



Safety Assurance

Management Review and Continuous Improvement

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Safety Assurance

The pipeline operator shall demonstrate the proper application of its PSMS and progress toward effective risk management and improved pipeline safety performance.

The pipeline operator shall use:

- Audits to ensure the PSMS **conforms to the requirements**
 - including how it applies to service providers and contractors.
- Audits and evaluation methods to **assess the effectiveness** of risk management and **progress made toward improving pipeline safety performance.**



Safety Assurance Sub-Elements

1. Audit
2. Evaluation
3. Employee Reporting and Feedback
4. Analysis of Data
5. Performance Evaluation
6. Evaluation of Safety Culture
7. Evaluation of Maturity



Safety Culture

- “The collective set of attitudes, values, norms, and beliefs that the operator’s employees and contractor personnel share with respect to risk and safety”
- “How we do things around here.” – “It is the glue”
- Foundation of Safety Culture
 - Policies
 - Operating procedures
 - Continuous vigilance and mindfulness
 - Reporting
 - Lessons learned
 - Employee and contractor engagement



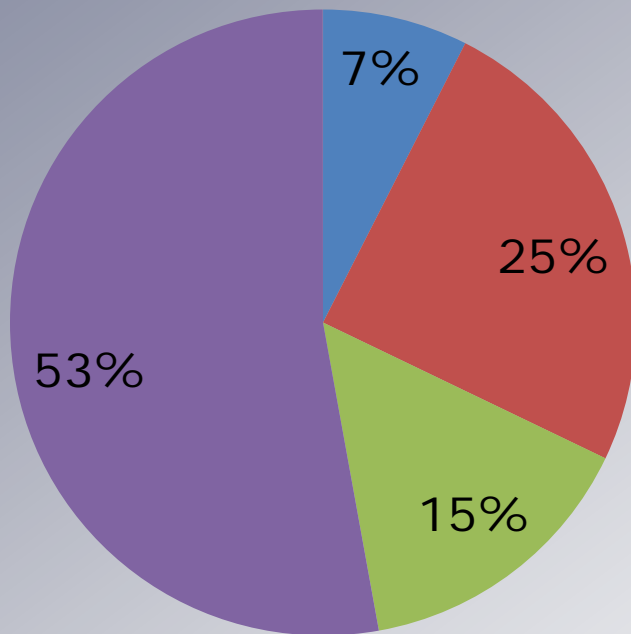
Evaluation of Safety Culture

- Perception
 - Questionnaires (surveys)
 - Interviews
 - Focus groups
- Effectiveness of Safety Culture Foundation
 - Observations
 - Audits



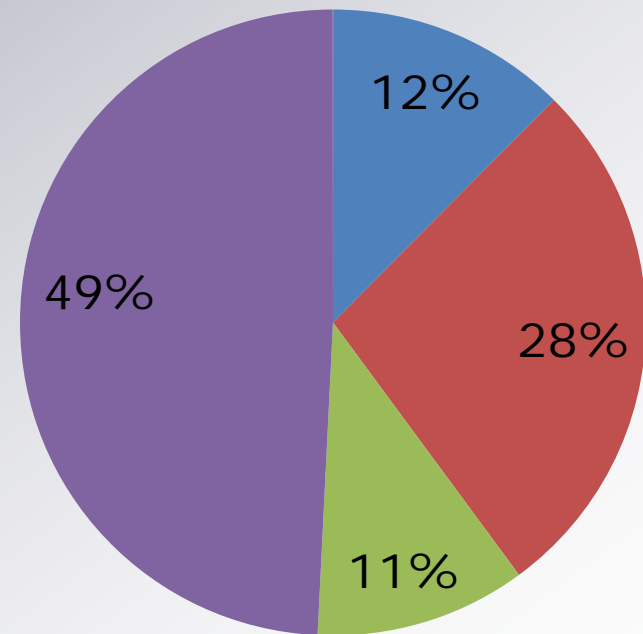
Why do you believe that the types of issues discussed during today's Safety Stand Down presentation occur?

