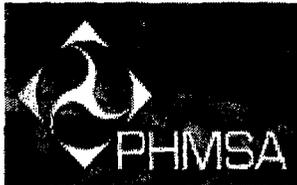


Application of Safety Regulation to Rural Onshore Hazardous Liquid Low-Stress Pipelines (Phase II)

Preliminary Environmental Assessment

Prepared For:



Pipeline and Hazardous Materials Safety Administration

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List of Acronyms

CFR	Code of Federal Regulations
DMS	Docket Management System
DOT	United States Department of Transportation
EFRD	Emergency flow restriction devices
EPA	United States Environmental Protection Agency
NEPA	National Environmental Policy Act of 1969
NPRM	Notice of Proposed Rulemaking
PHMSA	Pipeline and Hazardous Materials Safety Administration
SMYS	Specified minimum yield strength
U.S.	United States

1.0 PURPOSE OF AND NEED FOR ACTION

The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES Act), signed December 29, 2006, reauthorized federal pipeline safety programs, which are administered by PHMSA. Section Four of the PIPES Act requires that PHMSA issue regulations subjecting all low stress hazardous liquid transmission pipeline mileage to the same standards and regulations as other hazardous liquid transmissions pipelines.

For low stress pipelines (LSP), PHMSA proposed to develop regulations in two phases. Phase I, which became effective on July 3, 2008, extended all of 49 CFR Part 195 requirements to the higher risk, rural LSP. This encompassed low-stress pipelines larger than or equal to 8 5/8 inches in diameter and located within 1/2 mile of an Unusually Sensitive Area (USA). In addition, PHMSA adopted reporting requirements for all rural low stress hazardous liquid pipelines.

This document is a preliminary Phase II Environmental Assessment of the impacts of the Phase II regulation, which covers the remaining unregulated low-stress pipelines. The pipelines impacted by this proposed rule include those rural low-stress pipelines of any diameter that are more than half a mile outside a USA and low-stress pipelines less than 8 5/8 inches in diameter and within half a mile of a USA.

1.1 PHASE II REGULATION ALTERNATIVES

There are six potential alternatives for the Phase II regulation. These alternatives were developed on the basis of previous Phase I alternatives and OMB Circular A-4 alternative suggestions in regulatory analysis.¹ The six Phase II alternatives are:

Alternative 1: Apply all Part 195 Requirements to All Eligible LSP

Alternative 2: Apply all Part 195 Requirements to LSP less than 8 5/8 inches in diameter within 1/2 of a USA

Alternative 3: Apply all Part 195 requirements to LSP greater than or equal to 8 5/8 inches in diameter outside 1/2 mile of USAs

Alternative 4: Apply all Part 195 requirements to LSP less than 8 5/8 inches in diameter outside 1/2 mile of USAs

Alternative 5: Apply all Part 195 requirements except Subpart H Corrosion Control requirements to all LSP not currently regulated

Alternative 6: Apply all Part 195 requirements except Subpart F Integrity Management Program requirements to all LSP not currently regulated

¹ Office of Management and Budget, Circular A-4 provides guidance to Federal agencies on the development of regulatory analysis as required under Executive Order 12866. Available at http://www.whitehouse.gov/omb/circulars_a004_a-4/#c

The alternatives examine extending regulatory protections of varying stringencies to varying geographic regions in accordance with Office of Management and Budget Circular A-4 guidelines on regulatory analysis. Each alternative would extend regulatory protections to currently unregulated low-stress pipelines of varying types and geographies. Alternative 1 is the only alternative in full compliance with the PIPES Act and considered as the Proposed Action Alternative. However, each of these alternatives would reduce risks associated with pipeline incidents on currently unregulated low-stress pipelines. The remainder of this environmental assessment examines the potential impacts of the six alternatives.

1.2 BACKGROUND

PHMSA published a Notice of Proposed Rulemaking (NPRM) on September 6, 2006, (71 FR 52504) proposing to apply limited pipeline safety regulations to rural onshore low-stress hazardous liquid pipelines within a defined buffer of previously-defined USAs. Low-stress lines generally transport hazardous liquid at low-stress levels for relatively short distances to and from refineries and terminals. Safety regulations for hazardous liquid pipelines, contained in 49 CFR Part 195, had not previously been applicable to pipelines operating at low-stress outside of populated areas, except for those that cross navigable waterways.² USAs are non-populated areas requiring extra protection because of the presence of sole-source drinking water resources, endangered species, or other ecological resources that could be adversely affected by accidents/leaks occurring on hazardous liquid pipelines.

