

CAL FIRE - Office of the State Fire Marshal, Pipeline Safety Division Information Sheet

JURISDICTION OF THE PIPELINE:

- The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) has exclusive federal authority over **interstate** pipeline facilities (49 USC § 60101, et seq.). Interstate pipeline is defined as a pipeline or that part of a pipeline that is used in the transportation of hazardous liquid or carbon dioxide in interstate or foreign commerce. Typically, these lines cross state borders, or begin in federal waters. Also, A Federal Energy Regulatory Commission FERC filing by the operator can be the determining factor. The two pipelines in Santa Barbara County have a FERC filing.
- CAL FIRE - Office of the State Fire Marshal (OSFM) has safety regulatory and enforcement authority over **intrastate** hazardous liquid pipelines pursuant to the Elder California Pipeline Safety Act of 1981 (Gov. Code, § 51010, et seq.). Intrastate pipeline is defined as means a pipeline or that part of a pipeline to which this part applies that is not an interstate pipeline. Those pipelines are located entirely within state borders including offshore state waters.

Information about the OSFM Pipeline Safety Program can be found at <http://osfm.fire.ca.gov/pipeline/pipeline.php>.

CALIFORNIA HAZARDOUS LIQUID PIPELINES:

California INTERSTATE Hazardous Liquid Pipelines (Responsibility of PHMSA):

- 8 pipeline operators
- 1,188 miles of interstate pipeline:

California INTRASTATE Hazardous Liquid Pipelines (Responsibility of OSFM):

- 52 pipeline operators
- 4,500 miles of intrastate pipeline (this number is expected to increase by 1100 miles as we reclassify service pipelines to jurisdictional this coming year.)
- 344 Pump Stations and Tank farms
- 744 Breakout Tanks

PHMSA Agent:

In 1987, the State Fire Marshal and PHMSA entered into a Hazardous Liquid Pipeline Safety Program Interstate Agent Agreement. Per that agreement, the State Fire Marshal agreed to act as an interstate **agent**. This agreement was renewed until December 2012 at which time the OSFM did not renew the agreement starting in January 2013.

As an **agent** under the agreement for PHMSA, the OSFM was instructed to do the following:

1. Establish an annual plan for conducting and documenting inspections subject to approval of the PHMSA Region Director;
2. Perform the required number of inspections according to the inspection plan;
3. Conduct exit interviews that included informing the operator of findings, and indicate that any findings will be referred to PHMSA for possible enforcement action;
4. Immediately report conditions that may pose an imminent safety hazard to the public or to the environment;
5. Submit summary reports of inspections;
6. Submit any evidence of probable violations with supporting documentation to assist with Federal enforcement actions;
7. Maintain inspection and incident reports in the State office;
8. Submit annual information on inspections to PHMSA; and
9. Investigate reported safety-related conditions, monitor operators' remedies, and provide status reports to PHMSA.
10. Defer to PHMSA with regard to making inspection documents available to the public.

Testing verses Inspection:

Testing and inspecting are different activities. Testing, which is completed by pipeline operators on their pipeline system, would include hydrostatic pressure tests, in-line inspections (ILI), and cathodic protection. Inspections are conducted by the OSFM; these activities is conducted on the pipeline operator are to ensure compliance with federal and State laws. These inspections are a review of procedure manuals, operations and maintenance records, as well as field reviews.

With the Governor's signature of SB295 and AB864, the Office of the State Fire Marshal will be developing regulations that will increase the frequency of key testing and inspections as well as the installation of important pipeline valve systems necessary to reduce or eliminate the possibilities of pipeline leaks. These regulations will include annual inspections, testing requirements and pipeline valve systems.

Requirements and Frequencies for Intrastate (OSFM) and Interstate (PHMSA) Pipelines Testing Comparison

