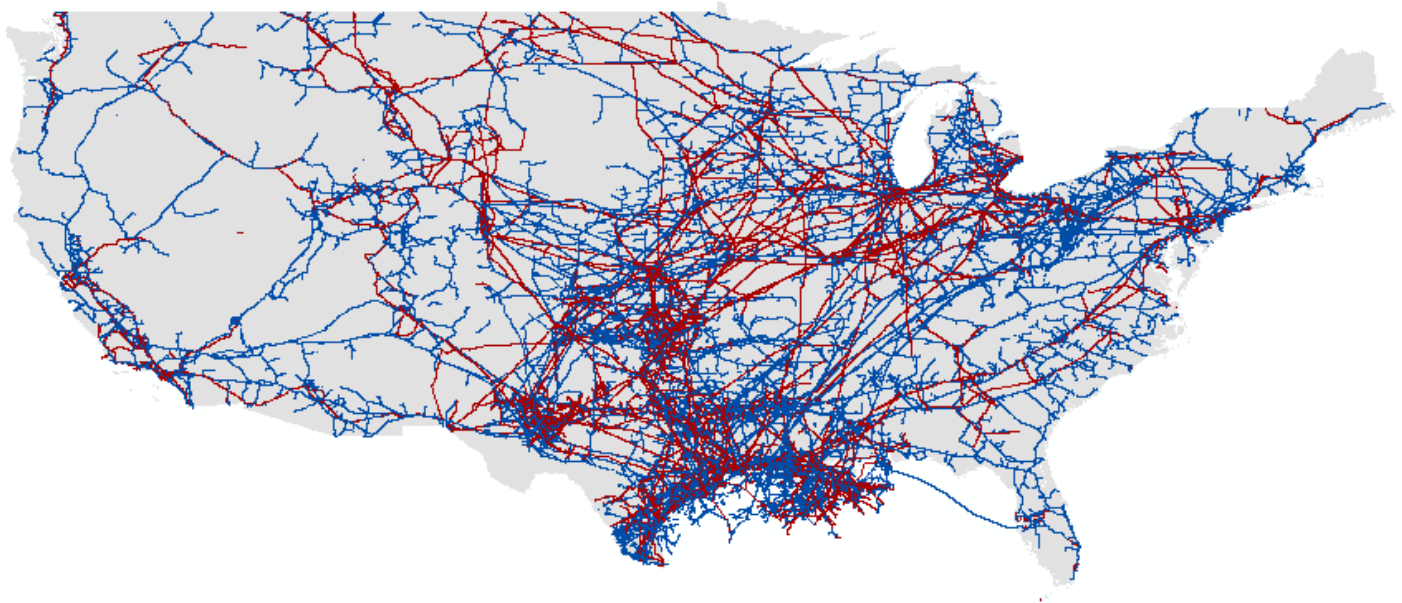


National Pipeline Mapping System

Standards for
**Pipeline, Liquefied Natural Gas and
Breakout Tank Farm Operator Submissions**
January 2027



www.npms.phmsa.dot.gov



**Pipeline and Hazardous
Materials Safety Administration**

Revisions to the Standards in January 2027

1. New spatial accuracy requirements for 2027 (CY26 reporting) and beyond are described in Section 4.3
2. Updates were made to Sections 2 and 3 describing the Types of Data Revisions to be submitted to the NPMS and listing the new acceptable revision code values
3. Updates were made to Section 5 to add the requirement of public contact information for breakout tank OPIDs
4. Updates were made to Appendix A.1: Pipeline Attribute Table and A.2: LNG Plant Attribute Table to reflect all attribute fields, names, properties and acceptable values approved and required as part of the NPMS Information Collection for Phases 1 and 3, which are mandatory in 2027 (reporting the system as-of 12/31/2026)
5. Without changing intent, other information was reorganized to create a more streamlined manual. If you have any concerns or feedback that could improve the quality and clarity of this manual, please contact NPMS staff at npms@dot.gov.

IMPORTANT NOTE FOR CY26 (2027 due dates) submission planning: This document is written to add all new submission requirements approved for pipelines and LNG plants in CY26 NPMS submissions due March 15 or June 15, 2027 to the complete and official NPMS Operator Standards Manual. Due to the additional attributes, OPERATORS CANNOT SUBMIT NO CHANGE NOTIFICATIONS OR ADDITION SUBMISSION TYPES FOR CY26 PIPELINE OR LNG PLANT SUBMITTALS FOR 2027 DUE DATES. However, because this manual will continue being used in the future, it still describes all NPMS requirements, options and tool functionality, including information about No Change Notifications and submitting an Addition in lieu of a traditional data submission. The continued inclusion of No Change Notifications and Addition options or guidance in this document DOES NOT IMPLY THESE OPTIONS ARE POSSIBLE DURING 2027. As well, links in this document will all point to the current resource versions available on the NPMS website. If you want to view FUTURE versions of the NPMS Submission Supplemental Instructions or data templates please go to the “[Future NPMS Submission Requirements EFFECTIVE 1/01/2027](#)” page available from the top of the Pipeline Operator section of the NPMS website.

