

**HAZARDOUS LIQUIDS
PART 195****HAZARDOUS LIQUIDS TRANSMISSION
OPERATIONS AND MAINTENANCE
MANUAL**

Subpart F**Operation and Maintenance****§ 195.400 Scope**

This subpart prescribes minimum requirements for operating and maintaining pipeline systems constructed with steel pipe.

§ 195.401 General Requirements

- (a) No operator may operate or maintain its pipeline systems at a level of safety lower than that required by this subpart and the procedures it is required to establish under §195.402(a) of this subpart.
- (b) Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it shall correct it within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

Approved: Signature on file Date: ____
 Manager, Safety, Health, and Environmental

Approved: Signature on file Date: ____
 Environmental Manager

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- (c) Except as provided by §195.5, no operator may operate any part of any of the following pipelines unless it was designed and constructed as required by this part:
- (1) An interstate pipeline on which construction was begun after March 31, 1970, that transports hazardous liquid.
 - (2) An interstate offshore gathering line on which construction was begun after July 31, 1977, that transports hazardous liquid.
 - (3) An intrastate pipeline, on which construction was begun after October 20, 1985, that transports hazardous liquid.
 - (4) A pipeline, on which construction was begun after July 11, 1991 that transports carbon dioxide.
 - (5) A low-stress pipeline on which construction was begun after August 10, 1994.

ESI RESPONSE to § 195.401:

ESI's operation and maintenance plans and procedures are documented in Company Engineering Specifications, Plant Engineering Specifications and DOT Procedures. With the correct interpretation and application of ANSI B31.4 Code supplemented by the requirements in DOT 49CFR195, they are intended to be adequate for public safety under all conditions encountered in hazardous liquid pipeline transportation.

ESI's DOT Procedures and Plant Engineering Specifications:

Hazardous Liquid Pipelines**Pipeline Repair Procedures**

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Plant Engineering Specifications:

- 1.0 Scope and Intent
- 2.0 References
- 3.0 Piping Systems Definitions
- 4.0 Design, Fabrication, Operation, and Testing Terms
- 5.0 Materials and Equipment
- 6.0 Welding
- 7.0 Design
- 8.0 Construction, Assembly, and Fabrication
- 9.0 Inspection and Testing
- 10.0 Operation and Maintenance Procedures

- 1.0 Scope and Intent
- 2.0 References
- 3.0 Definitions
- 4.0 Imperfections & Damage
- 5.0 Weld Defects
- 6.0 Leaks
- 7.0 Test & Inspection of A,B, and C

**Corrosion Control and Monitoring
Plant Engineering Specification:**

- 1.0 Scope
- 2.0 General
- 3.0 References
- 4.0 Service Conversions
- 5.0 Personnel Requirements
- 6.0 Design Requirements, External
- 7.0 Design Requirements, Internal
- 8.0 Design Requirements, Atmospheric
- 9.0 Installation
- 10.0 Operations
- 11.0 Maintenance

**Protection of Pipeline During
Construction & Repair Activities
Procedure:**

- 1.0 Scope and Intent
- 2.0 References
- 3.0 Definitions
- 4.0 General Requirements
- 5.0 Maintenance
- 6.0 Operations

DOT PROCEDURES:

- DOT-001-Louisiana One Call
- DOT-002-Pipeline Patrol/Leak Insp.
- DOT-003-Pipeline Pigging Operations
- DOT-033-DOT Pipeline Abandonment/
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ESI's Safety Procedures**Documentation****Location Filed**

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PRE-DOT Construction/Maintenance RecordsA-1DOT FILES

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POST-DOT Construction/Repair RecordsA-2DOT FILES**§ 195.402 Procedural Manual for Operations, Maintenance, and Emergencies**

- (a) GENERAL- Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not to exceed 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

ESI RESPONSE to §195.402:

ESI shall prepare and follow written procedures for hazardous liquid pipelines as described in this section for conducting:

- (1) Normal operations and maintenance
- (2) Abnormal operations
- (3) Emergency Operations

The procedures and Plant engineering specifications “Hazardous Liquid Pipelines”, “Corrosion Control and Monitoring”, “Protection of Pipeline During Construction and Repair Activities”, “Pipeline Repair Procedure”, “Valve Maintenance Procedure”, DOT-001 Louisiana One Call Procedure, DOT-002 Pipeline Patrol/Leak Inspection, DOT-003 Pipeline Pigging Procedure, DOT-033 DOT Pipeline Abandonment/Inactivation Procedure, pipeline operating procedures, and ESI’s Emergency Procedures shall be reviewed annually (not exceeding 15 months). Appropriate changes made to insure that the procedures are current in order to provide a reasonable level of safety. The annual review and revisions shall be documented and records kept in order to administer the plan. A documentation page which specifically cites the subject and date of any changes shall be included in each manual and updated annually.

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Documentation Review FormC-4DOT Files

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List of O, M & E ManualF-3DOT Files

(b) The Administrator or the State Agency that has submitted a current certification under the pipeline safety laws (49 U.S.C. 60101 *et seq.*) with respect to the pipeline facility governed by an operator's plans and procedures may, after notice and opportunity for hearing as provided in 49 CFR 190.237 or the relevant State procedures, require the operator to amend its plans and procedures as necessary to provide a reasonable level of safety.

(c) MAINTENANCE AND NORMAL OPERATIONS - The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

- (1) Making construction records, maps, and operating history available as necessary for safe operation and maintenance.
- (2) Gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner.
- (3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart.
- (4) Determining which pipeline facilities are located in areas that would require an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.
- (5) Analyzing pipeline accidents to determine their causes.
- (6) Minimizing the potential for hazards identified under paragraph (c)(4) of this section and the possibility of recurrence of accidents analyzed under paragraph (c)(5) of this section.
- (7) Starting up and shutting down any part of the pipeline system in a manner designed to assure operation within the limits prescribed by

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§ 195.406, consider the hazardous liquid or carbon dioxide in transportation, variations in altitude along the pipeline, and pressure monitoring and control devices.

- (8) In the case of a pipeline that is not equipped to fail safe, monitoring from an attended location pipeline pressure during start-up until steady state pressure and flow conditions are reached and during shut-in to assure operation within limits prescribed by § 195.406.
- (9) In the case of facilities not equipped to fail safe that are identified under § 195.402 (c)(4) or that control receipt and delivery of the hazardous liquid or carbon dioxide, detecting abnormal operating conditions by monitoring pressure, temperature, flow or other appropriate operational data and transmitting this data to an attended location.
- (10) Abandoning pipeline facilities, including safe disconnection from an operating pipeline system, purging of combustibles, and sealing abandoned facilities left in place to minimize safety and environmental hazards.
- (11) Minimizing the likelihood of accidental ignition of vapors in areas near facilities identified under paragraph (c) (4) of this section where the potential exists for the presence of flammable liquids or gases.
- (12) Establishing and maintaining liaison with fire, police, and other appropriate public officials to learn the responsibility and resources of each government organization that may respond to a hazardous liquid or carbon dioxide pipeline emergency and acquaint the officials with the operator's ability in responding to a hazardous liquid or carbon dioxide pipeline emergency and means of communication.
- (13) Periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.
- (14) Taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and making

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available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and a rescue harness and line.