The proposed rule would define a category of “regulated rural onshore low-stress lines” and would require operators to comply with requirements in Part 195. The safety requirements proposed addressed the most common threat to the integrity of these rural lines: corrosion and third party damage. The proposal was intended to provide additional integrity protection, to avoid significant adverse environmental consequences and to improve public confidence in the safety of hazardous liquid rural onshore low-stress lines.

Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006

The Pipeline Inspection Protection Enforcement and Safety (PIPES) Act of 2006 was signed into law by the President on December 29, 2006 (Pub. Law No. 109-468). The PIPES Act includes provisions affecting hazardous liquid pipelines operating at low-stress (i.e., hoop stress of 20% or less of specified minimum yield strength, SMYS). Specifically, Section Four of the PIPES Act requires that PHMSA “issue regulations subjecting low-stress hazardous liquid pipelines to the same standards and regulations as other hazardous liquid pipelines” with some limited exceptions. The PIPES Act allows the new regulations to be phased in.

Regulating larger-diameter pipelines at USAs has the most potential to reduce pipeline incident risks, relative to smaller diameter and outside USA pipelines. PHMSA, therefore, concluded that the most appropriate and expeditious means to implement the PIPES Act mandate was to act in two phases based on risk priority levels.

Pipelines affected by the Phase I rulemaking are those low-stress pipelines greater than 8 ⅝ inches in diameter and within half a mile of a USA. Phase I, became effective on July 3, 2008.

² For a full discussion of the background concerning historical treatment of low-stress rural pipelines and the decision to apply safety regulations at this time, see the September 6, 2006, notice.

The pipelines impacted by this Phase II proposed rule include those rural low-stress pipelines of any diameter that are more than half a mile outside a USA and low-stress pipelines less than 8 3/8 inches in diameter and within half a mile of a USA.

Description of Action

PHMSA proposes to extend pipeline safety regulations to rural low-stress lines of any diameter that are more than half a mile outside a USA and low-stress pipelines less than 8 3/8 inches in diameter and within half a mile of a USA. This proposal incorporates changes required by the PIPES Act of 2006. This action will improve the protection of environmentally-sensitive rural areas from the potential adverse impacts of hazardous liquid pipeline accidents.

Purpose of and Need for Action

The need for the action stems from safety concerns expressed by Congress (including the PIPES Act of 2006), as well as public comments gathered over the past several years and available spill data that show accidents are occurring on unregulated low-stress hazardous liquid pipelines in rural areas. These accidents have the same leading causes as accidents on regulated non-rural lines, namely corrosion and excavation damage.

The PIPES Act followed a series of costly low-stress hazardous liquid incidents. Low-stress regulatory evaluations started in 1990 after the Exxon Arthur Kill incident, of which total remediation costs were estimated to range from \$49 million to \$66 million. More recently, the 2006 BP low stress oil incident in Prudhoe Bay, Alaska spilled more than 200,000 gallons. An analysis of PHMSA's F 7000-1 (1-2001; Accident Report Form) database shows that from 2002 to 2008 there are approximately 3.5 low-stress incidents per thousand miles and approximately 0.5 non low-stress incidents per thousand miles, or approximately 7 times more low-stress incidents per mile than non low-stress incidents. In addition, costs per mile for low-stress incidents are approximately twice that of non low-stress, at approximately \$600 compared to \$300.

Previous accidents on low-stress lines and recent Congressional action have prompted PHMSA to take regulatory action to address rural onshore low-stress lines. These unregulated lines may pose a serious risk, especially where the potential exists for a spill to cause substantial harm to a USA. PHMSA thus recognizes that it is no longer appropriate to continue to exempt rural onshore low-stress hazardous liquid pipelines from safety requirements in Part 195, and that rather, a safety rule to address this concern is needed.

Public Involvement

In 2006, PHMSA held a public workshop in Alexandria, Virginia, to discuss the need to regulate rural low-stress lines (the notice for this workshop was published on May 1, 2006 (71 FR 25640)). On June 26, 2006, PHMSA held both the public workshop and a meeting of the Technical Hazardous Liquid Pipeline Safety Standards Committee to discuss how best to regulate low-stress lines to better protect USAs from spills. The

notice for the meeting, as well as comments regarding the regulation of rural low-stress lines, can be found on the Docket Management System, in Docket No. PHMSA-2004-18938; further comments can also be found in Docket No. PHMSA-2003-15864.