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List of Acronyms

AA	Anhydrous Ammonia
AGA	American Gas Association
API	American Petroleum Institute
ASCII	American Standard Code for Information Interchange
BDB	Biodiesel Blend
BTS	Bureau of Transportation Statistics, U.S. Department of Transportation
CAD	Computer-Aided Drafting
CADD	Computer-Aided Drafting and Design
CO ₂	Carbon Dioxide
CRD	Crude Oil
CRW	Sweet Crude Oil
CRR	Sour Crude Oil
DOE	Department of Energy
EPG	Empty Gas
EPL	Empty Liquid
ETB	Ethanol Blended Gasoline
ETH	Fuel Grade Ethanol
FERC	Federal Energy Regulatory Commission
FGDC	Federal Geographic Data Committee
FTP site	File Transfer Protocol site
GIS	Geographic Information System
GPS	Global Positioning System
HG	Hydrogen Gas
HVL	Highly Volatile Liquid
INGAA	Interstate Natural Gas Association of America

LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MQAT	Joint Government-Industry Pipeline Mapping Quality Action Team
NAD27	North American Datum of 1927
NAD83	North American Datum of 1983
NG	Natural Gas
NG1	Pipeline Quality or Tariff Quality Natural Gas
NG2	Wet But Non-Sour Natural Gas
NG3	Sour But Non-Wet Natural Gas
NG4	Wet, Sour Natural Gas
NGL	Natural Gas Liquids
NPS	Nominal Pipe Size
NPMS	National Pipeline Mapping System
OBI	Other Biofuels
OHV	Other HVL
OMB	Office of Management and Budget
OPS	Office of Pipeline Safety
OPID	Operator Identification Number
OSAVE	Operator Submission And Validation Environment
OTG	Other Gas
OTR	Other Refined or Non-HVL Petroleum Products
PG	Propane Gas
PHMSA	Pipeline and Hazardous Materials Safety Administration
PRD	Product
RFD	Refined Fuel Oil, Diesel
RGS	Refined Non-Ethanol Blended Gasoline
RKJ	Refined Kerosene, Jet Fuel
ROW	Right-Of-Way
SG	Synthetic Gas
SMYS	Specified Minimum Yield Strength
SPCS	State Plane Coordinate System
USDOT	U.S. Department of Transportation
USGS	United States Geological Survey
UTM	Universal Transverse Mercator

List of Useful NPMS Website Links

National Pipeline Mapping System (NPMS):

<https://www.npms.phmsa.dot.gov>

Pipeline Operator page:

<https://www.npms.phmsa.dot.gov/PipelineOperator.aspx>

Apply for Operator NPMS Account:

<https://www.npms.phmsa.dot.gov/ApplyForNPMSAccess.aspx>

Apply to sponsor a company contractor for a temporary NPMS account:

<https://www.npms.phmsa.dot.gov/SponsorNPMSAccess.aspx>

NPMS Operator Standards Manual (this link always stores the version for the current submission year):

https://www.npms.phmsa.dot.gov/Documents/Operator_Standards.pdf

NPMS Operator Submission Supplemental Instructions (current version):

https://www.npms.phmsa.dot.gov/Documents/NPMS_Supplemental_Instructions.pdf

Operator Submission And Validation Environment:

<https://www.npms.phmsa.dot.gov/OSAVE/>

Operator Submission And Validation Environment User Guide:

https://www.npms.phmsa.dot.gov/Documents/OSAVE_User_Guide.pdf

Summary of Required Components – Pipeline (current versions):

<https://www.npms.phmsa.dot.gov/RequiredComponentsSummary.aspx>

Overview of the Pipeline Submission Process:

<https://www.npms.phmsa.dot.gov/SubmissionProcessOverview.aspx>

NPMS Pipeline Shapefile and File Geodatabase template:

https://www.npms.phmsa.dot.gov/Documents/PIPE_SHP_FGDB_Template.zip

NPMS Pipeline Data Submission Attribute template:

https://www.npms.phmsa.dot.gov/Documents/NPMS_Pipeline_Data_Submission_Attribute_Table.xlsx

Summary of Required Components – LNG Plant (current versions):

<https://www.npms.phmsa.dot.gov/RequiredComponentsSummaryLNG.aspx>

Overview of the LNG Plant Submission Process:

<https://www.npms.phmsa.dot.gov/SubmissionProcessOverviewLNG.aspx>

NPMS LNG Plant Shapefile and File Geodatabase template:

https://www.npms.phmsa.dot.gov/Documents/LNG_SHP_FGDB_Template.zip

NPMS LNG Plant Data Submission Attribute template:

https://www.npms.phmsa.dot.gov/Documents/NPMS_LNG_Data_Submission_Attribute_Table.xlsx

Summary of Required Components – Breakout Tank (current versions):

<https://www.npms.phmsa.dot.gov/RequiredComponentsSummaryBOT.aspx>

Overview of the Breakout Tank Submission Process:

<https://www.npms.phmsa.dot.gov/SubmissionProcessOverviewBOT.aspx>

NPMS Breakout Tank Shapefile and File Geodatabase template:

https://www.npms.phmsa.dot.gov/Documents/BOT_SHP_FGDB_Template.zip

NPMS Breakout Tank Data Submission Attribute template:

https://www.npms.phmsa.dot.gov/Documents/NPMS_BOT_Data_Submission_Attribute_Table.xlsx

Pipeline Information Management and Mapping Application (PIMMA):

<https://www.npms.phmsa.dot.gov/PIMMA/>

Public Map Viewer:

<https://pvnpms.phmsa.dot.gov/PublicViewer/>

Find Who's Operating Pipelines in Your Area:

<https://www.npms.phmsa.dot.gov/FindWhosOperating.aspx>

Preface

The NPMS standards and this document was prepared by the second Joint Government/Industry Pipeline Mapping Quality Action Team (MQAT II). The team was sponsored by the U.S. Department of Transportation (USDOT) Pipeline and Hazardous Materials Safety Administration (PHMSA), American Petroleum Institute (API), American Gas Association (AGA), and Interstate Natural Gas Association of America (INGAA). Representatives on the team included PHMSA, Bureau of Transportation Statistics (BTS), U.S. Department of Energy (USDOE), U.S. Geological Survey (USGS), Federal Energy Regulatory Commission (FERC), state representatives from California, Louisiana, New York, and Texas, and representatives from the pipeline industry. This document has since been maintained with updates by NPMS staff.