- (d) ABNORMAL OPERATIONS - The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded.
- (1) Responding to, investigating and correcting the cause of:
 - (i) Unintended closure of valves or shutdowns;
 - (ii) Increase or decrease in pressure or flow rate outside normal operating limits;
 - (iii) Loss of communications;
 - (iv) Operation of any safety device;
 - (v) Any other malfunction of a component, deviation from normal operation, or personnel error which could cause a hazard to persons or property.
 - (2) Checking variations from normal operations after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation.
 - (3) Correcting variations from normal operation of pressure and flow equipment and controls.
 - (4) Notifying responsible operator personnel when notice of an abnormal operation is received.
 - (5) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found.

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- (e) EMERGENCIES - The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs:
- (1) Receiving, identifying, and classifying notices of events which need immediate response by the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action.
 - (2) Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities.
 - (3) Having personnel, equipment instruments, tools and material available as needed at the scene of an emergency.
 - (4) Taking necessary action, such as emergency shutdown, or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure.
 - (5) Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable highly volatile liquid.
 - (6) Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action.
 - (7) Notifying fire, police and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them pre-planned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid.

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- (8) In the case of failure of a pipeline system transporting a highly volatile liquid, use of appropriate instruments to assess the extent and coverage of the vapor cloud and determine the hazardous area.
- (9) Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.
- (f) Safety-related conditions reports. The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to reporting requirements of DOT § 195.55.

ESI RESPONSE to § 195.402:

ESI has procedures for operations and maintenance personnel pertaining to each DOT pipeline (Reference C-6 in DOT files for specific operations procedures). Responsible design, construction, operation, and maintenance personnel must have the experience and training to adequately cover all work related problems. All work performed within the scope of ESI's DOT Program will meet or exceed the requirements in ANSI/ASME B31.4 Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids and 49CFR195 Transportation of Hazardous Liquids by Pipeline.

ESI's DOT Procedures and Plant Engineering Specifications:**Hazardous Liquid Pipelines****Plant Engineering Specifications:**

- 1.0 Scope and Intent
- 2.0 References
- 3.0 Piping Systems Definitions
- 4.0 Design, Fabrication, Operation,

Pipeline Repair Procedures

- 1.0 Scope and Intent
- 2.0 References
- 3.0 Definitions
- 4.0 Imperfections & Damage

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	and Testing Terms	5.0	Weld Defects
5.0	Materials and Equipment	6.0	Leaks
6.0	Welding	7.0	Test & Inspection of
7.0	Design		A,B, and C
8.0	Construction, Assembly, and Fabrication		
9.0	Inspection and Testing		
10.0	Operation and Maintenance Procedures		

**Corrosion Control and Monitoring
Plant Engineering Specification:**

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5.0	Personnel Requirements
6.0	Design Requirements, External
7.0	Design Requirements, Internal
8.0	Design Requirements, Atmospheric
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**Protection of Pipeline During
Construction & Repair Activities
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1.0	Scope and Intent
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4.0	General Requirements
5.0	Maintenance
6.0	Operations

DOT PROCEDURES:

DOT-001-Louisiana One Call
DOT-002-Pipeline Patrol/Leak Insp.
DOT-003-Pipeline Pigging Operations
DOT-033-DOT Pipeline Abandonment/
Inactivation

ESI's Safety Procedures

The Plant Engineering Specifications and the DOT Procedures listed previously, will cover the following:

OPERATIONS AND MAINTENANCE PROCEDURES

- A. **OPERATING & MAINTENANCE PROCEDURES AFFECTING THE SAFETY OF LIQUID TRANSPORTATION PIPING SYSTEMS**
1. Basic Requirements
 2. Essential Features of the Operating and Maintenance Plan
 3. Essential Features of the Emergency Plan

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- a) Written Emergency Procedures
- b) Training Program
- c) Liaison
- d) Educational Program
- 4. Pipeline Failure Investigation
- 5. Prevention of Accidental Ignition
- 6. Blasting Affects

B. PIPELINE OPERATIONS AND MAINTENANCE

- 1. Operating Pressure
- 2. Communications
- 3. Markers
- 4. Right of Way Maintenance
- 5. Patrolling
- 6. Pipeline Repairs
 - a) General
 - b) Disposition of Defects
 - (i) Limits and Disposition of Imperfections
 - (ii) General Corrosion
 - (iii) Localized Corrosion Pitting
 - (iv) Allowable Pipeline Repairs
 - (v) Repair Methods
 - (vi) Testing Repairs to Pipeline Operating at a Hoop Stress of More Than 20% SMYS of the Pipe.
 - (A) Testing of Replacement Pipe Sections
 - (B) Examination of Repair Welds
- 7. Derating a Pipeline to a Lower Operating Pressure
- 8. Valve Maintenance
- 9. Railroads and Highway Crossing Existing Pipelines
- 10. Testing and Inspection of Replaced Pipe Sections

C. STATION, TERMINAL, AND TANK FARM OPERATION AND MAINTENANCE

- 1. General
- 2. Controls and Protective Equipment
- 3. Storage Vessels
- 4. Storage of Combustible Material

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5. Fencing
6. Signs
7. Prevention of Accidental Ignition

D. CORROSION CONTROL

E. EMERGENCY PLAN

F. RECORDS

G. QUALIFYING A PIPING SYSTEM FOR A HIGHER OPERATING PRESSURE

H. ABANDONING A PIPING SYSTEM

Documentation**Location Filed**

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PRE-DOT Construction/Maintenance RecordsA-1DOT FILES

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POST-DOT Construction/Repair RecordsA-2DOT FILES

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STRUCTURAL Crossing ReportsA-3DOT FILES

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PLAT MAPSA-4DOT FILES

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Liquid Pipeline Leak Spill ReportB-1DOT FILES**Documentation****Location Filed**

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Liquid Safety Related Condition FilesB-2DOT FILES

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Liquid Telephonic Notice of Certain AccidentsB-3DOT FILES

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Liquid Post Accident Review FormsB-4DOT FILES

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New Employee OrientationC-1DOT FILES

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Employee Safety/Training RecordsC-2DOT FILES

