

# Distribution Integrity Management Programs for Operators of Small JLP Systems

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# Discussion Topics

- DIMP Program Requirements
- DIMP Program Question Set



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# 49 CFR 192.1015 Small LPG DIMP Plan

- Operators must implement IM Program that includes the following elements.
  1. Knowledge of the system.
  2. Identify threats.
  3. Evaluate and prioritize risk.
  4. Identify an implement measures to mitigate risk.
  5. Measure performance, monitor results, and evaluate effectiveness.
  6. Periodic evaluation and improvement.
  7. Recordkeeping.



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# Distribution Integrity Management Program

- 1. Knowledge of system to include.
  - Date system placed into service.
  - Who is responsible for the plan.
  - Maps, location, and material used in the system.
  - Number of units served with gas services.
  - Description of how the system operates.
  - Identify missing information and how to gain additional information
  - List of documents required and where maintained.



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# Distribution Integrity Management Program

## ■ 2. Identify Threats.

### □ Consider all threats existing and potential.

- Corrosion e.g. leaks by corrosion, unprotected piping.
- Natural forces e.g. frost heaves, large trees, ice slide.
- Excavation damage e.g. buried systems, previous damage.
- Other Outside forces e.g. vandalism, vehicular damage.
- Material or welds e.g. manufacture defects, material failure.
- Equipment e.g. leaking seals, pipe dope, regulator failure.
- Operations e.g. workmanship defects, OQ qualified.
- Other concerns e.g. any leakage not listed above.



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# Distribution Integrity Management Program

- 3. Evaluate and prioritize risk.
  - Consider likelihood of accident and consequences.
    - Likelihood of threats that might cause a leak or accident.
    - Rank threats first to last by leaks if no leaks then most likely to cause a problem to least likely.
    - Consider consequences is the area high concentration of people or low concentration of people.
    - Finally group each threat in risk ranking groups highest to lowest.



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- 4. Identify and implement measure to mitigate risk.
  - Actions shall be taken to reduce all risk from your list of ranked threats.
    - Some actions could be monitoring, and patrols.
    - Replacement of pipe segments.
    - Install vehicle protection.
    - Perform onsite inspection during excavation activities.



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# Distribution Integrity Management Program

- 5. Measure performance, monitor results, and evaluate effectiveness.
  - Keep record of leaks including cause of leaks method used to repair leak and by who.
  - Keep record of system damage caused by excavation.
  - Keep record of replacement materials, materials removed.
  - Update any missing data if discovered, and update maps.



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# Distribution Integrity Management Program

- 6. Periodic Evaluation and Improvement.
  - Review threat identification and risk ranking whenever significant changes occur.
  - Re-evaluate DIMP program at a minimum every 5 years.



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# Distribution Integrity Management Program

## ■ 7. Recordkeeping.

- Keep all records, supporting documents, and superseded plans minimum of 10 years.



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# DIMP Question Set

- Procedure Questions
  - Does the plan include means to fill gaps as knowledge is gained on the systems?
  - How is new pipe data retained in the plan?
  - How is threats identified and considered?
  - How is risk ranked and validated in the plan?



# DIMP Question Set

## ■ Record Questions

- Steps taken to reduce risk on the systems?
- Number of leaks eliminated or repaired by cause?
- Records that were used to identify threats?
- New pipe date or missing data knowledge?



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# Questions / Comments

<https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-192/subpart-P?toc=1>

<https://www.phmsa.dot.gov/pipeline/enforcement/distribution-integrity-management-guidance-master-meter-and-small-liquefied-petroleum-gas-pipeline-operators>