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Introduction

The National Pipeline Mapping System is a program within the Pipeline and Hazardous Materials Safety Administration (PHMSA) that collects, processes, and disseminates geospatial data. The NPMS contains the location and selected attributes of hazardous liquid and gas transmission pipelines located onshore and offshore, liquefied natural gas (LNG) plants, and breakout tanks operating in the United States and subject to PHMSA reporting requirements (collectively referred to within this document as pipeline facilities). The NPMS also includes all subject facilities abandoned after 12/31/2022 (incomplete records for abandonments on or before 12/31/2022). The NPMS also contains contact information for pipeline operators that is accessible to the public.

PHMSA works with other governmental agencies and private organizations to add other relevant data layers to the system. These include layers on high consequence areas, hydrography, and transportation networks. PHMSA uses the system to 1) depict pipelines in relation to populated areas and natural resources, 2) coordinate information with other governmental agencies, 3) provide regulatory oversight, 4) better prepare for a possible pipeline release, and 5) work with governmental agencies and private industries in the event of a release.

The NPMS is built and maintained using information supplied by pipeline facility operators. On an annual basis, operators are required to provide geospatial and attribute data about their operations as well as contact information.

1. Regulatory Requirements

The [Pipeline Safety: Miscellaneous Changes to Pipeline Safety Regulations](#) rulemaking requires that pipeline operators provide information to PHMSA appropriate for use in the NPMS, and references this document (NPMS Operator Standards Manual) as specifying acceptable formats and additional information. 49 CFR 195.61 pertains to hazardous liquid pipeline and breakout tank operators (due each year by June 15th), and 49 CFR 191.29 pertains to gas transmission pipeline and LNG plant operators (due each year by March 15th). This rule became effective on October 1, 2015, and supersedes the Pipeline Safety Improvement Act of 2002. The Department of Transportation utilizes the National Pipeline Mapping System to handle all geospatial data. The regulations state that operators must annually submit:

- Data appropriate for use in the National Pipeline Mapping System (NPMS). A complete data submission includes the geospatial data, attribute data, and transmittal letter (metadata) for all breakout tank, LNG, hazardous liquid, and natural gas transmission pipeline systems operated by a company.
- The name and address of the person with primary operational control to be identified as its operator.
- Public contact information, which is used by members of the public to contact the operator for additional information about pipeline operations.
- Annual updates of the above information to reflect changes, or a notification confirming no changes are necessary.

Data appropriate for use in the NPMS (NPMS data standards) are defined by Information Collection Requests developed by PHMSA and approved by the Office of Management and Budget (OMB). The OMB control number for the NPMS information request is 2137-0596.

OMB most recently approved changes to the NPMS information collection in March 2023, which will become mandatory in phases through 2028. For planning purposes, you can access the [Future Attribute Standards and Revision Summary](#) from the Pipeline Operator section of the NPMS website. That document outlines all changes approved by OMB, data submission requirements planned for those changes, and implementation timelines. The official NPMS Operator Standards Manual (the current version of this document) will always be available at https://www.npms.phmsa.dot.gov/Documents/Operator_Standards.pdf for the current submission year. If OMB approved changes become mandatory next year, an early copy of next year's NPMS Operator Standards Manual will be available starting the preceding July from a temporary link on the Pipeline Operator section of the NPMS website. The official NPMS Operator Standards Manual will be updated within the first week of January during each reporting year. For example, new changes required in NPMS submissions during 2028 (reflecting operations as of 12/31/2027) will be reflected in an early NPMS Operator Standards Manual published temporarily in July 2027, then published in the official NPMS Operator Standards Manual location by January 7, 2028.

1.1 Development of NPMS and Standards for Data Submission

A Joint Government/Industry Pipeline Mapping Quality Action Team (MQAT II) was formed to work with PHMSA on creating the digital pipeline location and attribute layer of the NPMS. The team was sponsored by PHMSA, American Petroleum Institute (API), American Gas Association (AGA), and Interstate Natural Gas Association of America (INGAA), and included representatives from multiple federal and state governmental agencies, and the natural gas and hazardous liquid pipeline industry.

MQAT II drafted standards and incorporated appropriate recommendations from outside entities, including comments from mapping vendors, pipeline operators, and state agencies outside the MQAT II. The standards underwent two pilot tests. These tests helped to determine the:

- Ability of pipeline operators to submit data that meet the standards,
- Problems they encountered while trying to meet the standards,
- Cost and effort required to meet the standards,
- Usability of data formats other than those in the standards, and
- Ability of the pilot repositories to process the submitted data based on the draft standards.

To the greatest extent possible, MQAT II resolved the problems encountered in both pilot tests in an effort to further minimize the time and effort required to meet the standards. The majority of the operators and repositories that participated in the pilot tests stated that the standards were clear and could be met without an undue burden on their company. PHMSA updates or adds to these standards as we deploy technical enhancements to improve submission processes or as OMB approves changes to the NPMS information collection.