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<u>Employee Performance/Qualification Records</u>	<u>C-3</u>	<u>DOT FILES</u>
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<u>Documentation Review Form</u>	<u>C-4</u>	<u>DOT FILES</u>
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<u>Supervisor Knowledge Verification</u>	<u>C-5</u>	<u>DOT FILES</u>
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<u>List of O, M, & E Manuals</u>	<u>C-6</u>	<u>DOT FILES</u>
RKGP		
<u>Rectifier Readings/Repair</u>	<u>D-1</u>	<u>DOT FILES</u>
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<u>Pipe-to-Soil /Tank-to-Oil Potentials</u>	<u>D-2</u>	<u>DOT FILES</u>
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<u>Casing Status Summary</u>	<u>D-3</u>	<u>DOT FILES</u>
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<u>Corrosion Coupon Reports</u>	<u>D-4</u>	<u>DOT FILES</u>
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<u>Interference Bonds</u>	<u>D-5</u>	<u>DOT FILES</u>
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<u>Galvanic Anode Bed Readings</u>	<u>D-6</u>	<u>DOT FILES</u>
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<u>Pipeline Patrol/Marker/Leak/Inspection Reports</u>	<u>E-1</u>	<u>DOT FILES</u>
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<u>Operator Log Pressure Charts</u>	<u>E-2</u>	<u>DOT FILES</u>
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<u>Block Valve Inspection Reports</u>	<u>E-3</u>	<u>DOT FILES</u>
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<u>System Pressure Test Records</u>	<u>E-4</u>	<u>DOT FILES</u>
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<u>Pressure Limiting Device Inspections</u>	<u>E-5</u>	<u>DOT FILES</u>
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<u>Trouble Report Safety Survey</u>	<u>E-6</u>	<u>DOT FILES</u>
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<u>Fire Extinguisher Inspections</u>	<u>E-7</u>	<u>DOT FILES</u>
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<u>Thickness Reports</u>	<u>E-8</u>	<u>DOT FILES</u>
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<u>DOT Determination Study For Liquids/Gas</u>	<u>F-1</u>	<u>DOT FILES</u>
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<u>Correspondence (Regulatory)</u>	<u>F-2</u>	<u>DOT FILES</u>
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<u>Pipeline Data Reference Sheet</u>	<u>F-3</u>	<u>DOT FILES</u>
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<u>Pipeline Regulations Compliance Program</u>	<u>F-4</u>	<u>DOT FILES</u>

GENERAL FILES

<u>1. Annual Report</u>	<u>DOT FILES</u>
<u>2. Public Education</u>	<u>DOT FILES</u>
<u>3. Louisiana One Call</u>	<u>DOT FILES</u>
<u>4. Contractor Orientation</u>	<u>DOT FILES</u>
<u>5. Contractors Qualification Records</u>	<u>DOT FILES</u>

§ 195.403 TRAINING

- (a) Each operator shall establish and conduct a continuing training program to instruct operating and maintenance personnel to:
- (1) Carry out the operating, maintenance, and emergency procedures established under § 195.402 that relate to their assignments.
 - (2) Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in the case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions;
 - (3) Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquid or carbon dioxide spills, and to take appropriate corrective action;
 - (4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage;

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- (5) Learn the proper use of fire-fighting procedures, equipment, fire suits and breathing apparatus by utilizing, where feasible, a simulated pipeline emergency condition; and,
 - (6) In the case of maintenance personnel, to safely repair facilities using appropriate special precautions such as isolation and purging, when highly volatile liquids are involved.
- (b) At intervals not exceeding 15 months, but at least once each calendar year each operator shall:
- (1) Review with personnel their performance in meeting the objectives of the training program set forth in paragraph (a) of this section; and,
 - (2) Make appropriate changes to the training program as necessary to insure that it is effective.
- (c) Each operator shall require and verify that its supervisors maintain a thorough knowledge of that portion of the procedures established under § 195.402 for which they are responsible to insure compliance.

ESI RESPONSE to §195.403:

A DOT training program for operation/maintenance personnel has been incorporated in the Company Process Safety Management (PSM) training program, in-plant training programs; Industrial fire fighting, Rescue, maintenance/repair, Hazard Communication, Drug-Testing Policy, etc., as well as training through outside DOT Training Consultants. The training will be acquired through a combination of the following:

- Class room training
- Operator-Sponsored Training
- On-the-Job Training
- Apprenticeship

The training will cover both General and Specific information:

General Training:

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- Characteristics of the product moved (gas, non-HVL, HVL)
- Potential ignition sources, flammability range, corrosive effects, etc.
- Damage Prevention Programs and One-Call Systems.
- Purpose of the Drug-Testing Program

Specific Training:

- Requirements of Subparts in 43CFR192 and 195.
- Requirements of Parts 191 Reporting and Part 194-Oil Response.
- Requirements of Part 199 - Drug Testing.
- How to recognize abnormal and emergency situations.
- How to react to abnormal and emergency situations.
- How to notify and respond to notifications from a One-Call System.
- How to repair pipelines including isolation, purging, and venting.
- Proper operation and maintenance of equipment (CGI, Pipe locators, FI equipment, etc.)
- Fire fighting procedures and proper use of fire fighting equipment.
- ESI DOT Procedures and Engineering Specifications
- ESI Safety Procedures; i.e. Trenching & Shoring, Lock-out Tag-Out, Purging, etc.

A refresher course will be conducted within 24 months of the initial certification and then every 24 months thereafter.

Performance/Competency reviews will be conducted periodically to ensure adequate knowledge and skills are retained.

Performance reviews will be conducted twice a year for personnel who have been involved in an pipeline accident or incident.

Periodical reviews of the DOT Training Program will be conducted to ensure the integrity of the program.

Documentation**Location Filed**

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New Employee OrientationC-1DOT FILES

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Employee Safety/Training RecordC-2 DOT FILES

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Employee Performance/Qualification RecordsC-3 DOT FILES

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Documentation Review FormC-4 DOT FILES

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Supervisor Knowledge VerificationC-5 DOT FILES

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Pipeline Regulations Compliance ProgramF-4 DOT FILES

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Safety & Health Procedure 3.5 Emergency Response TeamSafety & Health Manual

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Public Education FilesGeneral filesDOT FILES

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Liaison With Public Officials General filesS &H Manual & Dot Files

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SARA Title IIIEnvironmental Dept**§ 195.404 MAPS AND RECORDS**

Each operator shall maintain current maps and records of its pipeline systems that include at least the following information:

- (a) (1) Location and identification of all major facilities.
 - (i) Breakout tanks;
 - (ii) Pump stations;
 - (iii) Scraper and sphere facilities;
 - (iv) Pipelines valves;
 - (v) Cathodically protected facilities;

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- (vi) Safety devices to which § 195.402(c)(9) applies.
- (2) All crossings of public roads, railroads, rivers, buried utilities, and foreign pipelines.
- (3) The maximum operating pressure of each pipeline.
- (4) The diameter, grade, type, and nominal wall thickness of all pipe.
- (b) Each operator shall maintain for at least 3 years daily operating records that indicate-
 - (1) The discharge pressure at each pump station; and
 - (2) Any emergency or abnormal operation to which the procedures under § 195.402 apply.
- (c) Each operator shall maintain the following records for the periods specified:
 - (1) The date, location, and description of each repair made to pipe shall be maintained for the useful life of the pipe.
 - (2) The date, location, and description of each repair made to parts of the pipeline system other than pipe shall be maintained for at least 1 year.
 - (3) A record of each inspection and test required by this subpart shall be maintained for at least 2 years or until the next inspection or test is performed, whichever is longer.