During the development of this rulemaking, PHMSA consulted with the National Association of Pipeline Safety Representatives, the Technical Hazardous Liquid Pipeline Safety Standards Committee, the Independent Petroleum Association of America, and the Association of Oil Pipelines.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1

2.2 OVERVIEW OF ALTERNATIVES

PHMSA considered six alternatives to reduce the risk of potential incidents on rural onshore low-stress lines. These alternatives are listed in Section 1.1. and evaluated below.

Alternative 1: Apply all Part 195 Requirements to All Eligible LSP

Alternative 1 is the most comprehensive alternative in that it covers all currently unregulated low stress hazardous liquid pipelines and applies all of Part 195 requirements. Alternative 1 fully complies with Section Four of the PIPES Act requiring that PHMSA issue regulations subjecting all low stress hazardous liquid pipeline mileage to the same standards and regulations as other hazardous liquid pipelines. For this reason, this alternative was selected as the Proposed Action Alternative.

Alternative 2: Apply all Part 195 Requirements to LSP less than 8 ½ inches in diameter within ½ of a USA

Alternative 2 applies only to small diameter LSP within USAs. This sub-portion of LSP is unique because it is the only currently unregulated sub-portion in which the IMP is applicable. The IMP is important to the regulation both because a greater amount of corrosion is detectable but also because the IMP is relatively costly compared to other Part 195 subparts. Alternative 2 allows for an examination of the benefits and costs by geographical sub-portion of the system where environmental impacts are of a greater concern.

Alternative 3: Apply all Part 195 requirements to LSP greater than or equal to 8 ½ inches in diameter outside ½ mile of USAs

This alternative applies to all unregulated large diameter pipes. As all large diameter inside USA LSP was regulated in Phase I, this alternative applies only to non USA LSP. This alternative examines a geographic sub-portion of eligible LSP where environmental impacts are not of as great concern.

Alternative 4: Apply all Part 195 requirements to LSP less than 8 ½ inches in diameter outside ½ mile of USAs

Alternative 4 would regulate only small diameter pipe outside of USAs. This alternative examines a geographic sub-portion of eligible LSP where environmental impacts are not of as great concern.

Alternative 5: Apply all Part 195 requirements except Subpart H Corrosion Control requirements to all LSP not currently regulated

Alternative 5 proposes applying all Part 195 requirements except Subpart H Corrosion Control requirements to all currently unregulated low-stress pipelines. Subpart H is composed of corrosion control requirements such as cathodic protection and external corrosion direct assessments. It is one of the two most costly subparts in terms of operator compliance and is thus excluded in this alternative in an attempt to vary stringency while minimizing cost.

Alternative 6: Apply all Part 195 requirements except Subpart F Integrity Management Program requirements to all LSP not currently regulated

Alternative 6 proposes applying all Part 195 requirements except Subpart F Integrity Management Program requirements to all currently unregulated low-stress pipelines. Subpart F is also one of the two most costly subparts in terms of operator compliance, and the IMP makes up the vast majority of this cost. It is thus excluded to better determine its relationship to the size and distribution of benefits. This follows the OMB suggestion to vary alternatives by stringency. The IMP is only applicable to the sub-portion of small diameter inside USA LSP.

2.3 PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative (i.e. Alternative 1) would ultimately apply Part 195 rules to those rural low-stress pipelines of any diameter that are more than half a mile outside a USA and low-stress pipelines less than 8 3/8 inches in diameter and within half a mile of a USA. The proposed rules would require operators of rural onshore low-stress lines to identify all segments of such lines, report accidents and safety-related conditions, establish a public education program, establish a damage prevention program, control corrosion for steel pipelines, and establish an operator qualification program. The Proposed Action Alternative also requires that operators of rural onshore low-stress lines follow safety rules for design, construction, initial inspection, and testing of new, relocated, or otherwise changed lines, establish the maximum operating pressure of the pipeline, and install and maintain line markers. Additionally, the Proposed Action Alternative would additionally require operators of rural onshore low-stress lines to establish integrity assessment programs.