Various state agencies currently request or require that operators submit pipeline and LNG data to them. Some state agencies are using the operators' data to create a digital pipeline and LNG layer for their state. NPMS does not supersede or replace state regulations. Operators must still comply with all applicable state regulations.

View details about when the NPMS Operator Standards document is updated to reflect changes in Section 1.

1.2 Annual NPMS Submission Requirement

Operators are required to examine their previously submitted gas transmission pipeline, hazardous liquid pipeline, LNG plant and breakout tank (collectively referred to as pipeline facility) data in the NPMS every year and report changes or verify if the previously submitted data is still accurate. NPMS submissions are used to fulfill this annual requirement. You can read about the types of NPMS submissions in Section 2.2, and information throughout this document explains differing submission requirements and procedures for pipelines, LNG plants and breakout tanks. As with annual reports to PHMSA, NPMS submissions must reflect operations as of December 31 of the previous year. Do not resubmit pipeline facilities your company previously submitted as abandoned to the NPMS (see Section 7).

1.3 NPMS Submission Due Dates

Effective October 1, 2015, operators submit their NPMS data concurrently with hazardous liquid, breakout tank, LNG plant, and gas transmission annual report submissions to PHMSA. Annual reports and NPMS submissions are due on March 15 each year for gas transmission and LNG plant operators and on June 15 for hazardous liquid and breakout tank operators. The data included in both annual reports and NPMS submissions must reflect conditions in the field as of December 31 of the previous year.

PHMSA encourages operators to submit data prior to the deadlines. Submitting early will speed up submission processing and provide time for NPMS staff to notify operators if a submission is incomplete. Submissions reflecting December 31 of the previous year will be accepted as early January 1 of the current year (e.g., submissions reflecting assets as of December 31, 2022, will be accepted as early as starting January 21, 2023). NPMS staff process submissions in the order they are received.

For those operators reporting both gas transmission and hazardous liquid pipelines under one OPID, PHMSA prefers a single NPMS pipeline data submission containing the changes for both the gas transmission and hazardous liquid pipelines reflecting as of December 31 of the previous year by March 15. If the operator is submitting both updated hazardous liquid and gas transmission pipelines in a single submission, the operator should clearly indicate that both types reflect as of December 31 of previous year on the cover/transmittal letter that accompanies the submission (a form to collect all transmittal letter components is integrated in the OSAVE submission workflow). If the operator is unable to submit updated hazardous liquid and gas transmission pipelines in a single submission by March 15, the operator must complete a submission with only the gas transmission pipelines by March 15, and a second submission with only the hazardous liquid pipelines by June 15. In this case the March 15th submission cannot contain hazardous liquid pipelines, and the June 15th submission cannot contain gas transmission pipelines. Both individual submissions should be accompanied by all required components of the submission. The OSAVE transmittal letter components in the individual submissions should clearly denote the pipeline type included in the submission and the as-of year reflected. When NPMS staff receive a submission containing only the gas transmission pipelines they conduct a cursory review of the submission and notify the operator. NPMS staff will conduct the full submission review and processing after receiving the hazardous liquid submission.

1.4 Matching NPMS Submissions and Annual Reports

In compliance with 49 CFR 191.22(d) and 49 CFR 195.64(d), each year operators must report the same gas transmission and hazardous liquid operations and mileage on the annual report and NPMS submission to PHMSA. In other words,

operators must use the same OPID number to report a pipeline, LNG, or breakout tank asset in both the annual report and NPMS submission, as well as for other PHMSA reporting requirements (e.g., incidents or national registry notifications). There may be scenarios where operators choose to include intricate in-plant lines and instrumentation on their annual report that are not compatible with the goal of the NPMS. See Section 4.1(3) to read about this exception and how to properly handle it in your NPMS submission. NPMS staff will question any NPMS submission with more than a 5% discrepancy in mileage calculated by pipeline type, state and interstate status.

1.5 Acceptable Notifications in lieu of Data Submissions (e.g., No Change Notifications)

In certain scenarios an NPMS data submission is not necessary to comply with the NPMS submission requirement. This includes when operators have made no changes to their pipeline facility operations since their previous NPMS submission, or when all facilities reported by an OPID should be removed from the NPMS for a valid reason. Read more about No Change Notifications and Removal Notifications in lieu of data submissions in Section 2.2. These notifications are easily submitted through the OSAVE environment (see Section 8).

When an operator only operates intricate in-plant pipe and instrumentation they should read about the option to submit an omitted pipe notification in Section 4.1(3).

1.6 Operator Submission And Validation Environment (OSAVE)

PHMSA has developed the Operator Submission And Validation Environment (OSAVE) to assist operators with all NPMS submission activities. Throughout this Operator Standards document you will see references to OSAVE and information about how to comply with submission requirements using OSAVE. You can read more about OSAVE in Section 8.

1.7 Distribution of NPMS Data

Federal, tribal, state, and local governmental agencies, emergency responders and the pipeline industry may request access to all or portions of the pipeline, LNG, and breakout tank GIS data from the NPMS. PHMSA also distributes GIS data reflecting high consequence areas, as collected from various government, security sensitive and proprietary data sources, to the extent permitted by the data source. The data collected for the NPMS is necessary for regulatory oversight and for monitoring pipeline security. In 2007, a [Public Viewer](#) was launched. The Public Viewer allows the general public to view maps of and information from the NPMS in a user-specified county or offshore area with map scale (<1:24,000) and attribute limitations. In 2025, a National View option was added to the Public Viewer with map scale limitations to less than 1:20,000,000 for pipelines, and less than 1:300,000 for LNG plants and breakout tanks.