		Description	OSFM	PHMSA
New Construction, Relocations, and Replacements		Every new pipeline system that is constructed with steel pipe and every pipeline system that has been relocated or replaced must be hydrostatically pressure tested in accordance with Subpart E of Part 195 of Title 49 of the Code of Federal Regulations.	OSFM receives hydrostatic pressure test results within 30 days of the test.	Test results are not required to be submitted to PHMSA
Integrity Management	Hydrostatic Tests	Pressure tests are used by pipeline operators as a means to determine the integrity of the pipeline during a pipeline's operating life.	OSFM requires pipeline operators to hydrostatically pressure test their Intrastate pipelines at intervals not to exceed 5 years. The test results must be certified by an Independent Testing Company or person approved by the State Fire Marshal and the results must be submitted to OSFM for review. Based on recently signed legislation, the OSFM expects to increase inspection/testing frequencies on all pipelines under its jurisdiction	DOT/PHMSA Integrity Management regulations require pipeline operators to periodically conduct integrity assessments on line segments that could affect HCAs at intervals not to exceed 5 years. Pressure testing is one acceptable method of performing these assessments. Test results are NOT required to be submitted to PHMSA
	ILI	Sophisticated in-line inspection (ILI) tools may be used by pipeline operators as a means to determine the integrity of the pipeline during a pipeline's operating life. These ILI tools travel through a pipeline and measure and record irregularities that may represent corrosion, cracks, laminations, deformations (dents, gouges, etc.), or other defects.	An operator must request a waiver from OSFM if they choose to test an Intrastate pipeline using an ILI tool in lieu of a hydrostatic pressure test. If the waiver is approved, the operator will be required to submit the ILI test results to OSFM for review.	An operator must perform periodic integrity assessments (i.e., continual integrity evaluation and assessment) on pipeline segments that could affect HCAs at intervals not to exceed 5 years. ILI testing is one acceptable method of performing these assessments. Test results are NOT required to be submitted to PHMSA

Testing Category	Description	OSFM	PHMSA
High Risk Pipelines	INTRASTATE pipelines that have leaked due to corrosion or defects will be placed on the State Fire Marshal's list of "higher risk" pipelines.	<p>Currently, OSFM requires high risk lines provided with effective cathodic protection to be tested every two years. With recently signed legislation, the OSFM expects to increase inspection/ testing frequencies through the regulatory process.</p> <p>OSFM requires high risk lines not provided with effective cathodic protection to be tested annually.</p>	PHMSA does not define High Risk pipelines
Bulk Loading Terminal	OSFM defines Bulk Loading Terminals as those facilities owned by a common carrier and is served by a pipeline of that common carrier, and the common carrier owns and serves by pipeline at least five such facilities in the state.	Currently, OSFM requires piping within a refined products bulk loading facility served by pipeline to be pressure tested every five years if those pipelines have effective cathodic protection and every three years for those pipelines without effective cathodic protection.	PHMSA does not regulate Bulk Loading Terminals

Requirements and Frequencies for Intrastate (OSFM) and Interstate (PHMSA) Pipelines Inspection Comparison

Inspection Type	Description	OSFM	PHMSA
Standard (Comprehensive)	<p>This is a comprehensive inspection of the pipeline Operator's procedures, their maintenance, operations and inspection records; and includes a right-of-way field inspection. The Operator's emergency procedures are also examined to determine if the Operator is prepared to respond promptly and effectively should an abnormal condition or pipeline failure occurs.</p>	<p>Currently, OSFM conducts a 5 year interval per inspection unit.</p> <p>Based on recently signed legislation, the OSFM expects to increase those inspection frequencies that have a direct impact on preventing pipeline leaks to annual intervals.</p>	<p>PHMSA conducts "Integrated Inspections"</p>
Integrity Management	<p>Beginning in 1984, the California State Fire Marshal has required all intrastate pipelines to be hydro-tested or internally inspected at intervals not to exceed 5 years. Prior to this date, pipelines were tested only at the time of construction.</p> <p>By the time the federal integrity management rules were enacted in the early 2000's, California's pipelines had gone through 4-5 testing cycles. As a result, the frequency and severity of pipeline leaks in California dropped dramatically.</p>	<p>Full Integrity Management Program reviews are conducted on a 5 year interval per Operator. In addition to these inspections, OSFM also tracks and reviews each hydrostatic pressure test and inline inspection conducted on INTRASTATE pipelines.</p> <p>Based on recently signed legislation, the OSFM expects to increase inspection frequencies on all pipelines under its jurisdiction. Inspections critical to pipeline integrity will be conducted on an annual cycle</p> <p>OSFM requires the pipeline Operator to notify the local fire department at least three days prior to each test.</p> <p>Any leak on a pipeline undergoing a pressure test shall immediately be reported to the local fire department, and to the Governor's Office of Emergency Services (OES)</p>	<p>A PHMSA Integrity Management Inspection generally verifies that an Operator uses all available information about its pipeline system to assess risks and take appropriate action to mitigate those risks. Inspections include reviewing the written IM program and associated records.</p>

