## **Risk-Based Inspection Update**

Michigan Public Service Commission Nathan Miller October 8, 2019



#### **Procedures for Inspection Priorities**



Each State agency must develop a risk-based procedure for scheduling when an inspection unit is to be evaluated unless it can demonstrate the inspection interval it utilizes eliminates the need for a risk based approach and all inspection units are inspected annually.... This procedure should provide for the establishment of an inspection priority list and consider the following data-driven criteria:

- The length of time since the last inspection.
- The history of the inspection unit.
- Internal and external events affecting the inspection unit.



# Discussion

- The original intent was to be able to avoid performing inspections annually on low-risk operators.
- Revised language in State Guidelines require a complete risk-based inspection process or justification that the current approach eliminates the need for a risk-based inspection ALONG WITH annual inspections.

# Discussion

- MPSC Michigan Public Service Commission
- A complete risk-based inspection process would require over 160 individual inspection profiles, one for each unit.
  - Not feasible to manage this many different inspection plans.
- Therefore, still required to conduct annual inspections, but with proposed changes to better facilitate the implementation of certain risk elements.
  - Hybrid approach.

**Procedures for Inspection Priorities** 



- a. The length of time since the last inspection.
  - *i.* Beginning calendar year 2015 a state program must complete an inspection of each operator's inspection units, other than Liquefied Natural Gas (LNG) units, within a five-year time interval for the following inspection types:
    - 1. Standard (General Code Compliance)
    - 2. IMP Integrity Management
    - 3. OQ Operator Qualification
  - ii. {LNG units...}
  - *iii. Construction inspections are required during every calendar year.*

#### **Procedures for Inspection Priorities**



b. The history of the inspection unit (leak history, prior noncompliance, accident/incident history, and any other information available from the operator's annual reports, etc.)

c. Internal and external events affecting the inspection unit (construction, recent changes in operator personnel or operating procedures, etc.)

## **Current Inspection Process**



- Standard (General Code Compliance)
  - Split into eight different sections.
  - Two sections inspected annually.
  - At the end of four years, a comprehensive
    Standard Inspection has been conducted.
- Construction
  - Identified through:
    - Rate cases.
    - Act 9 filings.
    - Submissions made pursuant to Michigan Rule 460.20502.

**Changes to Standard Inspection** 



- Expand the timeframe for a standard comprehensive inspection from four years to five years.
  - This will result in a reduction of time for each inspection region.
  - Will require a revision of the comprehensive inspection forms.
  - Will still have to ensure that no regulation has gone more than five years from being inspected during the transition.
  - Transition may have to occur over several years.

## **Changes to Standard Inspection**



• Establish specific protocols of regulations that can be target areas for risk-based inspections.

- Corrosion, Welding, Construction, etc.

 These will not be "full-blown" inspections, but targeted records and observations specific to each unit.

# **Changes to Standard Inspection**

- MPSC Michigan Public Service Commission
- Using the data from the new Michigan Rule 460.20504, create a risk-ranking of each inspection region to determine if specific protocols need to be inspected annually.
  - The majority of the inspection regions will not have additional inspections.
  - Looking for outliers.
  - Not intended to cover O&M manual at this time.

# Michigan Rule 460.20504

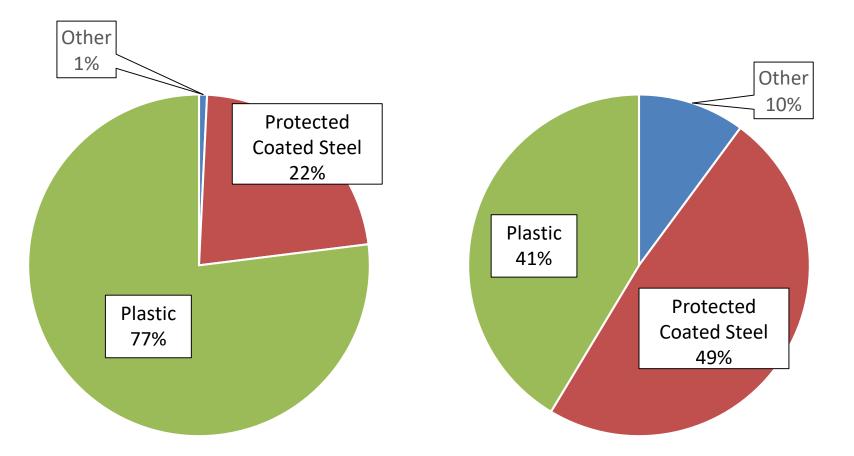


An operator required to submit an annual report in accordance with 49 C.F.R. §191.11 and 49 C.F.R. §191.17, which are adopted by reference in R 460.20606 of these rules, shall also submit a supplemental report to the commission staff.

In the supplemental report, the operator shall subdivide the information in the reports required under 49 C.F.R. §191.11 and 49 C.F.R. §191.17 into specific regions identified by the commission staff. The staff shall identify and communicate these regions to the operator by the end of the calendar year for which the reports are being submitted. For the purpose of this rule, "regions" are defined as geographical, operational, or functional areas of the operator's system.

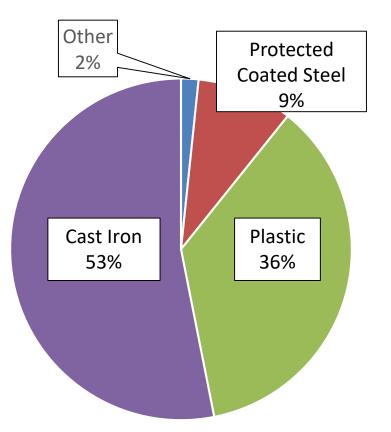
These supplemental reports are to be submitted no later than the dates required in 49 C.F.R. §191.11 and 49 C.F.R. §191.17 and in a similar format.

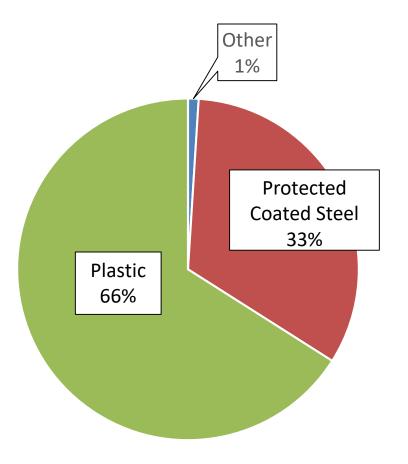
#### Two Regions in One Company



## Two Regions in One Company







# Additional Changes

- Revise Control Room Management and Operator Qualification inspections such that one-fourth of all operators are inspected annually instead of all operators every four years.
  - Will still have to ensure that no regulation has gone more than five years from being inspected during the transition.





 By expanding the timeframe to conduct a standard comprehensive inspection and interspersing risk-based inspections as needed, it is expected that the cumulative inspection impact will be negligible.

## Path Forward



- Starting in 2020, host meetings with operator representatives to outline the risk process.
- Review the methodology and potential areas of improvement.
- Determine implementation rollout timeframe.

# **Questions?**