One of the goals of the NPMS is to assist operators in progressing toward a digital mapping environment. Upon request, digital pipeline, LNG plant, and breakout tank data is provided to the contributing operator at no cost. The NPMS may charge a fee for other products and services. The data contained in the NPMS are for reference purposes only and are not to be construed as actual survey-quality data or as a replacement for contacting 811 or a one-call center.

1.8 About these Standards

These standards were created with input from the pipeline industry, governmental agencies, and the public. They address the submission of digital pipeline, LNG, and breakout tank data to support the development of a reasonably accurate NPMS. Operators are responsible for providing data that complies with these standards. The following sections discuss in detail the format, content, and quality of pipeline, LNG plant, and breakout tank data that are to be submitted for inclusion into the NPMS. Three types of data are required: geospatial data (location information),

attribute data (descriptive information), and metadata (data about the data). A cover/transmittal letter, separate metadata file, and contact information for the pipeline, LNG plant, and breakout tank operators are required components; however, the OSAVE workflow eliminates the need for each of these components to be submitted as separate files within a data package. Instead, the cover/transmittal letter information, metadata, and primary, technical, and public contact information are incorporated into the submission workflow as a series of questions. See Section 5 for more details about contact information and Section 8 for more details about how OSAVE supports NPMS submission activities.

2. General Submission Requirements

2.1 Key Terms and Definitions (Includes What Facilities are Required in NPMS)

This section defines key terms and how they relate to the NPMS submission requirements.

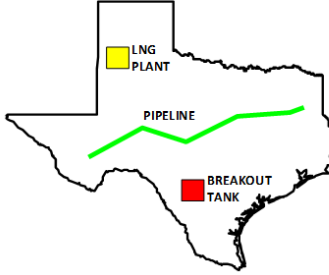
Geospatial Data	Attribute Data	Metadata	Contact Information						
Digital data with lines and/or points marking the location of pipelines, LNG Plants, and breakout tanks. 	A computer database containing descriptive information about pipelines or LNG Plants. There is one record in the database for each <i>pipeline segment</i>. <table><tr><th>Pipeline Attribute Table</th></tr><tr><td>Descriptive Field 1</td></tr><tr><td>Descriptive Field 2</td></tr><tr><td>Descriptive Field ...</td></tr></table> <table><tr><th>LNG Attribute Table</th></tr><tr><td>Descriptive Field 1 ...</td></tr></table>	Pipeline Attribute Table	Descriptive Field 1	Descriptive Field 2	Descriptive Field ...	LNG Attribute Table	Descriptive Field 1 ...	Descriptive information about how the geospatial and attribute data were prepared (i.e. data about data). This information includes the data projection, datum, and units.	Information about the person or entity who serves as a contact for the pipeline system. Contains either a person's name and title or the name of an entity. Also contains address, phone, and email information.
Pipeline Attribute Table									
Descriptive Field 1									
Descriptive Field 2									
Descriptive Field ...									
LNG Attribute Table									
Descriptive Field 1 ...									

Figure 2-1. The Types of NPMS data

The NPMS includes location and selected attributes of hazardous liquid and gas transmission pipelines, LNG plants, and breakout tanks. Information on other types of pipelines and facilities are not required at this time.

Pipelines and facilities other than those described below cannot be included in your NPMS submission.

Gas Transmission Line: a transmission line as defined in [49 CFR §192.3](#).

Additional information about PHMSA-regulated gas lines is in [49 CFR §192](#).

Hazardous Liquid Line: a pipeline system that is covered by [49 CFR §195.1](#). Some exceptions include non-regulated gathering lines and in-plant pipelines.

Regulated Rural Hazardous Liquid Gathering Lines: a type of hazardous liquid line defined as a regulated rural gathering line in [49 CFR §195.11](#).

GIS data layers depicting locations that meet the definition of certain unusually sensitive areas are available to pipeline operators as a starting point for determining whether their liquid lines are jurisdictional. Operators can download or read about requesting access to this GIS data from the Pipeline Operator section of the NPMS website.

Additional information about PHMSA-regulated liquid lines is in [49 CFR §195](#).

LNG Plant: an LNG plant as defined in [49 CFR §193.2007](#).

Breakout Tank: a facility as defined in [49 CFR §195.2](#).

Abandoned Pipeline Facilities: Each gas transmission, hazardous liquid pipeline, LNG plant or breakout tank permanently abandoned in place. Read Section 7 for more information about abandonments in the NPMS.

Other Helpful Terms:

Pipeline facility: As defined in 49 CFR §§ [192.3](#) and [195.2](#), means new and existing pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation, or used in the transportation of hazardous liquids or carbon dioxide. For NPMS purposes, the term pipeline facility is regularly used to collectively refer to the pipelines, LNG plants and breakout tanks subject to NPMS submission requirements.

Pipeline system: All parts of a natural gas transmission line or hazardous liquid line through which gas or hazardous liquid is transported. Full technical definitions can be found in 49 CFR §§ [191.3](#) and [195.2](#). By definition, only one firm can operate a pipeline system. Operators should assign unique and consistent names to each of their pipeline systems. A pipeline system may have an unlimited number of branches. Each pipeline system must be represented by one or more pipeline segments.