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High Risk Pipelines	INTRASTATE pipelines that have leaked due to corrosion or defects will be placed on the State Fire Marshal's list of "higher risk" pipelines.	Currently, OSFM requires high risk lines to be tested every two years. Based on recently signed legislation, the OSFM expects to increase inspection frequencies to annually on all pipelines under its jurisdiction	N/A PHMSA does not define High Risk pipelines
Independent Hydrostatic Testing Company Program	OSFM requires that all hydrostatic testing results submitted to the State Fire Marshal must be certified by an Independent Testing Company or person approved by the State Fire Marshal. The role of the Independent Testing Company's representative is to witness the pressure test for the prescribed time, ascertain the extent of the test, record the necessary data and forward the results to the OSFM.	Each year, the State Fire Marshal publishes a list of companies and persons who are approved to certify and witness hydrostatic tests	PHMSA does not have an Independent Hydrostatic Testing Company Program.
Bulk Loading Terminal	OSFM defines Bulk Loading Terminals as those facilities owned by a common carrier and is served by a pipeline of that common carrier, and the common carrier owns and serves by pipeline at least five such facilities in the state. Piping within a refined products bulk loading facility served by pipeline shall be tested hydrostatically at 125 percent of maximum allowable operating pressure utilizing the product ordinarily transported in that piping if that piping is operated at a stress level of 20 percent or less of the specified minimum yield strength of the pipe.	OSFM requires bulk loading facility pipelines to be pressure tested every five years if those pipelines have effective cathodic protection and every three years for those pipelines without effective cathodic protection. Based on recently signed legislation, the OSFM expects to increase inspection frequencies on all pipelines under its jurisdiction.	PHMSA does not regulate Bulk Loading Terminal

Inspection Type	Description	OSFM	PHMSA
New Construction Relocations Replacement	This inspection involves reviewing engineering drawings and specifications during the design phase; observe and evaluate construction work and processes; and validating required certifications and qualifications.	OSFM tracks each construction and replacement project for INTRASTATE pipelines (this is done by OSFM making direct contact with the Operators). An OSFM Pipeline Safety Engineer is then assigned to follow the project and conduct construction inspections. Based on recently signed legislation, the OSFM will be updating its regulations to require notification of construction projects.	An Operator is only required to notify PHMSA of construction or replacement project if the project costs \$10 million or more; the project includes 10 or more miles of a new hazardous liquid pipeline; or a new pipeline facility will be constructed
Encroachment	California Government Code states, “ (a) Effective January 1, 1987, no person, other than the pipeline operator, shall do any of the following with respect to any pipeline easement: (1) Build, erect, or create a structure or improvement within the pipeline easement or permit the building, erection, or creation thereof. (2) Build, erect, or create a structure, fence, wall, or obstruction adjacent to any pipeline easement which would prevent complete and unimpaired surface access to the easement, or permit the building, erection, or creation thereof. (b) No shrubbery or shielding shall be installed on the pipeline easement which would impair aerial observation of the pipeline easement.	It is the position of the State Fire Marshal that nothing shall encroach into or upon the pipeline easement, which would impede the pipeline operator from complete and unobstructed surface access along the pipeline right of way. Nor shall there be any obstructions, which would shield the pipeline right of way from observation. In the interest of public safety and the protection of the environment, it is imperative that the pipeline operator visually assesses the conditions along the easement to ensure the integrity of the pipeline. In cases where this is not possible, the pipeline operator shall inform the State Fire Marshal. The State Fire Marshal may in conjunction with the pipeline operator resolve the issue.	PHMSA does not have a regulation preventing pipeline right-of-way encroachments
Train Derailment Response	Hazardous liquid pipelines are often located alongside and in the immediate proximity of rail lines. In the event of a derailment, these pipelines may be damaged in such a fashion that their integrity is lost, making a rupture or leak more likely.	OSFM is notified by Cal OES of each train derailment. OSFM will track and investigate each train derailment on or adjacent to any pipeline for which the derailment or cleanup work could endanger the pipeline.	PHMSA does not receive notifications of train derailments from Cal OES.

Inspection Type	Description	OSFM	PHMSA
Operator Qualification	<p>PHMSA and state inspections verify that Operators have created acceptable OQ programs and identified all safety-sensitive employee positions. Inspectors also review records to verify that employees in these positions have been trained and tested.</p> <p>Operator employees performing operations and maintenance tasks are observed to ensure the tasks are completed in accordance with the Operator's program.</p>	<p>Full program reviews are conducted on a 5 year interval per Operator.</p> <p>Field verification inspections are conducted during each Standard Inspection</p> <p>Based on recently signed legislation, the OSFM expects to increase the frequency of program reviews on all pipelines operators under its jurisdiction.</p>	As required
Integrated Inspection	<p>These PHMSA inspections are risk-based and include a mixture of many of the above mentioned types of inspections combined into one large inspection. This large inspection would focus on just one Operator who has pipelines in multiple states.</p>	<p>PHMSA may invite OSFM to participate on the portion of the inspection that is conducted in California.</p>	<p>Integrated inspections prioritize specific areas to be inspected based on system-specific risk information in order to apply PHMSA inspection resources to programs, geographic areas, and threats that pose higher risks.</p>