ESI RESPONSE to §195.404:

ESI shall maintain a record relative to design, construction, and testing of each pipeline. These records shall be maintained for the life of the facility. The records shall include:

- **Materials specification**

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- Route maps and alignment sheets for “as-built” condition; break-out tanks, pump stations, pipeline valves, right-of-ways, safety devices, all crossings.
- Location of each pipe size, grade, wall thickness, type of seam (if any), and manufacturer.
- Coatings and cathodic protection
- Maximum operating pressure of each pipeline.

ESI will maintain for at least 3 years daily operating records of the discharge pressure at each pump station when the pipeline is used, and any emergency or abnormal operation that would apply to § 195.402.

ESI will maintain detailed maintenance records for each pipeline for the life of the facility. Inspection/test records will be maintained for at least 2 years or until the next inspection.

<u>Documentation</u>		<u>Location Filed</u>
RKPG PRE-DOT Construction/Maintenance Records	A-1	<u>DOT FILES</u>
RKPG POST-DOT Construction/Repair Records	A-2	<u>DOT FILES</u>
RKPG Structural Crossing Reports	A-3	<u>DOT FILES</u>
RKGP Plat Maps	A-4	<u>DOT FILES</u>
RKGP Liquid Pipeline Leak Spill Report	B-1	<u>DOT FILES</u>
RKGP Liquid Safety Related Condition Files	B-2	<u>DOT FILES</u>
RKGP Liquid Telephonic Notice of Certain Accidents	B-3	<u>DOT FILES</u>
RKGP Documentation Review Form	C-4	<u>DOT FILES</u>
RKGP Supervisor Knowledge Verification	C-5	<u>DOT FILES</u>
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Pipe-To-Soil/Tank-To-Soil Potentials	D-2	<u>DOT FILES</u>
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Casing Status Summary	D-3	<u>DOT FILES</u>
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Corrosion Coupon Reports	D-4	<u>DOT FILES</u>
RKGP		
Interference Bonds	D-5	<u>DOT FILES</u>
RKGP		
Galvanic Anode Bed Readings	D-6	<u>DOT FILES</u>
RKGP		
Pipeline Patrol/Marker/Leak/Inspection Reports	E-1	<u>DOT FILES</u>
<u>Documentation</u>		<u>Location Filed</u>
RKGP		
Operator Log Pressure Charts	E-2	<u>DOT FILES</u>
RKGP		
Block Valve Inspection Reports	E-3	<u>DOT FILES</u>
RKGP		
System Pressure Test Records	E-4	<u>DOT FILES</u>
RKGP		
Pressure Limiting Device Inspections	E-5	<u>DOT FILES</u>
RKGP		
Trouble Reports/Safety/Survey	E-6	<u>DOT FILES</u>
RKGP		
Fire Extinguisher Inspections	E-7	<u>DOT FILES</u>
RKGP		
Thickness Reports	E-8	<u>DOT FILES</u>
RKGP		
DOT Determination Study for Liquids/Gas	F-1	<u>DOT FILES</u>
RKGP		
Correspondence (Regulatory)	F-2	<u>DOT FILES</u>
RKGP		
Pipeline Data Reference Sheet	F-3	<u>DOT FILES</u>

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RKGP

Pipeline Regulations Compliance Program

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DOT FILES**§ 195.406** **MAXIMUM OPERATING PRESSURES**

- (a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following:
- (1) The internal design pressure of the pipe determined in accordance with § 195.106. However, for steel pipe in pipelines being converted under § 195.5, if one or more factors of the design formula (§ 195.106) are unknown, one of the following pressures is to be used as design pressure:
 - (i) Eighty percent of the first test pressure that produces yield under section N5.0 of appendix N of ASME B31.8, reduced by the appropriate factors in §§ 195.106 (a) and (e); or
 - (ii) If the pipe is 323.8 mm (12 3/4 in.) or less outside diameter and is not tested to yield under this paragraph, 1379 kPa (200 psig).
 - (2) The design pressure of any other component of the pipeline.
 - (3) Eighty percent of the test pressure for any part of the pipeline which has been hydrostatically tested under subpart E of this part.
 - (4) Eighty percent of the factory test pressure or of the prototype test pressure for any individually installed component which is excepted from testing under § 195.304.
 - (5) For pipelines under §§ 195.302 (b)(1) and (b)(2)(i) that have not been pressure tested under subpart E of this part, 80 percent of the test pressure or highest operating pressure to which the pipeline was subjected for 4 or more continuous hours that can be demonstrated by recording charts or logs made at the time the test or operations were conducted.

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(b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

ESI RESPONSE to §195.406:

The maximum steady state operating pressure and static head pressure shall not exceed the internal design pressure and pressure ratings for the components.

Pressure rise due to surges shall not exceed the internal design pressure at any point in the piping system and associated equipment by more than 10%.

A piping system shall be requalified at a higher operating pressure if the higher operating pressure will produce a hoop stress more than 20% of the SMYS of the pipe. The requirements in paragraph 456, ASME/ANSI B31.4 shall be followed without exception to determine the acceptability of the new operating pressure.

If a piping system is derated to a lower operating pressure in lieu of repair or replacement, the new maximum shall be determined in accordance with paragraph 10.2.7 of ESI's "Hazardous Liquid Pipelines Plant Engineering Specification" DOT-037.

If existing pipeline systems have used materials produced under discontinued or superseded standards or specifications, the internal design pressure shall be determined using the allowable stress and design criteria listed in the issue of the applicable code or specification in effect at the time of the original construction.

<u>Documentation</u>		<u>Location Filed</u>
RKPG PRE-DOT Construction/Maintenance Records	A-1	<u>DOT FILES</u>
RKPG POST-DOT Construction/Repair Records	A-2	<u>DOT FILES</u>
RKGP Operator Log Pressure Charts	E-2	<u>DOT FILES</u>
RKGP		

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System Pressure Test RecordsE-4DOT FILES**§ 195.408** **Communications**

- (a) Each operator must have a communication system to provide for the transmission of information needed for the safe operation of its pipeline system.
- (b) The communication system required by paragraph (a) of this section must, as a minimum, include means for:
 - (1) Monitoring operational data as required by § 195.402(c)(9);
 - (2) Receiving notices from operator personnel, the public, and public authorities of abnormal or emergency conditions and sending this information to appropriate personnel or government agencies for corrective action;
 - (3) Conducting two-way vocal communication between a control center and the scene of abnormal operations and emergencies; and,
 - (4) Providing communication with fire, police, and other appropriate public officials during emergency conditions, including a natural disaster.

ESI RESPONSE to §195.408:

Communication shall be maintained to assure safe pipeline operations under both normal and emergency conditions.