Contractor



- Inadequate training
- Employee attitude

Operator

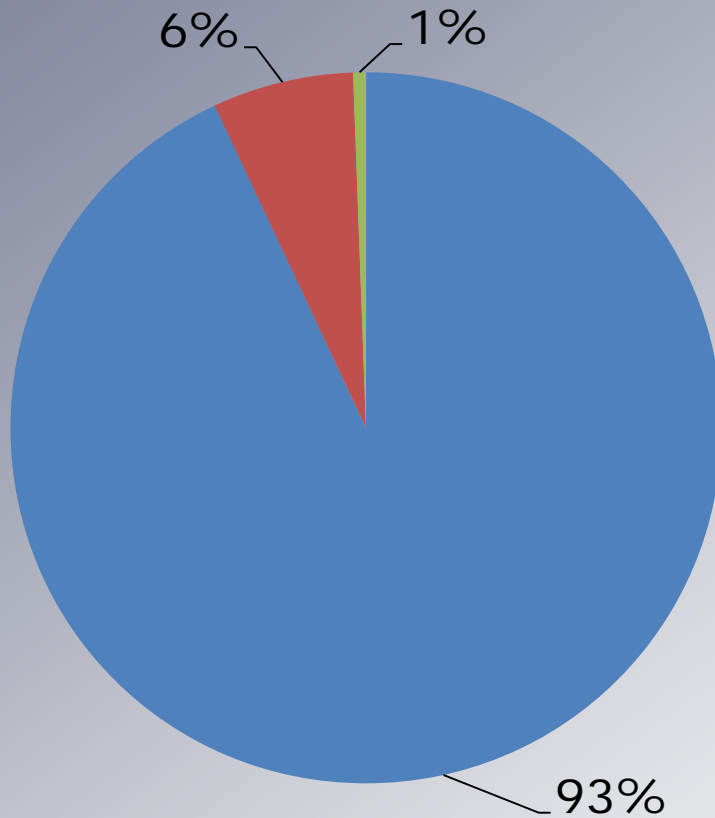


- Employees are pushed for production
- Not following procedures

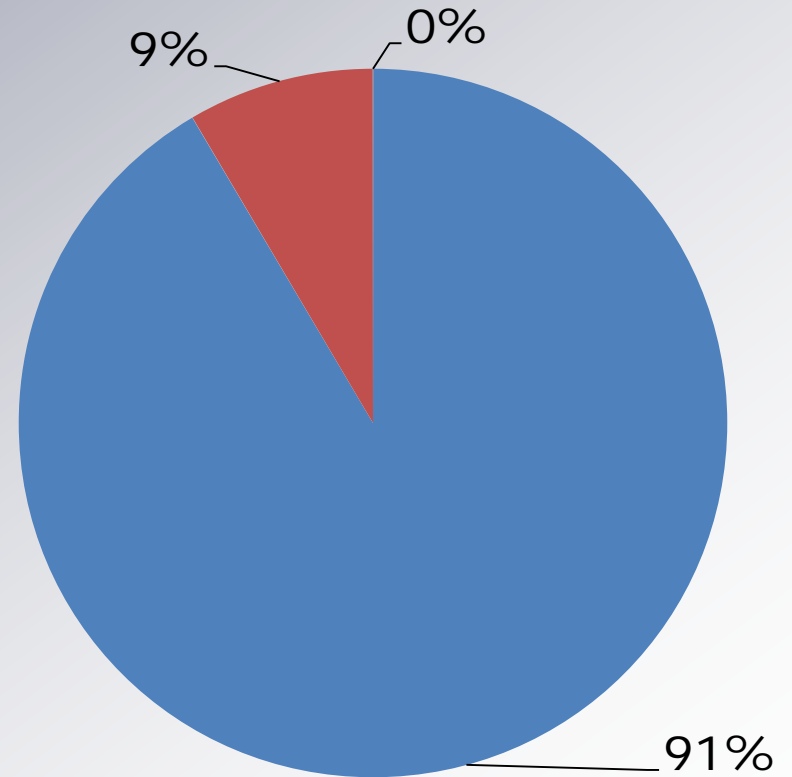


Are procedures, rules and regulations necessary?

