

NATURAL GAS TRANSMISSION PIPELINE INTEGRITY MANAGEMENT PROGRAM SUMMARY

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PIPELINE INTEGRITY MANAGEMENT PROGRAM SUMMARY

Policy

It is the policy of Ohio Valley Gas (OVG) and its subsidiaries to conduct its activities in such a way as to:

- Ensure the operational integrity of its natural gas pipeline system meeting the requirements as detailed in Part 192 Subpart O.
- Consider first the safety of its employees, contractors and third parties that may be impacted by the operation of the pipeline system.
- Conduct the Pipeline Integrity Management Program in compliance with the Operations and Maintenance Plan Section O.
- Comply with all environmental regulatory requirements.

OVG will carry out this policy through corporate action plans supported by management. We require the commitment of each individual employee to achieve these objectives and OVG is committed to providing continuing education and training to achieve our goals.

All Company personnel are accountable for ensuring compliance with the Pipeline Integrity Requirements as outlined in Part 192 Subpart O and described in the Pipeline Integrity Management Program which details the implementation requirements for ensuring the integrity of the natural gas pipeline system.

OVG's Pipeline Integrity policies seek to incorporate guidance from industry organizations such as the American Society of Mechanical Engineers (ASME), NACE International, and the Gas Technology Institute (GTI). Furthermore, the policies, processes, and procedures set out in the Pipeline Integrity Management Program should be supplemented by applicable codes and standards recommended by applicable industry groups, corporate and client safety policies, and regulatory requirements.

Overview

OVG's primary goal is the safe and reliable continuous operation of its pipeline system. Our goal assures delivery of product to customers without adverse effects on employees, customers, the public, and the environment. OVG's Pipeline Integrity Management Program meets the requirements identified in 49 CFR 192 Subpart O, Gas Transmission Pipeline Integrity Management, which requires an operator of a covered pipeline segment to develop and follow a written integrity management program that contains all the elements described in 49 CFR 192.911 and that addresses the risks on each covered transmission pipeline segment.

The Pipeline and Hazardous Materials Safety Administration's four primary objectives for the integrity management regulation are as follows:

- accelerating the integrity assessment of pipelines in High Consequence Areas (HCA)
- improving operator integrity management systems
- improving government's role in reviewing the adequacy of integrity programs and plans, and
- providing increased public assurance in pipeline safety

OVG has specific processes and procedures in place to operate the Pipeline Integrity Management Program. This document summarizes the processes that are key to managing the overall program and the procedures that implement each of the program's requirements.

Purpose and Objectives

OVG's purpose and objectives include continuing product delivery to customers in a safe and reliable manner while following industry regulations.

OVG's Pipeline Integrity Management Program is a comprehensive systematic approach to maintain and improve the safety of our pipeline system. –The program contains processes and procedures that will help our employees achieve results. –The program contains five plans that provide the foundation for the program.

The five plans are as follows:

- Integrity Management Plan
- Performance Plan
- Communications Plan
- Management of Change Plan
- Quality Control Plan

The foundation for OVG's program was established using United States Department of Transportation (US DOT) 49 CFR Part 192, Subpart O and ASME B31.8S-2001.

a. The Pipeline Integrity Management Program consists of a framework that describes the process for implementing each program element, how relevant decisions will be made and by whom, a timeline for completing the work to implement the program elements, and how information gained from experience will be continuously incorporated into the program.

b. The Pipeline Integrity Management Program upholds OVG's high regard for strict compliance with all safety and environmental laws and regulations. –The program requires that every action within it be carried out in a manner that minimizes its impact on people and environment.

Background

Pipeline integrity has always been a concern for pipeline operators. –A formalized approach to gas pipeline integrity management programs was initiated with the American Society of Mechanical Engineers (ASME) B31.8S “Managing System Integrity of Gas Pipelines” in 2001. The Department of Transportation, Office of Pipeline Safety, established a rule requiring formal gas pipeline integrity management programs under 49 CFR 192 as required by the “Pipeline Safety Improvement Act of 2002” enacted on December 17, 2002. The rule, enacted December 15, 2003, generally follows the ASME standard.

The rule identifies 16 elements that must be present in a pipeline integrity management program. The table below lists each of the required elements, their relationship to sections in the ASME standard, and where each is addressed within our program.