It is the policy of ESI to operate in a safe manner, with minimum risk to people, property or the environment, both on-site and in the surrounding community. ESI is a member of CAER, SLMA, and Mutual Aid. ESI's 3.1 ESI Emergency Plan applies to all emergency situations which potentially impact operations at the Complex including but not limited to fires, explosions, liquid spills, gas releases, unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water; hurricanes; tornadoes; flooding; and bomb threats.

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- 1) Assure the safety and health of Complex employees and the welfare of the general public and surrounding community during emergency situations to the best of their ability.
- 2) To minimize property damage in the Complex as well as that of other companies or individuals and to provide for prompt resumption of operations.
- 3) Satisfy the legitimate concern of our employees, their families, and the general public by providing prompt, accurate information on the extent and effect of the emergency.

When an emergency exists, the affected Shift Supervisor will notify the Complex main gate guard and refer to 3.4 ESI Emergency Notification/Call-Out Procedure. The guard will activate the Complex All Call System. Appropriate personnel assigned on the key list personnel will respond. For more information refer to 3.4 ESI Emergency Notification/Call-Out Procedure.

<u>Procedures</u>	<u>Location Filed</u>
RKPG <u>Safety & Health Procedure 3.5 Emergency Response Team</u>	<u>Safety & Health Manual</u>
RKPG <u>Public Education Files</u> <u>General files</u>	<u>DOT Files</u>
RKPG <u>Liaison With Public Officials</u> <u>General files</u>	<u>S &H Manual & Dot Files</u>
RKPG <u>SARA Title III</u>	<u>Environmental Dept.</u>
RKPG <u>List of O, M & E Manuals</u> C-6	<u>DOT Files</u>
RKPG <u>Safety Survey</u> E-8	<u>DOT Files</u>
RKPG <u>Vista Chemical Complex Safety & Health Manual</u>	<u>DOT Files</u>

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§ 195.410 LINE MARKERS

- (a) Except as provided in paragraphs (b) of this section, each operator shall place and maintain line markers over each buried line in accordance with the following:
 - (1) Markers must be located at each public road crossings, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known.
 - (2) The marker must state at least the following: "Warning" followed by the words "Petroleum (or the name of the hazardous liquid transported) Pipeline" or "Carbon Dioxide Pipeline" (in lettering at least 1 inch high with an approximate stroke of one-quarter inch on a background of sharply contrasting color), the name of the operator and a telephone number (including area code) where the operator can be reached at all times.
- (b) Line markers are not required for buried pipelines located:
 - (1) Offshore or at crossings of or under waterways and other bodies of water; or
 - (2) In heavily developed urban areas such as downtown business centers where-
 - (i) The placement of markers is impracticable and would not serve the purpose for which markers are intended; and
 - (ii) The local government maintains current substructure records.
- (c) Each operator shall provide line marking at locations where the line is above ground in areas that are accessible to the public.

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ESI RESPONSE to §195.410:

The objective of installing, inspecting, and maintaining various signs, markers, etc., is to make the general public aware of the existence and ownership of pipeline facilities in order that both the public and the facilities may be protected against injury and damage. API RP 1109 shall be used for guidance in the installation and maintenance of pipeline markers. The following shall be written legibly on each marker placed at other than waterways:

- The word “WARNING” in white letters at least 1” high with a stroke of 14” on a background of blue;
- The words “PETROLEUM PIPELINES” in white letters at least 1” high with a stroke of 1/4” on a background of blue.

The Company name, telephone number, including area code where the Company can be reached at all times, and other information as deemed appropriate, shall be included and may be incorporated in the signs or affixed to the marker with separate signs, decals, etc.

Aerial patrol markers shall be located at strategic locations readily visible from patrol aircraft.

Buried Pipelines:

A line marker shall be placed and maintained as close as practical over each buried pipeline at fence lines, property boundaries, and other locations as often as necessary to indicate the location of the pipeline.

The Unit Manager is responsible for the proper installation, inspection, and maintenance of these markers and signs.

The inspection shall include an inspection of line markers present at:

- Each crossing of public roads and railways.
- Where deemed necessary to identify locations of pipelines to reduce the possibility of damage in the right-of-ways.

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- The inspection shall be recorded on the “Patrolling of Liquid and Gas Pipelines” report form.

DocumentationLocation Filed

RKGP

Pipeline Patrol/Marker/Leak/Inspection ReportsE-1DOT FILESDOT PROCEDURES:

DOT-001-Louisiana One Call

O,M,& E Manual

DOT-002-Pipeline Patrol/Marker/Leak Inspection

DOT-034-Hazardous Liquid Pipeline Plant Engineering
Specification; 10.2.3 Markers**§ 195.412 INSPECTION OF RIGHTS-OF-WAYS AND CROSSINGS UNDER
NAVIGABLE WATERS**

- (a) Each operator shall, at intervals not exceeding three weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.
- (b) Except for offshore pipelines, each operator shall, at intervals not exceeding five (5) years, inspect each crossing under a navigable waterway to determine the condition of the crossing.

ESI RESPONSE to § 195.410:**Inspection and Recordkeeping:**

ESI shall maintain a periodic pipeline patrol program at intervals not exceeding two (2) weeks. The Ethylene Terminal/Unit Manager is responsible for the patrol inspection of the pipelines and shall make a record of each inspection.

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The Ethylene Terminal/Unit Manager or trained designee shall patrol the Right-of-Ways and observe for the following conditions:

- The right-of-way should be maintained to assure clear visibility and to give reasonable access to maintenance crews.
- Access shall be maintained to valve locations.
- Diversion ditches shall be maintained where needed to protect against washouts of the pipeline and erosion of Company's property.
- Special attention shall be given to road building, ditch clean out, excavations, and other encroachments to the pipeline system.
- Surface conditions on and adjacent to the pipeline right-of-way.
- Indication of leaks.
- Construction activity other than the Company.
- Any other factors affecting the safety and operation of Company pipelines.

<u>Documentation</u>	<u>Location Filed</u>
RKGP <u>Liquid Pipeline Leak Spill Report</u>	<u>B-1</u> <u>DOT FILES</u>
RKGP <u>Pipeline Patrol/Marker/Leak/Inspection Reports</u>	<u>E-1</u> <u>DOT FILES</u>

DOT PROCEDURES:

DOT-002-Pipeline Patrol/Marker/Leak Inspection
DOT-034-Hazardous Liquid Pipeline Plant Engineering
Specification; 10.2.4 Right-of-Way Maintenance
10.2.5 Patrolling

O,M,& E Manual

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§ 195.413 Underwater inspection and Reburial of Pipelines in the Gulf of Mexico and its Inlets.

NOT APPLICABLE. ESI DOES NOT HAVE PIPELINES IN THE GULF OF MEXICO OR ITS INLETS.

