



DIMP

1.5 A. D.

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What Principles Underlie DIMP?

- Requirements are high-level, performance-based
- DIMP requires operators to...
 - Know Your System*
 - Identify Threats*
 - Rank and Mitigate Risks*
- DIMP does not stipulate specific assessment or mitigation actions
- Allows the regulator to investigate internal operator risk management practices

General Observations

- Large, serious effort - began 2007 to early 2010
- Few fully dedicated DIMP personnel; many teams
- Many operators are using GPTC and SHRIMP
- Modifying commercial plan development and risk model tools
- Multi-state and State specific plans
- Change from compliance to integrity management culture
 - Forces a structured approach to prioritize work.
 - Provides “compliance leverage” for funding system integrity projects.

General Observations

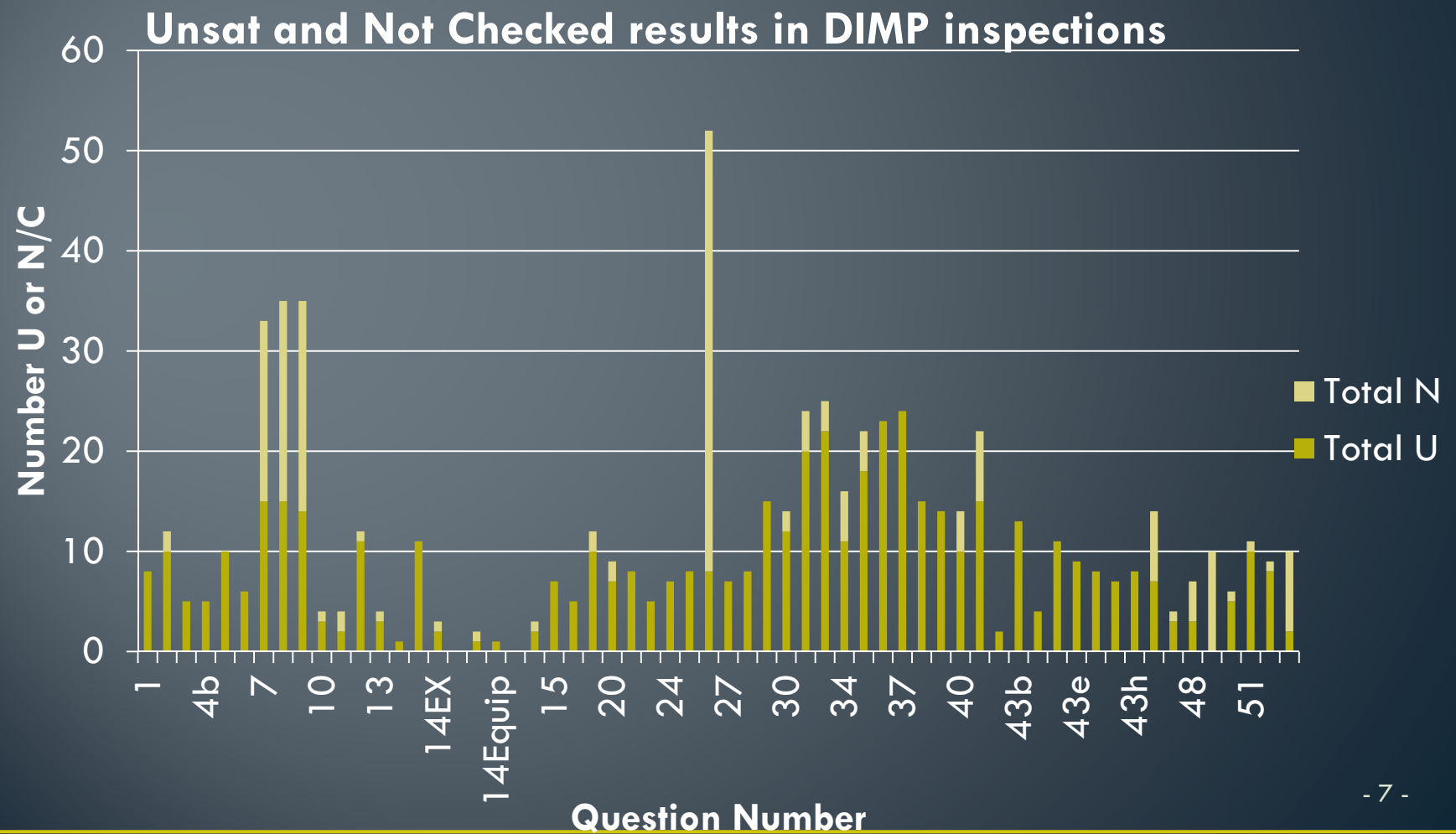
Operators are taking a deep look at data

- Modifying data collection procedures
- Improving/implementing computer applications and hardware (office and field)
- Scrubbing data
- Enhancing training on data collection
- Documenting reason for data anomalies
- Requires knowledge of the geographical relationship of data
- Using a minimum of 5-10 yrs, sometimes using much more to develop trend lines.