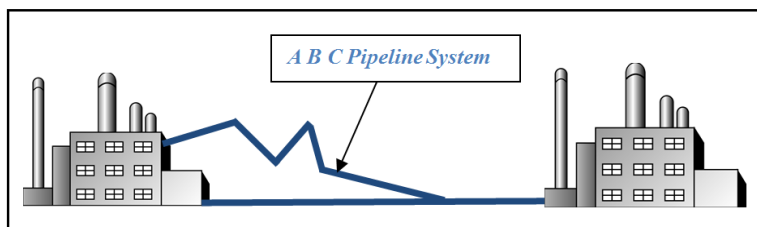


Figure 2-2. Sample of annotated pipelines system

Pipeline segment: A linear feature representing part or all of a pipeline system. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. The number of pipeline segments should be kept to the minimum needed to represent a pipeline system and its associated attributes. A unique line segment in the computer-aided drafting (CAD) or GIS dataset should represent each pipeline segment.

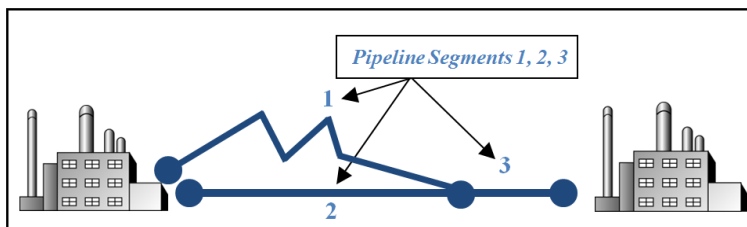


Figure 2-3. A pipeline system consisting of three pipeline segments

A pipeline system should be broken into multiple pipeline segments for only two reasons:

1. To represent a branch or intersection with another pipeline segment, or
2. To allow for a change of associated attributes such as diameter.

Pipeline intersection: A point where a physical connection between two pipelines occurs. A commodity from one pipeline can flow into another pipeline(s), either through a branch within a pipeline system or a connection between two pipeline systems. When submitting digital geospatial data, line segments in the CAD or GIS data set should be broken at the point of intersection. The intersection will be a common endpoint (node) representing the two pipeline segments.

Pipeline crossing: A point where two or more pipelines cross, but where there is no physical connection between the pipelines. Pipeline segments should not be broken at pipeline crossings.

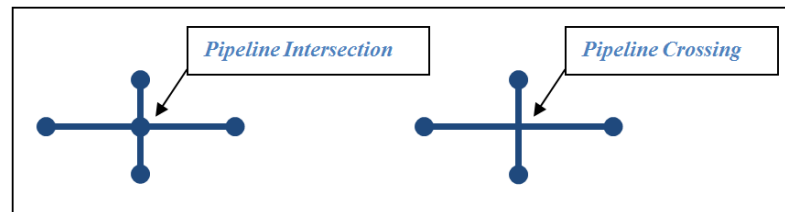


Figure 2-4. Sample annotation of pipeline intersection and pipeline crossing

Pipeline corridor: A pipeline corridor is a linear area where two or more pipelines (either part of the same or different pipeline systems) are closely grouped in a single right-of-way. Each line in a pipeline corridor must be represented as a separate segment including its unique attributes.

2.2 Types of NPMS Submissions

Operators must classify submissions according to one of the following types. The various types of submissions are intended to facilitate maintenance of the NPMS and minimize the effort required by operators. OSAVE is the method pipeline, LNG plant, and breakout tank data submissions are conveyed to NPMS staff. The OSAVE workflow eliminates the need for the type of submission to be identified in a separate cover/transmittal letter. Instead, operators use submission tools specific to pipelines, LNG plants or breakout tanks, and select the type of submission as part of the NPMS submission workflow.

INI – Initial Submissions to the NPMS contain data for a first-time submittal for a given OPID. If data has ever been submitted under your OPID in the past, then you cannot make an Initial Submission under that OPID again. The revision codes (REVIS_CD) of all pipeline segments, LNG plants, or breakout tanks should be set to **“C”** for addition due to new construction; **“J”** for addition due to an asset that is new to the NPMS reporting requirement (e.g., upgraded from gas gathering to gas transmissions, new to Part 195 reporting requirement); **“E”** for addition to correct an error in not submitting previously; or **“Q”** for addition due to an acquisition/transfer from another operator/OPID.

FRP – Full Replacement Submissions should be made whenever it is necessary to apply changes to your data. A full replacement must include all data for your OPID as you want it to appear online after processing because it will replace all previously submitted data. **Abandoned pipeline, LNG plant, and breakout tank facilities should not be included in this resubmission IF they were previously reported to the NPMS as abandoned (e.g., abandoned prior to this reporting year). If you are unsure which abandoned pipelines your company previously submitted you can review them in OSAVE on the Data Reviewer Map (Review Current Data option on General Homepage). You can also contact NPMS staff at npms@dot.gov with further questions about your abandoned pipelines, or about your previously abandoned LNG plant or breakout tank facilities. Read more about abandoned facilities in Section 7.* The revision codes (REVIS_CD) for pipeline segments, LNG plants, or breakout tanks may be **“C”** for addition due to new construction; **“J”** for addition due to an asset that is new to the NPMS reporting requirement (e.g., upgraded from gas gathering to gas transmissions, new to Part 195 reporting requirement); **“E”** for addition to correct an error in not submitting previously; or **“Q”** for addition due to an acquisition/transfer from another operator/OPID; **“B”** for both spatial and/or attribute modification; or **“N”** for no change (e.g., nothing about the operation of the asset or the data representing the asset has changed – the spatial and attribute components are an exact match).