PHMSA recently proposed similar rules on line markers, operating pressure, and design and construction standards for rural gas gathering lines. Similar safety requirements are also included in a consensus standard (ASME B31.4) followed widely throughout the hazardous liquid pipeline industry. As such, the approach described in the Proposed Action Alternative is not expected to be excessively burdensome to affected pipeline operators.

2.4 COMPARISON OF THE ALTERNATIVES

Based on the analysis presented in this document, no significant environmental impacts would result from the Proposed Action Alternative. Minor environmental impacts from line marking, cathodic protection, and integrity assessment measures would be offset by the reduction in the likelihood of spills and environmental damage. The Proposed Action Alternative may result in improved protection of USAs from the threats posed by onshore hazardous liquid low-stress lines in rural areas.

Alternatives 2 through 6 would also involve minor negative environmental impacts due to line marking, cathodic protection, and integrity assessment measures. These safety systems and processes have the potential to significantly reduce risks associated with pipeline incidents.

Alternatives 2 through 6 examine the relative impacts of applying Phase II regulations at various stringencies and to varying geographic regions in accordance with regulation analysis recommendations by the OMB. However, these alternatives would not provide as high a degree of environmental protection as the Proposed Action Alternative 1.

3.0 AFFECTED ENVIRONMENTAL AND OPERATIONAL CONSEQUENCES

3.1

3.2 AFFECTED ENVIRONMENT

The affected environment would be the land area in the United States in which rural onshore low-stress lines exist. Low-stress hazardous liquid pipelines are usually short-distance pipelines, such as those associated with petrochemical complexes, refineries, and terminals, where high pressures to move relatively small quantities of liquids are not required. Major pipeline firms operate the rural onshore low-stress lines that might be impacted by the proposed rule.

The proposed safety rules could potentially result in improved protection of USAs in the vicinity of rural onshore low-stress lines. The proposed safety rules would also require pipeline operators to perform physical work along the pipeline rights of way with environmental consequences as discussed below.

NEPA also requires analysis of socioeconomic consequences; thus, the primary stakeholder group potentially affected by the rulemaking – entities that operate rural onshore low-stress lines – may be considered an important part of the “affected environment.” The proposed safety rules could potentially result in placing a disproportionate burden on certain pipeline operators.

The pipeline operators impacted by the proposed regulations are expected to be major pipeline firms. Those firms are already performing the actions required by the proposed regulations on their currently regulated lines. They know what is required and how to meet those requirements. Additionally, many of the requirements are good business practice that the operators are likely to be following even in the absence of regulations. Consequently, the additional burden on the operators is expected to be small.

3.3 OPERATIONAL AND ENVIRONMENTAL CONSEQUENCES

In this section the operational, environmental, socioeconomic, and environmental justice consequences of Alternatives 1 through 6 are examined. Since the Proposed Action Alternative (Alternative 1) is the most comprehensive alternative it is examined in detail according to the provisions of 49 CFR Part 195. Part 195 has ten subcomponents. The other alternatives are compared by how their impacts differ from those of the Proposed Action Alternative. The operational and environmental consequences are examined first and then the socioeconomic and environmental justice consequences are examined.

Alternative 1: Apply Part 195 Requirements to All Eligible LSP (Proposed Action Alternative)

The operational and environmental consequences of Alternative 1 are examined by various subpart components of Part 195.

Subpart B – Annual, Accident, and Safety-Related Condition Reporting

Pipeline Identification

The proposed Phase II rules would require operators to identify all applicable segments of their onshore rural low-stress pipelines that would become regulated. This will largely be an administrative exercise. However, some field verification work may be required to confirm line sizes, operating conditions, and proximity to USAs. This could result in minor ground disturbances through USAs to access pipelines. However, these impacts are expected to be negligible since the operator likely maintains regular access to such areas already for routine operation and maintenance activities.

Reporting Requirements

Operators would also be required to report accidents and safety-related conditions. This is an administrative activity with no negative environmental consequences. In fact, such reporting would have a positive impact on the environment since the information on accident and safety-related conditions could be used to prevent future incidents and spills.

Subpart D – Construction

Safety Rules

Under the proposed rules, operators will be required to follow safety rules in 49 CFR Part 195 for design, construction, initial inspection, and testing for regulated steel pipelines that are constructed, replaced, relocated, or otherwise changed. However, inspection and testing activities are expected to have negligible environmental consequences compared to the impact of pipeline construction, replacement, or relocation activities that would trigger the compliance activity. Furthermore, inspection and testing efforts would be expected to help ensure pipelines are in a satisfactory condition prior to being placed in service, thereby reducing the likelihood of an incident and having a net positive impact on the environment.

