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## PROPOSED NEW RULES FOR "OPERATION AND MAINTENANCE"

## WAC 480-75-023 Moving and lowering hazardous liquid pipelines

Every operator must prepare a study, prior to moving or lowering any hazardous liquid pipeline, to determine whether the proposed action will cause an unsafe condition. This study must be reviewed and approved by the company's senior engineer and retained in the company's files for the life of the pipeline. The study must include, but not limited to the following criteria:

- (1) The required deflection of the pipeline;
- (2) The diameter, wall thickness, and grade of the pipe;
- (3) The products transported;
- (4) The terrain;
- (5) The current integrity of the pipeline;
- (6) The safe stress of the pipeline; and
- (7) The toughness of the steel.

If the toughness of the pipe is unknown, it must be considered to be brittle, and the pipeline must not be moved.

## WAC 480-75-024 Monitoring and Inspections

Each reverse-current switch, diode or interference bond whose failure would jeopardize structural protection must be checked electrically for proper performance six times each calendar year with intervals not to exceed two and one half months.

#### WAC 480-75-025 Interference

Where interfering currents are compromising the pipeline cathodic protection system, each operator must use right of way inspections or other methods to determine the source of interference. In the course of these inspections, personnel should be alert for electrical or physical conditions that would indicate interference from a neighboring source. Whenever suspected areas are identified, the operator must conduct appropriate tests within six months to determine interference and take appropriate corrective action.

#### WAC 480-75-026 Remedial Action

Each operator must initiate remedial action to correct deficiencies observed during corrosion monitoring within ninety days.

## WAC 480-75-027 Atmospheric corrosion control

Each above ground portion of the pipeline must be coated, or jacketed with a suitable material for the prevention of atmospheric corrosion. Annual inspections are required to

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evaluate the coating condition and need for reapplication. Coating must not be applied until the pipe surface is cleaned in accordance with the manufacturers' recommendation.

# WAC 480-75-028 Inspections during excavation

Whenever the pipe is exposed for any reason, the operator must examine the pipe for evidence of mechanical damage or external corrosion, including inspecting the coating for evidence of damage. Mechanical damage must be evaluated and repaired as required, in accordance with established repair procedures. Coating damage must be repaired prior to reburying the pipeline. If the operator finds active corrosion, that the surface of the pipe is generally corroded, or that corrosion has caused a leak, the operator must investigate further to determine the extent of corrosion. The pipeline must be inspected prior to and during backfilling of the exposed section. The results of this inspection must be documented and maintained for the life of the pipeline.

#### WAC 480-75-029 Corrosion control records

Each operator must record and retain all cathodic protection inspections and test readings taken for a period of five years.

## WAC 480-75-030 Cathodic protection

Every operator must ensure that all of its metallic, hazardous liquid pipelines are protected by a recognized method or combination of methods of cathodic protection. Cathodic Protection for pipelines must meet or exceed the minimum criteria established in National Association of Corrosion Engineers (NACE) Standard RP-01-69. Cathodic protection systems for storage tank bottoms must meet or exceed the minimum criteria established in the NACE Standard RP-0193-2001.

## WAC 480-75-031 Valve Spacing and Rapid Shutdown

Each operator must prepare a study during the design of the pipeline to evaluate its shutdown capabilities. The study must consider valve placement, terrain, drainage potential, time to shutdown valves and risks. Operators must consider installing remotely monitored pressure gauges and meters. Remote shutdown must be considered for high stress pipelines and pipelines that cannot be isolated within a reasonable time after an acknowledged emergency. The operator must take steps to minimize drain out and emergency shutdown time.

Valve retrofitting requires an appropriate engineering surge analysis.

Each operator must develop a preplanned sectionalization plan to shut down and contain all sections of the pipeline system.

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#### WAC 480-75-032 Valves

Valves must be marked and numbered so they may be readily and positively identified.

## WAC 480-75-033 Right of Way Inspections

Right of way inspections must be conducted at least once each calendar week.

# WAC 480-75-034 Above ground facilities

Proper warning signs must be placed and other adequate protective measures taken at any point where hazardous liquid pipelines and any associated equipment and facilities are exposed, and where their location presents an unusually hazardous situation. All hazardous liquid pipelines attached to bridges or otherwise spanning an area must have warning signs that are visible and readable at both ends of the suspended pipeline. Each operator must inspect all signs annually; signs that are reported damaged and missing must be replaced within 30 days.

## WAC 480-75-035 Pipeline markers.

Pipeline markers required by 49 CFR, Part 195.410(a), must be placed approximately five hundred yards apart if practical and at points of horizontal deflection of the pipeline. Exceptions to this rule must conform with 49 CFR, Part 195.410(b).