Regulation 49 CFR 192 Subpart O	ASME Standard B31.8S	OVG Program
a. Identification of all high consequence areas	Section 3 Consequences	6.1.1 High Consequence Area (HCA) Identification
b. Baseline assessment plan	Section 4 Gathering, Reviewing & Integrating Data	6.1.3 Gather/Review and Integrate Data 6.2.2 Develop Long-Term Assessment Plan
c. Identification of threats to each covered pipeline segment (including data integration and a risk assessment)	Section 5 Risk Assessment	6.1.2 Potential Threat Impact Identification
d. Direct assessment plan, if applicable, depending on the threat assessed	Section 6.4 Direct Assessment	6.3 Implementation of Annual Assessment Plan 6.3.1.3 Direct Assessment
e. Remediating conditions found during an integrity assessment	Section 7 Responses to Integrity Assessments & Mitigation	6.3.4 Implement Repairs and Mitigation Based on Assessment
f. Process for continual evaluation and assessment	Section 6 Integrity Assessment	6.4 Post-assessment
g. If applicable, a plan for confirmatory direct assessment (CDA)		6.3.2.4 Confirmatory Direct Assessment
h. Provisions for adding preventive and mitigative measures to protect HCA	Section 7.6 Prevention Strategy/Methods	6.3.4.5 Prevention & Mitigation Strategy/Methods
i. Performance plan that includes performance measures	Section 9 Performance Plan	7.0 Performance Plan
j. Record keeping provisions	Section 4 Gathering, Reviewing & Integrating Data	4.0 Documentation
k. Management of change process	Section 11 Management of Change	9.0 Management of Change Plan

Regulation 49 CFR 192 Subpart O	ASME Standard B31.8S	OVG Program
l. Quality assurance process	Section 12 Quality Control Plan	10.0 Quality Control Plan
m. Communication plan that includes procedures for addressing safety concerns	Section 10 Communications Plan	8.0 Communications Plan
n. Process for providing copy of risk analysis or integrity management program to OPS and state or local authority	Section 10 Communications Plan	8.0 Communications Plan
o. Procedures for ensuring that each integrity assessment is conducted in a manner that minimizes environmental and safety risks	Section 1.2 Purpose and Objectives	1.0 Purpose and Objectives 6.3 Implementation of Annual Assessment Plan
p. Process for identification and assessment of newly-identified HCAs		6.1.1 High consequence Area (HCA) Identification

As mentioned, OVG's Pipeline Integrity Management Program is a comprehensive systematic approach to maintain and improve the safety of our pipeline system and contains five plans, summarized below, that provide the foundation for the program.

1. INTEGRITY MANAGEMENT PLAN

OVG's Integrity Management Plan incorporates several key elements including the understanding of the integrity risks, a thorough assessment of each risk, a mitigation/remediation process to address each risk, and a continuous integrity assessment process.

Pipeline System Data Integration

Identifying and locating High Consequence Areas (HCAs) and the potential threats to specific pipeline segments will identify the data elements required to form integrity management. Initial data is collected from attribute and construction data. Additional data is integrated as it becomes available through operations and maintenance activities and pipeline integrity inspections. Finally, the information is distributed through reports and alignment sheets that group the information for a specific pipeline segment. Any new or replacement pipe to the pipeline system is incorporated into the database and an initial assessment is completed within 10 years of installation.

Risk Assessment & Inspection Schedule

A risk model ranks each pipeline segment from highest to lowest risk. The results of the risk assessment are used to develop a long-term (10-year) assessment plan and schedule. The initial

long-term plan becomes the baseline assessment schedule. Before each subsequent year begins, the long-term plan is used to develop an annual assessment plan that provides the order of assessment for the coming year and indicates the segment, issue, type of assessment, and potential mitigation to be completed.

Implementation of Annual Assessment Plan

The annual assessment plan details the inspection activity and schedule. Inspection results are documented and used to formulate immediate and scheduled repair and mitigation actions, as appropriate. The actions taken and the observed results are documented. This process ensures the availability of the information gained during inspection and repairs for both data integration and management of the segment integrity management plan.