§ 195.414 Cathodic Protection

- (a) No operator may operate a hazardous liquid interstate pipeline after March 31, 1973, a hazardous liquid intrastate pipeline after October 19 1988, or a carbon dioxide pipeline after July 12, 1993 that has an effective external surface coating material, unless that pipeline is cathodically protected. This paragraph does not apply to breakout tank areas and buried pumping station piping. For the purposes of this subpart, a pipeline does not have an effective external coating and shall be considered bare, if its cathodic protection current requirements are substantially the same as if it were bare.
- (b) Each operator shall electrically inspect each bare hazardous liquid interstate pipeline, other than a low-stress pipeline, before April 1, 1975; each bare hazardous liquid intrastate pipeline, other than a low-stress pipeline, before October 20, 1990; each bare carbon dioxide pipeline before July 12, 1994; and each bare low-stress pipeline before July 12, 1996 to determine any areas in which active corrosion is taking place. The operator may not increase its established operating pressure on a section of bare pipeline until the section has been so electrically inspected. In any areas where active corrosion is found, the operator shall provide cathodic protection. Section § 195.416 (f) and (g) applies to all corroded pipe that is found.
- (c) Each operator shall electrically inspect all breakout tank areas and buried pumping station piping on hazardous liquid interstate pipelines, other than low-stress pipelines, before April 1, 1973, on hazardous liquid intrastate pipelines, other than low-stress pipelines, before October 20, 1988, and on carbon dioxide pipelines before July 12, 1994; and on low-stress pipelines before July 12, 1996

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as to the need for cathodic protection, and cathodic protection shall be provided where necessary.

ESI RESPONSE to § 195.414:

Minimum requirements and procedures for corrosion of above-ground, buried, and submerged DOT-regulated pipelines are summarized in the ESI Plant Engineering Specification “Corrosion Control and Monitoring” and section 10 of the “Hazardous Liquid Pipelines Plant Engineering Specification”.

Protection of pipe and components from internal and external corrosion, including tests, inspections, and appropriate corrective measures, shall be as prescribed in Chapter VIII, Corrosion Control, ASME/ANSI B31.4, and Engineering Specifications.

Provisions for the corrosion control of DOT-regulated liquid pipelines shall be administered under the direction of competent corrosion control personnel. Minimum qualifications for supervisory work include NACE accreditation as a Corrosion Specialist with 10 years experience in all phases of corrosion control liquid pipeline systems.

<u>Documentation</u>	<u>Location Filed</u>
RKPG PRE-DOT Construction/Maintenance Records	A-1 <u>DOT FILES</u>
RKPG POST-DOT Construction/Repair Records	A-2 <u>DOT FILES</u>
RKGP LIST OF O, M, & E Manuals	C-6 <u>DOT FILES</u>
RKGP Rectifier Readings/Repair	D-1 <u>DOT FILES</u>
RKGP Pipe-to-Soil/Tank-to-Soil Potentials	D-2 <u>DOT FILES</u>
RKGP Casing Status Summary	D-3 <u>DOT FILES</u>
RKGP Corrosion Coupon Reports	D-4 <u>DOT FILES</u>
RKGP Interference Bonds	D-5 <u>DOT FILES</u>

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Galvanic Anode Bed Readings	D-6	<u>DOT FILES</u>
RKGP		
Pipeline Patrol/Marker/Leak/Inspection Reports	E-1	<u>DOT FILES</u>
RKGP		
Thickness Reports	E-8	<u>DOT FILES</u>

§ 195.416 **EXTERNAL CORROSION CONTROL**

- (a) Each operator shall, at intervals not exceeding fifteen (15) months, but at least once each calendar year, conduct tests on each underground facility in its pipeline systems that is under cathodic protection to determine whether the protection is adequate.
- (b) Each operator shall maintain the test leads required for cathodic protection in such a condition that electrical measurements can be obtained to ensure adequate protection.
- (c) Each operator shall, at intervals not exceeding two (2 1/2) months but at least six times each calendar year, inspect each of its cathodic protection rectifiers.
- (d) Each operator shall, at intervals not exceeding five (5) years, electrically inspect the bare pipe in its pipeline system that is not cathodically protected and must study leak records for that pipe to determine if additional protection is needed.
- (e) Whenever any buried pipe is exposed for any reason, the operator shall examine the pipe for evidence of external corrosion. If the operator finds that there is active corrosion, that the surface of the pipe is generally pitted, or that corrosion has caused a leak, it shall investigate further to determine the extent of the corrosion.
- (f) Any pipe that is found to be generally corroded so that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances must either be replaced with coated pipe that meets the requirements of this part or, if the area is small, must be repaired. However, the operator need not replace generally corroded pipe if the operating pressure is reduced to

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be commensurate with the limits on operating pressure specified in this subpart, based on the actual remaining wall thickness.

- (g) If localized corrosion pitting is found to exist to a degree where leakage might result, the pipe must be replaced or repaired, or the operating pressure must be reduced commensurate with the strength of the pipe based on the actual remaining wall thickness in the pits.
- (h) The strength of the pipe, based on actual remaining wall thickness, for paragraphs (f) and (g) of this section may be determined by the procedure in ASME B31G manual for Determining the Remaining Strength of Corroded Pipelines or by the procedure developed by AGA/Battelle-A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe (with RSTRENG disk). Application of the procedure in the ASME B31G manual or the AGA/Battelle Modified Criterion is applicable to corroded regions (not penetrating the pipe wall) in existing steel pipelines in accordance with limitations set out in the respective procedures.
- (i) Each operator shall clean, coat with material suitable for the prevention of atmospheric corrosion, and, maintain this protection for, each component in its pipeline system that is exposed to the atmosphere.

ESI RESPONSE to § 195.416:

Protection of pipe and components from internal and external corrosion, including tests, inspections, and appropriate corrective measures, shall be as prescribed in Chapter VIII, Corrosion Control, ASME/ANSI B31.4, and Engineering Specifications.

All new buried pipe installed will be coated and cathodically protected as part of the construction project. Cathodic Protection system will be commissioned *prior to acceptance of the pipeline.*

Each test lead wire will be connected to the pipeline so as to remain mechanically secure and electrically conductive while minimizing stress concentration on the pipe. Each bared test lead wire and bared metallic area at point of connection to the pipeline will be coated with an electrical insulating material compatible with the pipe coating and the insulation

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on the wire. NOTE: Place approximately 1 mile apart and locations will be shown on maps.

The level of cathodic protection provided will be such that a negative voltage of at least 0.85 volts, with reference to a saturated copper-copper sulfate half cell exists. The amount of protection must be controlled so as not to damage the protective coating or the pipe.

Any deficiency located during the annual (not to exceed 15 months) cathodic protection monitoring or routine inspections shall be reported to the Ethylene Terminal/Unit Manager immediately. Prompt remedial action will be taken.

Each rectifier will be checked six (6) times each calendar year (at intervals not exceeding 21/2 months). Prompt remedial action shall be taken if any deficiency is noted.

All buried lines will be cathodically protected.

When pipe is exposed for any reason, the pipe will be examined by the Inspection Department for evidence of external corrosion and coating deterioration.

If the pipe is generally corroded such that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances, ESI will investigate adjacent pipe in the same area, to determine the extent of corrosion.