Subpart F – Operation and Maintenance

Line Markers

Under the proposed rules, operators would have to install and maintain line markers at various places along newly regulated pipelines in accordance with 49 CFR Part 195.410, unless markers are already in place in those locations. Also, some changes to existing markers may be necessary to meet Part 195 standards. PHMSA assumes most operators have already installed line markers on their higher risk rural pipelines. A widely followed consensus standard (ASME B31.4) calls for installation and maintenance of markers to prevent excavation damage. Also, since excavation damage is a leading cause of pipeline accidents, it is reasonable to assume operators would already have installed markers to help prevent such damage. In any event, the ground disturbances from

digging to install new markers or to maintain existing markers are expected to be small and localized. Typically, such disturbances do not affect areas beyond the pipeline right of way.

Public Education Programs

Implementation of public education programs in accordance with 49 CFR Part 195.440 does not require any physical work along the pipeline. Public education programs are expected to help reduce the likelihood of an incident or spill and, therefore, would have a positive impact on the environment.

Damage Prevention Programs

Operators of rural onshore low-stress lines would be required to implement a damage prevention program in accordance with 49 CFR Part 195.442. This involves membership in a one-call program and would not require any intrusive work along the pipeline. This requirement would also have a net positive impact on the environment since it is intended to reduce the likelihood of incidents arising from excavation damage.

Integrity Assessment Programs

Under the proposed rules, operators of rural onshore low-stress lines would be required to establish an integrity assessment program using in-line inspection tools, direct assessment, pressure testing, or other appropriate technology to assess the integrity of the regulated pipeline segments. This includes both initial and periodic assessments. Launchers and receivers are required to allow for the insertion and removal of in-line inspection tools. If operators choose to use in-line inspection tools to comply with this requirement in pipeline segments where launchers and receivers do not exist, they will have to be installed. Operators may also choose to install other devices as part of their integrity management program, such as emergency flow restriction devices (EFRD). These actions may require excavation and reconfiguration pipelines at selected points to facilitate the installation of launchers, receivers, EFRDs, or other devices. This activity will cause localized ground disturbances where such devices are installed. If operators choose to use hydrotesting, wastewater from the testing is considered contaminated and is typically transported to and treated at a wastewater facility. As EPA already regulates the treatment of wastewater, the environmental impact is expected to be minor. The benefits of performing integrity assessments would offset these minor adverse impacts since the net effect would be a reduction in the number of incidents and potential environmental damage.

Subpart H – Operation and Maintenance

Corrosion Control Requirements

Under the proposed rules, operators of rural onshore low-stress lines would be required to meet the corrosion control requirements for steel pipelines contained in 49 CFR Part 195

Subpart H. This involves the installation and maintenance of cathodic protection systems. Many operators of steel lines not currently subject to regulation have already installed cathodic protection systems. These systems provide protection against external corrosion, a predominant cause of pipeline leaks and failures. Operators have an economic incentive to install such systems, to protect the valuable assets represented by their pipelines; PHMSA believes many pipeline operators installed such systems when their pipelines were installed.

For pipelines that will become newly regulated, but for which cathodic protection systems were not previously installed, such systems may need to be retrofitted. Installation of these systems involves excavating predetermined locations along the rights of way to install sacrificial anodes and the installation of current rectifiers to impose an electrical current on the pipeline. The type of localized ground disturbance associated with these installations is typically minimal and does not affect the environment beyond the immediate vicinity of the pipeline. These disturbances would have far less impact than the potential consequences of a pipeline accident (especially to threatened and endangered species and drinking water resources) that could occur if corrosion caused a failure of the pipeline. In PHMSA's experience, the benefits of installing cathodic protection to prevent corrosion would offset the minor adverse impacts of localized ground disturbances.

Subpart G – Qualification of Pipeline Personnel

Operator Qualification Programs

Operators of rural onshore low-stress lines would also be required to establish an operator qualification program in accordance with 49 CFR Part 195 Subpart G. This is an administrative requirement that would have no negative environmental consequences. It could have a positive impact on the environment assuming the likelihood of an incident is reduced with improved operator qualifications.