Contractor



Operator

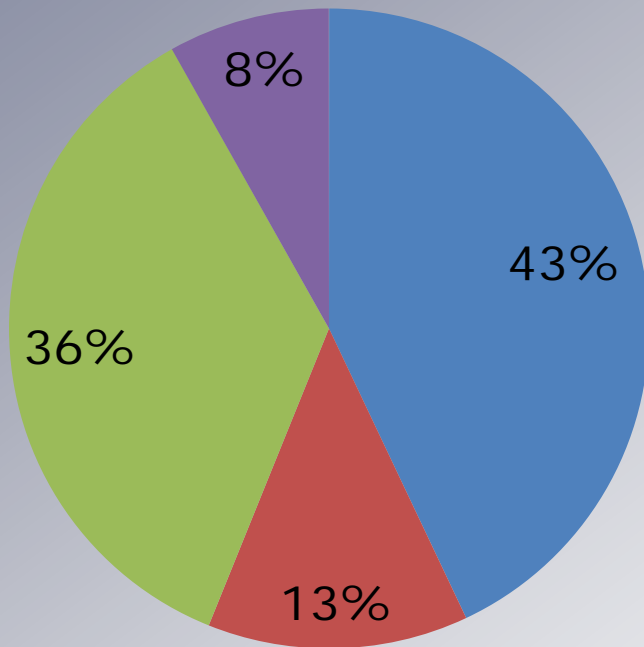


■ Always necessary ■ Sometimes necessary ■ Not necessary at all

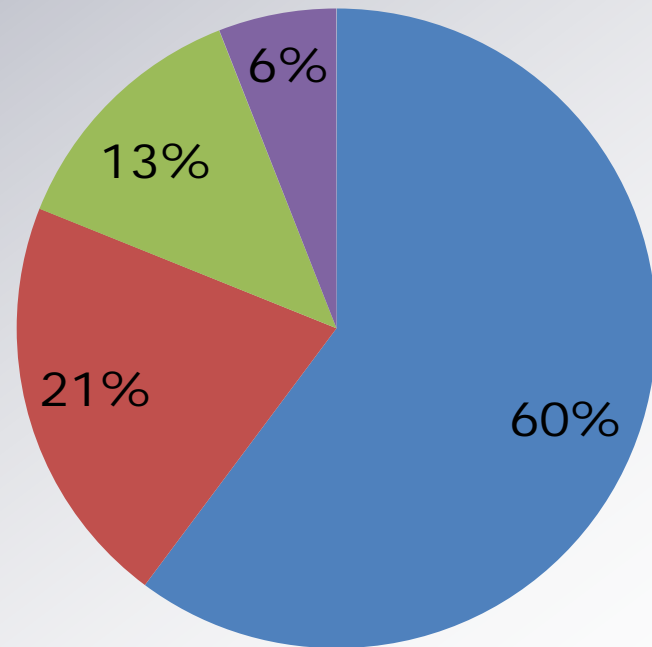


Why do you think someone would choose not to report an issue (not following procedures, rules, regulations)?

Contractor



Operator

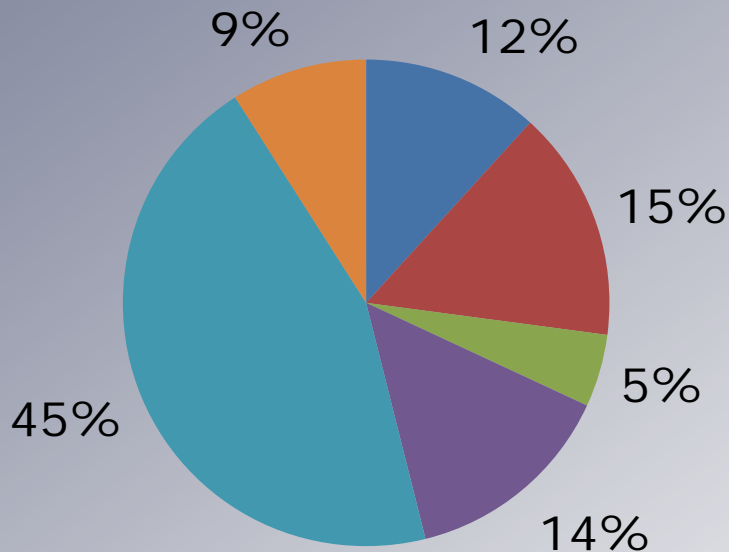


- Negative impact to coworkers (whistle blowing)
- Management would not take action to correct
- Fear of actions by regulatory agencies
- None of my business

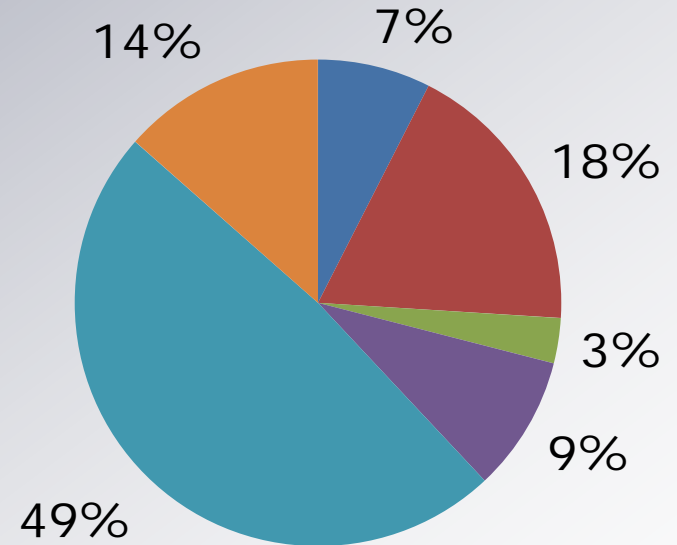


How can we improve the “safety culture” relative to pipeline construction activities in your area of responsibility?

