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DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM

49 CFR PART 192 SUBPART P

- **192.1003** : *"This subpart prescribes minimum requirements for an IM program for any gas distribution pipeline covered under this part, including liquefied petroleum gas system."*
- *"A master meter operator or small LPG operator of a gas distribution pipeline must follow the requirements of 192.1015 of this subpart."*

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Prescriptive vs. Performance Rules

- Prescriptive Rule?
  - ✓"What" - "When" – "Where" & "Possibly How"
  - ✓192.465(a) CP Monitoring
- Performance Based Rule?
  - ✓May define "What"
  - ✓May define "When"
  - ✓May define "How"

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PERFORMANCE RULES REQUIRE

- Performance Standard?
  - ✓Verifiable, measurable levels of service in terms of quantity, quality, timeliness, location, and work units.
- 192.615 - Emergency Calls
  - ✓Number of calls
  - ✓Response time
  - ✓Which operating center
  - ✓Number of calls exceeding standard

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PERFORMANCE MEASURE

- Performance Measures?
  - ✓An indicator that defines progress toward success
  - ✓Must be tied to a goal
  - ✓Progress toward meeting the goal

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MEASURING PERFORMANCE

- Goal – Adequate Emergency Response
- Measures:
  - Number of calls
  - Response time
  - Where they took place – reporting center
  - Number of calls exceeding defined standard
- All response times under defined goal, No incidents, no further action required

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DIMP IMPLEMENTATION

- DIMP Implementation Task Group developed in January of 2010.
- DIMP Task Group:
  - ✓Developed a Plan inspection form
  - ✓Developed inspector guidance tied to form
  - ✓Developed FAQs
  - ✓Conducted Pilot Inspections to exercise and refine inspection form
  - ✓Refined inspection form and guidance

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DIMP IMPLEMENTATION

- DIMP Task Group:
  - ✓Developed Inspector training
  - ✓Working with PHMSA IT to develop an inspection form that will feed a PHMSA data base
  - ✓Creating a Record and Field Inspection Form
  - ✓Supporting Industry Conferences
  - ✓Held a Public Meeting

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IMPLEMENTATION FINDINGS

- Inspection Experience - Positive feedback from some Operators
- Meaningful insights into DIMP Implementation and solution-oriented comments.
- DIM Plans interact with other required plans (OM&I) to create overall DIM Program

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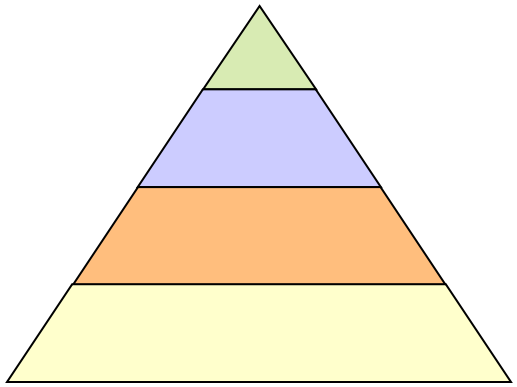
THE BIG PICTURE

- An operator should be able to document and discuss:
  - The Primary Threats to the system,
  - Actions taken to address Primary Threats,
  - Metrics used to measure their performance.



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INSIGHTS

- Trust the Program.
- Follow the Plan.
- “Safety First” culture – may require change
- Communicate Roles & Responsibilities to all Stakeholders
- The DIMP Plan is not “another book on the shelf”, it is an “operating strategy”.

COMMON STRUGGLES

- Tailoring “canned” programs to meet individual operator circumstances and operating environment.
  - SHRIMP
  - NGA/SGA Guidance
  - MEA Guidance
  - Others

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STRUGGLES: RISK MITIGATION

- Identifying appropriate “measures to reduce risk” and developing “ performance metrics”
  - Effectiveness
  - Efficiency
  - Quality
  - Timeliness
  - Productivity
  - Safety
- Performance Baselines - Development

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DATA

- Data quality is commonly a concern;
  - Data cleanup and scrubbing is often required.
- Access to records containing quality data was as challenge.
- Finding the right balance between SME and hard data is important.
- Resources allocation to implement thoughtful data integration to identify existing and potential threats

Knowledge of System: Going Forward

- Documenting SME Conclusions
- Filling Information Gaps
  - How will required data be collected?
  - How will it be integrated?
- Field Data integration:
  - How will the data make it into the risk evaluation?

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NEW DATA INTEGRATION

- Plan must include procedure for recording new pipe data, including location and materials used.
  - Field data collection and acquisition forms may need to be enhanced.
  - How will new data be included in program for risk analysis?
  - Who will review new data for accuracy?

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THREAT IDENTIFICATION

- Go beyond the 7 required threats
- Verifying that all operator specific threats are included (mine subsidence, flooding)
- Consider applicable operating and environmental factors affecting consequence (e.g., paved areas, business districts, hard to evacuate) relating to the Consequence of Failure (COF)

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EXISTING & POTENTIAL THREATS

- Data from external sources:
  - Where will it come from?
  - Which data affects the operator's system?
- DIMP procedures must provide for:
  - Re-evaluation of known threats
  - Identification of new threats
  - Identification of potential treats

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POTENTIAL THREATS

- Some Operators are struggling with:
  - Known threats that the Operator has not experienced (from Industry or PHMSA information)
  - Threats that have not resulted in a leak (e.g., near misses, overpressures).
  - Threats from aging infrastructure

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IDENTIFIED POTENTIAL THREATS

- Over pressurization events;
- Regulator malfunction or freeze-up;
- Cross-bores into sewer lines;
- Static electricity build and discharge;
- Materials with identified performance issues;
- Gophers.

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Risk Evaluation & Ranking

- Risk ranking validation:
  - Does it make sense ?
- SME validation of Risk Ranking
- Changes to Risk Ranking
  - Who made the changes?
  - Why were the changes made?
  - Examination of risk model to determine why the rankings were not accurate?

Risk Ranking Reevaluation

- Evaluate the effectiveness of Risk Mitigation Measure(s)
- Have some risks been eliminated?
- How often will the reevaluation be conducted?
- Who will conduct the reevaluation?
- How will it be validated?

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Mitigative Measure Performance Evaluation

- Evaluate effectiveness of performance measures:
  - How often with they be evaluated?
  - Who will perform evaluation?
- When are additional measures required:
  - Triggers (when is a measure required)?
  - Which Measure will be implemented?
- Elimination of a performance measure

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Periodic Plan Evaluation & Improvement

- Plan must have a procedure for evaluation
  - Who be included in the evaluation?
  - What the evaluation include?
  - When will it be conducted?
  - Where will it be conducted?
  - How will it be conducted, and how will changes be communicated to stakeholders?
    - Leader
    - In person or email
    - Video Conference (both)

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REPORTING

- Required to report:
  - Number of hazardous leaks eliminated or repaired categorized by cause
  - Number of excavation damages
  - Number of excavation tickets
  - Total leaks eliminated or repaired, categorized by material
- Mechanical fitting failure reporting

Reporting Data Collection

- The Plan should specify:
  - Who will collect the data
  - What data will be collected
  - When will it be compiled
  - Where is the data to be sent
  - How will it be reported

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MFFR

- The Plan should include:
  - Who will gather the information
  - What information will be collected
  - When will it be collected and reported
  - Where will the recording take place
  - How will the information be gathered (e.g. How will the operator acquire the required information about the fitting)

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RECORDS

- Records demonstrating compliance with this rule must be kept for 10 years.
  - If 5 years of records were used to develop the plan they must be kept for 10 additional years
- Copies of superseded plans must be kept for 10 years

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QUESTIONS?