Summary of Operational and Environmental Consequences

In summary, the Proposed Action Alternative will not result in any *significant* adverse environmental impact. The proposed rulemaking would require only limited physical modification or other work that would disturb pipeline rights-of-way resulting in negligible to minor negative environmental impact from activities such as identifying segments of pipelines meeting the regulatory definitions, inspection and testing, installing and maintaining line markers, implementing corrosion controls, pipeline cleaning, and establishing integrity assessment programs. PHMSA also believes that many of these safety measures (for example, implementing corrosion control and installing and maintaining line markers) are already being undertaken for a large portion of the pipeline mileage that would become regulated under the proposed rules. Furthermore, by requiring these and other safety rules such as accident reporting, implementing public education and damage prevention programs, and establishing operator qualification programs, it is likely the number of spills from rural low-stress lines will be reduced

resulting in minor to moderate positive environmental impact that would offset the negative environmental impacts.

Socioeconomic and Environmental Justice Consequences

Socioeconomic impacts of the Proposed Action Alternative may occur because operators of the lines impacted by the proposed regulatory changes are expected to incur costs attributable to the proposed rule. As part of the rulemaking action, and in compliance with Executive Order 12866 (Regulatory Planning and Review), the costs and benefits of the proposed regulations must be assessed. The resulting detailed economic analysis will be presented in the Regulatory Evaluation, separate from this Environmental Assessment. Executive Order 12898 (E.O. 12898), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires federal agencies to adopt strategies to address environmental justice concerns within the context of agency operations. E.O. 12898 and its accompanying memorandum have the primary purpose of ensuring that Federal agencies identify and address disproportionately high and adverse human health or environmental effects on certain populations that could result from federal projects and programs. These populations include low income and minority populations, and Indian tribes. It is possible that these populations exist in areas subject to the proposed rules (for example, Indian tribes are often located in rural areas). However, the environmental analysis concludes that the Proposed Action Alternative will not result in any significant adverse environmental impact, though it has the potential to result in negligible to minor negative impact as well as minor to moderate positive impact. Therefore, PHMSA believes the proposed rules will not have a disproportionate negative impact on populations of concern.

In summary, the Proposed Action Alternative will not result in any *significant* adverse socioeconomic or environmental justice impact.

Alternative 2: Apply all Part 195 Requirements to Small Diameter LSP within ½ Mile of a USA

Alternative 2 would result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 (i.e. the Proposed Action Alternative). As was the case for Alternative 1, this alternative will not result in any significant negative impacts. However, since Alternative 2 only applies to certain types of pipelines within a certain geographic region, it does not provide the full safety benefits provided by Alternative 1.

Alternative 3: Apply all Part 195 Requirements to LSP greater than or equal to 8 5/8 inches in diameter outside ½ mile of a USA

Alternative 3 would result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 (i.e. the Proposed Action Alternative). However, Alternative 3 and its consequences would be localized to areas with LSP greater than or equal to 8 5/8 inches in diameter outside ½ mile of a USA.

Alternative 4: Apply all Part 195 requirements to LSP less than 8 5/8 inches in diameter outside 1/2 mile of USAs

Alternative 4 would result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 (i.e. the Proposed Action Alternative). However, Alternative 4 and its consequences would be localized to areas with LSP less than 8 5/8 inches in diameter outside 1/2 mile of USAs.

Alternative 5: Apply all Part 195 requirements except Subpart H Corrosion Control requirements to all LSP not currently regulated

Alternative 5 would result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 (i.e. the Proposed Action Alternative). However, Alternative 5 would not extend the regulatory Corrosion Control protections in Subpart H to all LSP not currently regulated.

Alternative 6: Apply all Part 195 requirements except Subpart F Integrity Management Program requirements to all LSP not currently regulated

Alternative 6 would result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 (i.e. the Proposed Action Alternative). However, Alternative 6 would not extend the Integrity Management Program protections to all LSP not currently regulated.

Summary of Socioeconomic and Environmental Justice Consequences

Alternatives 2 to 6 would largely result in the same environmental, socioeconomic, and environmental justice consequences as Alternative 1 for the pipeline segments to which they respectively pertain. However, each of these alternatives would not regulate certain pipelines or extend specific types of protections, such as corrosion control and integrity management programs to the full extent as Alternative 1. Nevertheless, Alternatives 2 to 6 would not result in any *significant* adverse environmental impact, though they have the potential to result in minor negative environmental impact.

4.0 PREPARERS

This Environmental Assessment was prepared by Jack Faucett Associates for PHMSA.