BOSPEC.R) (detail) 195.132(b)  
   Notes  
   N/A  
   technical service visit for new operator-no records yet

2. Repair, Alteration and Reconstruction of Aboveground Breakout Tanks that have Been in Service Do records indicate breakout tanks repaired, altered, or reconstructed in compliance with the requirements of §195.205(b)? (DC.TS.BOMODIFY.R) (detail) 195.266 (195.205(b))  
   Notes  
   N/A  
   technical service visit for new operator-no records yet

3. Breakout Tank Impoundments If a breakout tank first went into service after October 2, 2000 do records indicate it has an adequate impoundment? (FS.TS.IMPOUNDBO.R) (detail) 195.404(c) (195.264(b))  
   Notes  
   N/A  
   technical service visit for new operator-no records yet

4. Breakout Tank Venting Do records indicate that normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000 are adequate? (FS.TS.VENTBO.R) (detail) 195.404(c) (195.264(d))  
   Notes  
   N/A  
   technical service visit for new operator-no records yet

5. Breakout Tank Pressure Testing Have aboveground breakout tanks been pressure tested to their corresponding API or ASME Standard or Specification and do pressure test records contain the required information? (FS.TS.PRESSTESTBO.R) (detail) 195.310(a) (195.310(b); 195.307)  
   Notes  
   N/A  
   technical service visit for new operator-no records yet

6. Normal Maintenance and Operations - History Do records indicate current maps and records of its pipeline systems are maintained and made available as necessary? (MO.LO.OMHISTORY.R) (detail) 195.404(a) (195.404(b); 195.404(c); 195.9; 195.402(c)(1))  
   Notes  
   N/A  
   technical service visit for new operator-no records yet
### 7. Protection Against Ignitions During O&M of Breakout Tanks
Do records indicate protection against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities of aboveground breakout tanks? (FS.TS.IGNITIONBO.R) (detail) 195.404(c) (195.405(a))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 8. Floating Roof Access/Egress Hazards
Do records indicate access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance, or repair activities of in-service tanks is performed consistent with API Publication 2026? (FS.TS.FLOATINGROOF.R) (detail) 195.404(c) (195.405(b))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>No floating roof</td>
<td></td>
</tr>
</tbody>
</table>

### 9. Testing HVL Breakout Tank Reliefs
Do records document testing and inspection of relief valves on HVL pressure breakout tanks at the required frequency? (FS.TS.PRVTESTHVLBO.R) (detail) 195.404(c)(3) (195.428(b))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 10. Breakout Tank Overfill Protection
Do records document the inspection and testing of overfill protection devices on aboveground breakout tanks at the required interval? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.] (FS.TS.OVERFILLBO.R) (detail) 195.404(c)(3) (195.428(a); 195.428(c); 195.428(d))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical service visit for new operator-no records yet</td>
<td></td>
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</tbody>
</table>

### 11. Breakout Tank Inspection
Do records document that breakout tanks that are not steel atmospheric or low pressure tanks or HVL steel tanks built according to API 2510 have been inspected at the proper interval and that deficiencies found during inspections have been corrected? (FS.TSAPIINSPECT.BOINSPECTION.R) (detail) 195.404(c)(3) (195.432(a))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>API 620 tanks</td>
<td></td>
</tr>
</tbody>
</table>

### 12. Breakout Tank Inspection - In-service
Do records document that steel atmospheric or low pressure breakout tanks have received routine in-service inspections at the required intervals and that deficiencies found during inspections have been documented? (FS.TSAPIINSPECT.BOINSRVCSINS.R) (detail) 195.404(c)(3) (195.432(b))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>
### 13. Breakout Tank Inspection - External
Do records document that steel atmospheric or low pressure breakout tanks have received external inspections at the required intervals and that deficiencies documented during inspections have been corrected within a reasonable time frame?  
(195.404(c)(3) (195.432(b)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 14. Breakout Tank Inspection - External UT
Do records document that steel atmospheric or low pressure breakout tanks have received ultrasonic thickness inspections at the required intervals and that deficiencies found during inspections have been documented?  
(195.404(c)(3) (195.432(b)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 15. Breakout Tank Inspection - Internal
Do records document that steel atmospheric or low pressure breakout tanks have received formal internal inspections at the required intervals and that deficiencies found during inspections have been documented?  
(195.404(c)(3) (195.432(b)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
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</tbody>
</table>

### 16. Breakout Tank Inspection - External Visual
Do records document that in-service pressure steel aboveground breakout tanks built to API Standard 2510 have received visual external inspections at the required intervals and that deficiencies found have been corrected?  
(195.404(c)(3) (195.432(c)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 17. Breakout Tank Inspection - Internal In-service
Do records document that in-service pressure steel aboveground breakout tanks built to API Standard 2510 received internal inspections at the required intervals and that deficiencies found have been corrected?  
(195.404(c)(3) (195.432(c)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 18. Cathodic Protection for Breakout Tanks
Do records document adequate cathodic protection system inspections on breakout tanks?  
(195.589(c) (195.573(d)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>

### 19. Internal Corrosion Lining of Breakout Tanks
Do records document the adequate installation of breakout tank bottom linings?  
(195.589(c) (195.579(d)))

<table>
<thead>
<tr>
<th>Notes</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical service visit for new operator-no records yet</td>
<td></td>
</tr>
</tbody>
</table>
### 20. Atmospheric Corrosion Monitoring

**Question:** Do records document inspection of aboveground pipe exposed to atmospheric corrosion? *(TD.ATM.ATMCORRODEINSPE.R) (detail) 195.589(c) (195.583(a); 195.583(b); 195.583(c))*

<table>
<thead>
<tr>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>technical service visit for new operator-no records yet</td>
</tr>
</tbody>
</table>

### 21. Cathodic Protection System Maps and Records

**Question:** Do maps and or records document cathodic protection system appurtenances that have been installed on pipelines that have been constructed, relocated, replaced, or otherwise changed or been converted to hazardous liquid service? *(TD.CP.MAPRECORD.R) (detail) 195.589(a) (195.589(b))*

<table>
<thead>
<tr>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>SAT</td>
</tr>
<tr>
<td>Looked at maps with procedures.</td>
</tr>
</tbody>
</table>

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**Acceptable Use:** Inspection documentation, including completed protocol forms, summary reports, executive summary reports, and enforcement documentation are for internal use only by federal or state pipeline safety regulators. Some inspection documentation may contain information which the operator considers to be confidential. In addition, supplemental inspection guidance and related documents in the file library are also for internal use only by federal or state pipeline safety regulators (with the exception of documents published in the federal register, such as advisory bulletins). Do not distribute or otherwise disclose such material outside of the state or federal pipeline regulatory organizations. Requests for such information from other government organizations (including, but not limited to, NTSB, GAO, IG, or Congressional Staff) should be referred to PHMSA Headquarters Management.