RMV – Removal Notifications are only accepted when all of the data under your OPID needs to be removed from the NPMS for one of the following reasons:

1. All pipeline/LNG plant/breakout tank facilities were sold/divested to another OPID/operator and are no longer operated under the current OPID (includes a change in operatorship).
2. All pipelines are no longer classified as gas transmission (reclassified to gas gathering or distribution) or hazardous liquid pipelines are no longer subject to Part 195 Subpart B reporting requirements.
3. All pipeline/LNG plant/breakout tank facilities were physically removed from the ground (does not include pipeline facilities that are abandoned in place); or
4. All pipeline/LNG plant/breakout tank facilities were permanently abandoned in place. (Abandoned facilities are not removed from the NPMS because they are a required submission component. Rather, NPMS staff

will convert all pipelines, plants or tanks associated with your OPID into a permanently abandoned status, which disassociates them from your company in the OPID and OPERATOR NAME fields).

For the Removal of all pipelines, LNG plants or breakout tanks previously submitted to the NPMS under your OPID, you should submit a Request for Removal of OPID via the OSAVE tool. The OSAVE workflow eliminates the need for a pipeline removal request to be submitted using the cover/transmittal letter as required in the past. Instead, the type of data removal, reason for the data removal, and effective date of the data removal are incorporated into the submission workflow as a series of questions. Additionally, if the pipelines, LNG plants or breakout tanks were sold, the transaction date, company name, contact name, and phone number where NPMS staff can reach the new operator to verify the sale are also incorporated into the submission workflow as a series of questions. Send an email to Maya.Shaprio@dot.gov if your company is closing and will no longer exist to be able to submit the Removal Notification during the applicable submission year. Maya can assist with collecting an early Removal Notification.

If any of the Removal Notification scenarios describe only some of the pipelines, LNG plants or breakout tanks previously submitted to the NPMS under your OPID, the type of submission needed will depend on the type of changes and how your data was previously submitted to the NPMS. If the only changes to your OPID are the removal of a subset of entire pipeline segments, LNG plants or breakout tanks due to any of the scenarios described above, you may submit edits via the OSAVE map viewer in place of a traditional pipeline data submission. However, if the changes to your OPID are a removal of partial pipeline segments (i.e., requires a spatial change to the previously submitted pipeline segment), a full replacement data submission is required.

NC – Notification of No Changes are only accepted when all of the pipeline, LNG plant, or breakout tank data previously submitted to the NPMS under your OPID is accurate and no reportable operational changes occurred during the reporting year. In other words, the pipeline, LNG plant or breakout tank data previously submitted to the NPMS under your OPID still accurately reflects the spatial location and attribute values as of December 31 of the previous year. This notification fulfills the annual NPMS submission requirement. NPMS staff will update dates, revision code values and compliance records accordingly.

2.3 Cover/Transmittal Letter Requirement

The OSAVE workflow collects all cover/transmittal letter content through a series of onscreen questions.

For your awareness, cover/transmittal letter templates are included in Appendix C for pipeline, LNG plant, and breakout tank submissions. If you do not use OSAVE for submission activities, you must include a completed copy of the appropriate cover/transmittal letter template as a separate file with your NPMS submission. This content of the cover/transmittal letter is meant to provide NPMS staff with key information for processing your submission and is different for pipeline, LNG plant, and breakout tank submissions.

3. Attribute Data

Operators are required to provide descriptive information about the pipelines, LNG plants, and breakout tanks when submitting data to the NPMS. The attribute data is essential information about each pipeline segment, LNG plant, or breakout tank, such as its name and commodity transported or stored. View detailed attribute standards in Appendix A.

3.1 Required and Optional Attributes

Each pipeline segment, LNG plant, or breakout tank submitted must be accompanied by a corresponding record in the attribute database table. For information about required and optional attributes, refer to Appendix A.

3.2 Rules for Attribute Data Input

When submitting digital attribute information, adhere to the following rules:

1. Adhere to standards in Appendix A.
2. Use only UPPERCASE when defining field names.
3. Use only UPPERCASE when inputting data into the attribute tables.
4. Omit all punctuation except for periods (.), spaces (), backslashes (\), colons (:), commas (,), hyphens (-), and underscores (_). Semicolons (;) should be used only as a delimiter when submitting attribute data in ASCII-delimited text files.
5. Use only NPMS-specified abbreviations.
6. Select the correct attribute value or code to represent the pipeline segment, LNG plant, or breakout tank. For example, the revision code must reflect the correct revision type. Read more about selecting the correct data revision code below.
7. Be consistent. Names and terms should be exactly replicated throughout a submission. For example, if a pipeline system is named Pennsylvania Line (SYS_NM = "PENNSYLVANIA LINE"), the operator should consistently use the full and exact name. The operator should not use alternative names like "Penn Line" or "PA Line" or "Pennsylvania."
8. Use the correct OPID. OPID is an accounting number assigned by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration to firms that operate pipelines, LNG plants, or breakout tanks. In accordance with 49 CFR 191.22(d) and 49 CFR 195.64(d), you must use the same OPID number to describe a pipeline, LNG plant, or breakout tank asset in both the annual report and NPMS submission. If you do not know your company's OPID number, check with your company's accounting department or you can look up OPIDs based on company names through this [PHMSA Pipeline Data Mart tool](#) available from the [Pipeline Operator](#) page on the NPMS website.