Pipe shall be replaced if required, repaired if area is small, or operated at a reduced pressure if general corrosion has reduced the wall thickness to less than the design thickness decreased by an amount equal to the manufacturing tolerance applicable to the pipe or component.

Pipe shall be repaired, replaced, operated at a reduced pressure if localized corrosion pitting has reduced the wall thickness to less than the design thickness. Paragraph 451.7, Derating a Pipeline to a Lower Pressure, ASME/ANSI B31.4, ASME/ANSI B31G, and ESI's Engineering Specification Pipeline Repair shall be used to determine the effect of pipeline pitting on the strength of the line and the requirements to remove, repair, or replace. Excess mechanical grinding shall be treated as pitting.

Remedial action plan will be developed within 90 days.

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ESI will clean, coat with material suitable for the prevention of atmospheric corrosion, and maintain this protection for each component in its pipeline system that is exposed to the atmosphere. Above ground piping and the supports upon which piping is dependent shall be visually inspected for atmospheric corrosion each calendar year with intervals not to exceed 15 months.

Should corrosion be discovered on piping, determination of whether to re-coat, repair, or replace shall be made according to Chapter VIII, Corrosion Control, ASME/ANSI B31.4, ASME Guide Material Appendix G-6 "Determination of Maximum Size of Corrosion Pit", ASME Guide Material Appendix G-7 "Tables for Corrosion Limits", ASME Guide Material Appendix G-8 "Evaluation of MAOP in Corroded Areas". Should repairs be made as a result of atmospheric corrosion documentation of such repairs shall be maintained in a permanent file for the life of the pipeline.

Documentation of the above inspections will be in the Annual Thickness Inspection Reports.

<u>Documentation</u>	<u>Location Filed</u>
RKPG PRE-DOT Construction/Maintenance Records	A-1 DOT FILES
RKPG POST-DOT Construction/Repair Records	A-2 DOT FILES
RKPG LIST OF O, M, & E Manuals	C-6 DOT FILES
RKPG Rectifier Readings/Repair	D-1 DOT FILES
RKPG Pipe-to-Soil/Tank-to-Soil Potentials	D-2 DOT FILES
RKPG Casing Status Summary	D-3 DOT FILES
RKPG Corrosion Coupon Reports	D-4 DOT FILES
RKPG Interference Bonds	D-5 DOT FILES
RKPG Galvanic Anode Bed Readings	D-6 DOT FILES
RKPG Pipeline Patrol/Marker/Leak/Inspection Reports	E-1 DOT FILES

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Thickness ReportsE-8 DOT FILES**§ 195.418 INTERNAL CORROSION CONTROL**

- (a) No operator may transport any hazardous liquid or carbon dioxide that would corrode the pipe or other components of its pipeline system, unless it has investigated the corrosive effect of the hazardous liquid or carbon dioxide on the system and has taken adequate steps to mitigate corrosion.
- (b) If corrosion inhibitors are used to mitigate internal corrosion the operator shall use inhibitors in sufficient quantity to protect the entire part of the system that the inhibitors are designed to protect and shall also use coupons or other monitoring equipment to determine their effectiveness.
- (c) The operator shall, at intervals not exceeding 71/2 months, but at least twice each calendar year, examine coupons or other types of monitoring equipment to determine the effectiveness of the inhibitors or the extent of any corrosion.
- (d) Whenever any pipe is removed from the pipeline for any reason, the operator must inspect the internal surface for evidence of corrosion. If the pipe is generally corroded such that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances, the operator shall investigate adjacent pipe to determine the extent of the corrosion. The corroded pipe must be replaced with pipe that meets the requirements of this part or, based on the actual remaining wall thickness, the operating pressure must be reduced to be commensurate with the limits on operating pressure specified in this subpart.

ESI RESPONSE to § 195.418:

Protection of pipe and components from internal and external corrosion, including tests, inspections, and appropriate corrective measures, shall be as prescribed in Chapter VIII, Corrosion Control, ASME/ANSI B31.4, and ESI Engineering Specifications, Plant Engineering Specifications and DOT Procedures .

DocumentationLocation Filed

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PRE-DOT Construction/Maintenance RecordsA-1 DOT FILESDocumentationLocation Filed

RKPG

POST-DOT Construction/Repair RecordsA-2 DOT FILES

RKGP

LIST OF O, M, & E ManualsC-6 DOT FILES

RKGP

Rectifier Readings/RepairD-1 DOT FILES

RKGP

Pipe-to-Soil/Tank-to-Soil PotentialsD-2 DOT FILES

RKGP

Casing Status SummaryD-3 DOT FILES

RKGP

Corrosion Coupon ReportsD-4 DOT FILES

RKGP

Interference BondsD-5 DOT FILES

RKGP

Galvanic Anode Bed ReadingsD-6 DOT FILES**§ 195.420 VALVE MAINTENANCE**

- (a) Each operator shall maintain each valve that is necessary for the safe operation of its pipeline systems in good working order at all times.
- (b) Each operator shall, at intervals not exceeding 7 1/2 months, but at least twice each calendar year, inspect each main line valve to determine that it is functioning properly.
- (c) Each operator shall provide protection for each valve from unauthorized operation and from vandalism.

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ESI RESPONSE to § 195.420:

Pipeline block valves shall be inspected twice annually (not to exceed 7 1/2 months), serviced where necessary and partially operated at least twice each year to assure proper operating conditions.

Valves shall be located at accessible points on the pipeline, protected from damage or tampering, and suitably supported to prevent differential settlement or movement of the attached piping. An operating device shall be protected and accessible only to authorized persons.

<u>Documentation</u>		<u>Location Filed</u>
RKPG PRE-DOT Construction/Maintenance Records	A-1	<u>DOT FILES</u>
RKPG POST-DOT Construction/Repair Records	A-2	<u>DOT FILES</u>
RKGP Pipeline Patrol/Marker/Leak/Inspection Reports	E-1	<u>DOT FILES</u>
RKGP Operator Log Pressure Charts	E-2	<u>DOT FILES</u>
RKGP Block Valve Inspection Reports	E-3	<u>DOT FILES</u>
RKGP System Pressure Test Records	E-4	<u>DOT FILES</u>
RKGP Pressure Limiting Device Inspections	E-5	<u>DOT FILES</u>

§ 195.422 PIPELINE REPAIRS

- (a) Each operator shall, in repairing its pipeline systems, insure that the repairs are made in a safe manner and are made so as to prevent damage to persons or property.

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- (b) No operator may use any pipe, valve, or fitting for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

ESI RESPONSE to § 195.422:

Repairs shall be completed in accordance with paragraph 451.6, Pipeline Repairs, ASME/ANSI B31.4, and ESI's Plant Engineering Specification "Pipeline Repairs". Repairs shall be performed by trained personnel under qualified supervision who are familiar with the hazards to public safety.