Post-assessment

After completing the assessment and repair/mitigation for each segment, the findings, conclusions, recommendations, and actions are used to update the segment integrity management plan and schedule reassessment activity, as appropriate. In addition, any recommended changes to risk assessment and threat analysis are considered and incorporated as necessary into the Long Term and/or Annual Assessment plans.

2. PERFORMANCE PLAN

OVG's integrity management undergoes annual evaluation. The evaluation determines if the objectives of the program are being met and if the pipeline integrity and safety were improved through the program. The performance plan incorporates a set of performance measures and metrics designed to assess the program's effectiveness.

The performance measures provide us with indicators of effectiveness but are not absolute. The trends indicate the overall program effectiveness over the short-term and long-term. Performance measures may be leading indicators or lagging indicators. Leading indicators provide a measure of how well our program is expected to work and lagging indicators indicate our past performance.

Process Measures

Process measures evaluate the effectiveness of prevention or mitigation activities.

Operational Measures

Operational measures indicate program effectiveness over time.

Direct Integrity Measures

Direct integrity measures include leaks, ruptures, injuries, and fatalities. These measures provide a passive or lagging indication of performance.

Industry Performance Measurement

Industry performance measurements consist of comparing OVG's performance measures to industry-published performance measures and conducting periodic benchmarking studies with other pipeline operators.

Performance Improvement

All the information gathered from performance measurements determines the effectiveness of OVG's program. The results of the evaluation are used to develop recommendations for changes and/or improvements to our integrity management plan. The results, recommendations, and changes are documented.

3. COMMUNICATIONS PLAN

Communications are a key component of OVG's Pipeline Integrity Management Program. Internal communications help ensure that our employees have current information about the pipeline system and the Pipeline Integrity Management Program. External communications with regulatory entities are required to keep interested parties aware of OVG's efforts regarding system integrity.

Internal Communications

The intent of OVG's internal communications is to ensure that management and operations personnel who are involved in or impacted by the integrity management plan are aware of the plans requirements, any changes to the plan, the results of integrity management, and the specific performance measures. This information will be communicated to employees during routine employee meetings, through periodic written documents, and established corporate communications channels, such as newsletters, intranet notifications etc.

External Communication

It is OVG's goal to communicate with outside parties to make them aware of OVG's efforts with regard to integrity management.

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Notifications and performance reports must be filed electronically to PHMSA in accordance with 49 CFR 191.7. Some notifications to the OPS ([Office of Pipeline Safety](#)) are also required to be sent to State or local pipeline safety authorities when either a covered segment is located in a State where OPS has an interstate agent agreement or an intrastate covered segment is regulated by that State. Those notifications shall be submitted to the Indiana Utility Regulatory Commission (IURC).

4. Management of Change Plan

The management of change plan is designed to ensure that changes impacting the pipeline system and its integrity are identified and well managed. The goal of managing change is to ensure that employees, contractors, vendors, and stakeholders are aware of any changes that may impact them and the safe, reliable operation of OVG's pipeline system.

Three main processes have been defined to manage change within OVG. The processes are based on ensuring that all processes, procedures, and documentation that implement all operating, maintenance, and management action relative to the pipeline are maintained, and that any changes are identified, analyzed, and communicated.

5. Quality Control Plan

Quality control, as defined for this purpose, is documented proof that actions and activities surrounding the program do meet the requirements set forth in the Pipeline Integrity Management Program. The minimum requirements of OVG's quality control program are documentation, implementation, and maintenance.

The specific elements that comprise the quality control plan are:

- Specific documentation requirements
- Management and employee responsibilities
- Review of integrity assessment results
- Training of responsible employees
- Performance measurement of effectiveness
- Periodic internal audits
- Implementation of corrective actions to improve the effectiveness of the overall plan

Additional Information

The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) provides transmission pipeline operators with specific guidelines on integrity management programs. These guidelines are publically available for review and details on this regulation can be viewed at www.phmsa.dot.gov. Additionally, PHMSA provides information specific to the Gas Integrity Management Rule, including key documents, fact sheets, Frequently Asked Questions (FAQs), inspection protocols, performance measures, flowcharts, and technical reports, at <https://primis.phmsa.dot.gov/gasimp/index.htm>.

For specific questions regarding OVG's Transmission Integrity Management Plan, contact OVG directly at:

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