Contractor



Operator

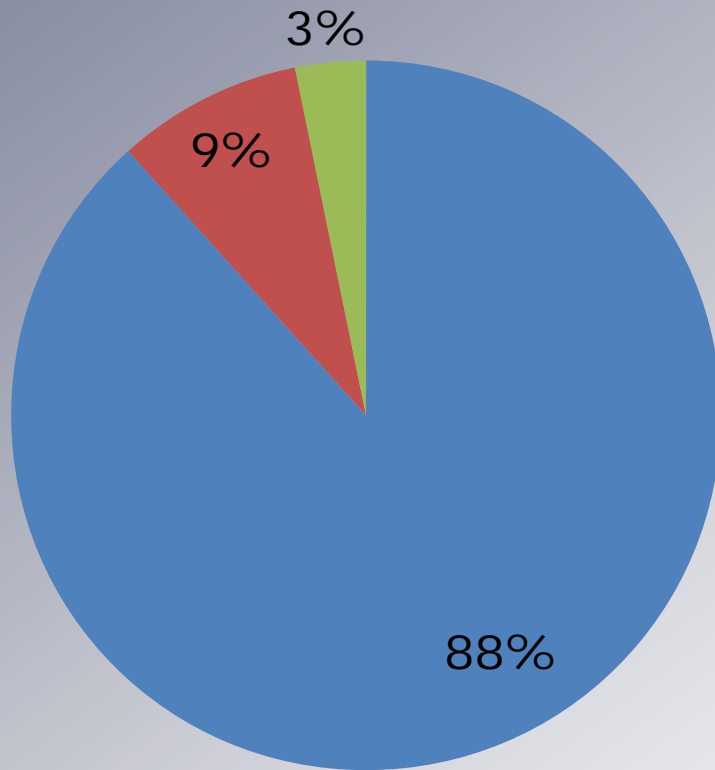


- More training
- Better quality training
- More oversight
- Reward/penalty programs
- Focus on quality vs. quantity of work
- Make people more aware of negative consequences of unsafe work

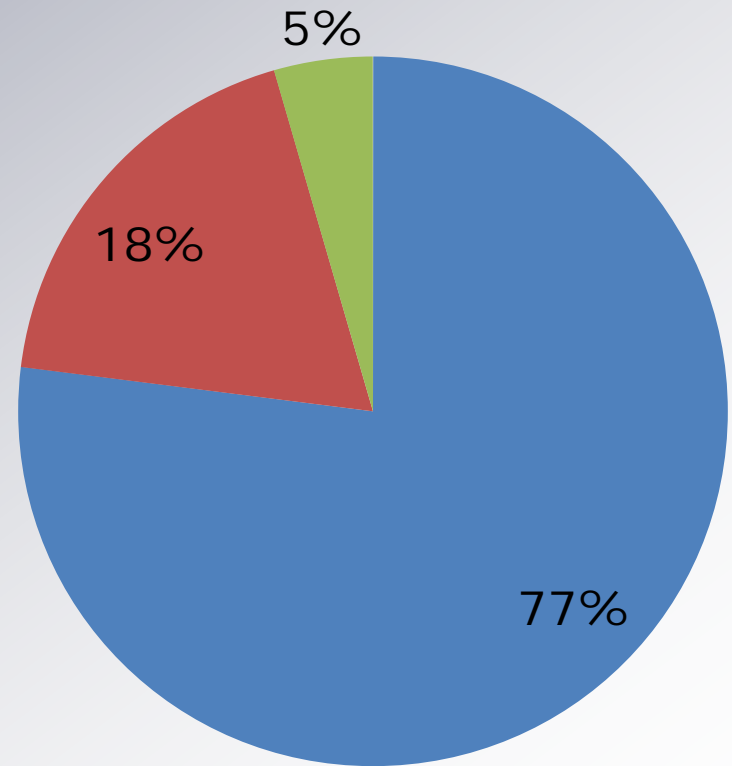


Do you believe you have the authority to stop work if pipeline safety is compromised?

Contractor



Operator



Always Sometimes Never



Assessing Maturity





Management Review and Continuous Improvement

The pipeline operator's PSMS and safety performance shall be reviewed at least annually by top management to evaluate whether the performance goals and objectives have been met.



Management Review and Continuous Improvement

- Management Review Inputs
- Management Review Outputs
- Continuous Improvement
- Evaluation of Technology



Management Review and Continuous Improvement

- Management review ensures the connection with top management
- Continuous improvement is an important theme
- At least annually
- Inputs are work products of PSMS elements
- Yields a summary of effectiveness and opportunities to continuously improve
- The RP explicitly addresses the need to evaluate technology improvements