DocumentationLocation Filed

RKPG

PRE-DOT Construction/Maintenance RecordsA-1DOT FILES

RKPG

POST-DOT Construction/Repair RecordsA-2DOT FILES**§ 195.424 PIPE MOVEMENT**

- (a) No operator may move any line pipe, unless the pressure in the line section involved is reduced to not more than 50 percent of the maximum operating pressure.
- (b) No operator may move any pipeline containing highly volatile liquids where materials in the line section involved are joined by welding unless:
- (1) Movement when the pipeline does not contain highly volatile liquids is impractical.
 - (2) The procedures of the operator under § 195.402 contain precautions to protect the public against the hazard in moving pipelines containing highly volatile liquids, including the use of warnings, where necessary, to evacuate the area close to the pipeline; and,
 - (3) The pressure in that line section is reduced to the lower of the following:
 - (i) Fifty percent or less of the maximum operating pressures; or

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- (ii) The lowest practical level that will maintain the commodity in a liquid state with continuous flow, but not less than 50 p.s.i.g. above the vapor pressure of the commodity.
- (c) No operator may move any pipeline containing highly volatile liquids where materials in the line section involved are not joined by welding unless:
 - (1) The operator complies with paragraphs (b) (1) and (2) of this section; and,
 - (2) That line section is isolated to prevent the flow of commodity.

ESI RESPONSE to § 195.424:

ESI will not move any pipelines unless the requirements of this section are followed.

§ 195.426 SCRAPER AND SPHERE FACILITIES

No operator may use a launcher or receiver that is not equipped with a relief device capable of safely relieving pressure in the barrel before insertion or removal of scrapers or spheres. The operator must use a suitable device to indicate that pressure has been relieved in the barrel or must provide a means to prevent insertion or removal of scrapers or spheres if pressure has not been relieved in the barrel.

ESI RESPONSE to § 195.424:

Scraper traps (pig receivers and launchers) shall be installed as required by ESI's Plant Engineering Specifications, Procedures and DOT Regulation 49CFR195. All pipe, valves, fittings, closures, and appurtenances shall comply with ESI Engineering Specifications, ASME/ANSI B31.4, and 49CFR195.

Scraper traps on pipelines shall be designed with sufficient length to run an instrumented pig.

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Receiver traps on mainlines which are connected to piping or manifolding shall be anchored below ground with adequate concrete anchors when required and suitably supported aboveground to prevent transmission of line stresses due to expansion and contraction to connecting facilities.

Scraper trap and components shall be assembled in accordance with paragraph 435, Assembly of Piping Components, ASME/ANSI B31.4.

Pressure controls and protective equipment, including pressure limiting devices, regulators, controllers, relief valves, and other safety devices, as shown on the construction drawings and required by the specifications shall be installed by competent and skilled workers. Instruments and devices shall be installed to enable checks to be done without undue interruptions in operations. After installation, controls and protective equipment shall be tested under conditions approximating actual operations to assure proper installation and function.

§ 195.428 OVERPRESSURE SAFETY DEVICES

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7 1/2 months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

(b) In the case of relief valves on pressure breakout tanks containing highly volatile liquids, each operator shall test each valve at intervals not exceeding five (5) years.

ESI RESPONSE to § 195.428:

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Controls and protective equipment, including pressure limiting devices, regulators, relief valves, and other safety devices shall be subjected to systematic periodic inspections and tests annually, not to exceed 15 months to determine that the equipment is:

- In good mechanical condition;
- Adequate from the standpoint of capacity and reliability of operation for the service use;
- Set to function at the correct pressure;
- Properly installed and protected from foreign materials or other conditions that might prevent proper operation.

<u>Documentation</u>		<u>Location Filed</u>
RKGP System Pressure Test Records	E-4	<u>DOT FILES</u>
RKGP Pressure Limiting Device Inspections	E-5	<u>DOT FILES</u>

§ 195.430 FIRE FIGHTING EQUIPMENT

Each operator shall maintain adequate fire fighting equipment at each pump station, terminal, and tank farm. The equipment must be:

- (a) In proper operating condition at all times;
- (b) Plainly marked so that its identity as fire fighting equipment is clear; and,
- (c) Located so that it is easily accessible during a fire.

ESI RESPONSE to § 195.430:

Reference ESI's Safety and Health Procedure 3.03 Fire Protection for details on fire equipment, location, and maintenance.

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DocumentationLocation Filed

RKGP

Fire Extinguisher InspectionsE-7DOT FILES**§ 195.432 BREAKOUT TANKS**

Each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each breakout tank (including atmospheric and pressure tanks).

ESI RESPONSE to § 195.432:

Storage vessels, including atmospheric and pressure tanks, handling the liquid or liquids being transported shall be inspected annually, not to exceed 15 months, in accordance with API 653, Inspection of Storage Tanks. Reference ESI's "Hazardous Liquid Pipeline Plant Engineering Specification".

§ 195.434 SIGNS

Each operator shall maintain signs visible to the public around each pumping station, terminal, or tank farm. Each sign must contain the name of the operator and an emergency telephone number to contact.

ESI RESPONSE to § 195.434:

Appropriate signs shall be posted to serve as warnings in hazardous areas.

§ 195.436 SECURITY OF FACILITIES

Each operator shall provide protection for each pumping station, terminal, and tank farm and other exposed facility (such as scraper traps from vandalism and unauthorized entry).

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ESI RESPONSE to § 195.436:

Pumping station, terminal, and tank farm areas shall be maintained in a safe condition. These areas shall be fenced and locked, or attended, for the protection of the property and the public.

§ 195.438 SMOKING OR OPEN FLAMES

Each operator shall prohibit smoking and open flames in each pump station area and each terminal or tank farm area where there is a possibility of the leakage of a flammable commodity or of the presence of flammable vapors.

ESI RESPONSE to § 195.438:

Smoking is prohibited in all areas of a pump station, terminal, or tank farm where the possible leakage or presence of vapor constitutes a hazard of fire or explosion.

Flashlights or hand lanterns, when used, shall be of the approved type.

Welding shall commence only after compliance with paragraph 34.8.1(c), Safe Practices in Cutting and Welding, ASME/ANSI B31.4.

Consideration shall be given to the prevention of other means of accidental ignition. See NACE RP-01-77 for additional guidance.

§ 195.440 Public Education

Each operator shall establish a continuing educational program to enable the public, appropriate government organizations and persons engaged in excavation-related activities to recognize a hazardous liquid or a carbon dioxide pipeline emergency and to report it to the operator or the fire, police, or other appropriate public officials. The program must be conducted in English and in other languages commonly understood by a significant number and concentration of non-English speaking population in the operator's operating areas.

ESI RESPONSE to § 195.440:

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ESI has a continuing educational program to inform the public, appropriate government organizations, and persons engaged in excavation activities that include, but is not limited to:

Participating in Louisiana One Call, members of CAER, SLMA, and API, including public service announcements, periodic mailing to public agencies; maps, brochures, and pertinent information about pipeline safety and an annual face-to-face meeting with public officials.