Inspection Findings



Other DIMP Plan Comments

- The DIMP rules may require something that is already being done in another context – copy it over or link to it.
- The Plan should culminate in a ranked/prioritized list of threats, risk reduction measures, and performance measures.
- Treat DIMP as a tool to analyze needs and progress, not as a regulatory exercise.

Knowledge of Gas Distribution System

- Where DIMP relies upon subject matter expert (SME) input, the operator must be able to demonstrate why the SME is an expert.
- SME decisions and conclusions must be documented.
- Operators must specify how field information is to be relayed into DIMP. Some Operators have modified field data acquisition forms and internal processes to incorporate new information and correct inaccurate information.

Knowledge (continued)

- Procedure for collection of additional or missing information must be documented; and if there is no missing or unknown information, the DIMP must state this assumption.
- Plan must list data that the Operator has identified that is needed to fill gaps.
- Plan must include procedure for recording new pipe data, including location and materials used.

Knowledge (continued)

- Data quality is a common concern;
 - Outdated, incomplete, obvious errors.
 - Outdated data systems difficult to use or sort.
 - Data cleanup and scrubbing is often required.
- Reasonable balance between SME and hard data is important.
- Integration of data to identify existing and potential threats requires an appropriate level of resource allocation.

Threat Identification

There is more to do than account for just Time Dependent and Time Independent Threats

- An Operator must look at “near misses”, known threats identified in Industry literature, PHMSA Advisory Bulletins, etc. and understand how threats interact with each other
- An Operator should also consider that Interactive Threats (interaction of multiple threats) can be a potential threat.

Identified Potential Threats

Examples of potential threats often not being considered:

- Over pressurization events
- Regulator malfunction or freeze-up
- Cross-bores into sewer lines
- Materials, Equipment, Practices, etc. with identified performance issues
- Vehicular or Industrial activities
- Incorrect maintenance procedures or faulty components
- Rodents, plastic eating bugs, tree roots
- Other potential threats specific to the operator's unique operating environment

Risk Evaluation Guidance

- Understand how your risk model works. Each current and potential threat requires a consequence and likelihood weighting
- Subdivide facilities by measures to reduce risk; balance enough granularity with too much granularity to identify problems
- “Reasonable result” – is the ranking logical, justified through quantitative data, in agreement with SME validation?
- Multi-state operators should have a risk ranking for each State (either separately or be able to filter by State)

Performance Measurement

- Operators must develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program.
- Some Operator's Plans identified “triggers” to initiate development of new performance measures depending on the program performance and the operating environment.
- Each Measure Implemented to Reduce Risk must have a Performance Measure established to monitor its effectiveness.

Example Measures to Reduce Risk

- Measures to reduce risk operators selected:
 - Hurricane Plans to shut in systems
 - Pot Holing every locate
 - Patrol and leak survey at more frequent than code
 - Monthly rectifier readings
 - Riser replacement programs
 - Cast iron surveys after earthquakes
 - Pipe replacement program

“Effective” Leak Management Guidance

Effective Leak Management Program includes:

- Locate the leaks in the distribution system;
- Evaluate the actual or potential hazards associated with these leaks;
- Act appropriately to mitigate these hazards;
- Keep records; and
- Self-assess to determine if additional actions are necessary to keep people and property safe.



Periodic Evaluation & Improvement Guidance

What constitutes a program review?

- Review frequency of periodic evaluation, < 5 years
- Verify general information
- Incorporate new system information
- Re-evaluation of threats and risk
- Review the frequency of the measures to reduce risk
- Review the effectiveness of the measures to reduce risk
- Modify the measures to reduce risk and refine/improve as needed
- Review performance measures, refine/improve as needed

Record and Field Inspection Form

- Draft developed per NAPS Board request

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In Review

- Intended for inspections after initial DIMP inspections

Question Number	Rule §	Description	S/Y	U/N	N/A	N/C
1	192.1007(a) .1007 (a)	Does the operator have records demonstrating a reasonable understanding of its system (e.g., pipe location, size, dates of installation, materials, operating conditions, operating environment)? List deficiencies below:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector Comments						
2	.1007 (a)(3)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector Comments						
3	.1007 (a)	Is the operator making reasonable progress in filling identified knowledge gaps using	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector Comments						

DIMP Enforcement Guidance

- DIMP Enforcement Guidance is being drafted.
- When completed, this guidance will be made publicly available and posted on PHMSA's website with the other Enforcement Guidance documents currently posted at

<http://www.phmsa.dot.gov/foia/e-reading-room>

- This posting will allow Operators to understand Regulators' expectations with regards to the DIMP Regulation