3.3 Types of Data Revisions (Revision Codes)

Pipeline, LNG plant, and Breakout tank Revisions:

The type of revision must be specified for each pipeline segment, LNG plant, or breakout tank. The revision type (or field name REVIS_CD), which is indicated with a code, describes the changes that have occurred to that segment, plant, or tank since the last NPMS submission. It is likely that one code will not describe the entire submission properly; therefore, attribute each pipeline segment, plant, or tank with the correct code. To remove a pipeline segment, LNG plant, or breakout tank previously submitted for your OPID, do not include it in your new submission and explain the

reason for removal during the OSAVE workflow or on the cover/transmittal letter. A thorough explanation of each data revision code for pipelines, LNG plants, and breakout tanks is below:

C - Addition due to construction. Use this revision code when the pipeline segment is new construction that adds mileage or is considered a re-route and, therefore, has never been included in the NPMS under any OPID. This code also applies to new construction that adds a new LNG plant or breakout tank to the NPMS. For example, this pipeline segment is a new lateral laid into the ground in time for this year's submission. NPMS staff will add this new segment or point feature to your OPID's data in the NPMS. Note that repairs, such as a portion of an existing pipeline that is being replaced with a new section of pipe in the same ditch (not a re-route, often called "in situ"), are not new construction in the NPMS. Repairs should be categorized as revision code "B" if any of the required attributes will change or if the repair results in a spatial change, or "N" if none of the required attributes or the spatial characteristics has changed.

J - Addition due to mileage that is newly subject to the NPMS submission requirements. Use this revision code when a change to the pipeline segment, LNG plant, breakout tank or operation of these facilities resulted in it becoming subject to the NPMS submission requirements (49 CFR 191.29 and 49 CFR 195.61) and, therefore, was not included in the NPMS under any OPID last year. For example, your company previously operated this pipeline segment as a gas distribution line, but it was re-categorized to be a gas transmission line as of December 31 of the previous year. This data is new mileage to the NPMS this year because gas transmission is subject to the NPMS submission requirements, but gas distribution is not. NPMS staff will add this new segment or point feature to your OPID's data in the NPMS.

E – Addition due to previously omitting in error. Use this revision code when the pipeline segment, LNG plant, or breakout tank is a new addition to the NPMS because it was mistakenly left out of the last submission for this OPID. To correct this error, include the pipeline segment, LNG plant, or breakout tank with this revision code value. NPMS staff will add the new segment or point feature to your OPID's data in the NPMS. It is important that the NPMS does not mistreat these segments as new construction, acquisitions or changes in jurisdiction or contact you in search of the matching segment from last year's submission. This revision code helps NPMS staff properly and efficiently handle the correction and does not trigger any retroactive compliance effort.

Q – Addition due to an acquisition/transfer. Use this revision code when the pipeline segment, LNG plant, or breakout tank is a new addition to the NPMS for this OPID due to an acquisition or change in operatorship (transfer from one OPID to another). NPMS staff will add the new segment or point feature to your OPID's data in the NPMS and create an historic connection to the previous OPID.

B - Modification to a previously submitted feature. Use this revision code when either an attribute change, a spatial change, or both types of changes have occurred to this pipeline, LNG plant, or breakout tank since the previous submission. For example, this pipeline segment has a more accurate location, this breakout tank no longer stores a commodity, or this LNG plant has a more accurate location and new LNG Plant ID. NPMS staff will find the equivalent segment from your previous submission and replace it with this segment. Prior to 2027, the NPMS would differentiate between spatial changes, attribute changes, or both, but we determined the separation had no significant value to the accuracy of the NPMS. Only collecting one Modification code is intended to simplify the process of defining Revision Codes in your NPMS submission.

N - No change to the existing NPMS feature. Use this revision code only when there have been no changes to the spatial location, segmentation, or attributes of this pipeline segment, LNG plant, or breakout tank since the previous submission. There is no need for NPMS staff to change this segment, plant, or tank, but the attributes in the NPMS that will change reflect that this segment is up to date and has not changed since the previous year. It is necessary to include these lines in your Full Replacement submission (refer to Section 2.2 for additional details on the types of submissions) even though no changes have occurred. Any segment or point previously submitted for your OPID that is not included in your NPMS submission is treated as a deletion.

3.4 Required Diameter Values as NPS

The Diameter is reported in Nominal Pipe Size (NPS). Nominal pipe size of the pipeline segment identifies the diameter with a dimensionless value, (e.g., 8.625" outside diameter pipe is reported as NPS 8, 5" outside diameter pipe is NPS 4.5). Decimals are only accepted when less than NPS 5. The NPMS data templates reflect all acceptable NPS values. If you operate a pipeline with a different NPS value please send the NPS value standards in an email to npms@dot.gov so we can provide guidance or determine that we should add an additional NPS value to our system. See Figure 3-1 for a list of acceptable Diameter (NPS) values required for pipelines in the NPMS.

DIAMETER (NPS values accepted in NPMS submittal)	NPS Value Descrip.	Outer Diameter (in)	Annual Report Attribute Group
0.125	1/8	0.405	4 or less
0.25	1/4	0.54	4 or less
0.375	3/8	0.675	4 or less
0.5	1/2	0.84	4 or less
0.75	3/4	1.05	4 or less
1	1	1.315	4 or less
1.25	1 1/4	1.66	4 or less
1.5	1 1/2	1.9	4 or less
2	2	2.375	4 or less
2.5	2 1/2	2.875	4 or less
3	3	3.5	4 or less
3.5	3 1/2	4	4 or less
4	4	4.5	4 or less
4.5	4 1/2	5	
5	5	5.563	
6	6	6.625	6
7	7	7.625	
8	8	8.625	8
9	9	9.625	
10	10	10.75	10
12	12	12.75	12
14	14	14	14
16	16	16	16
18	18	18	18

DIAMETER (NPS values accepted in NPMS submittal)	NPS Value Descrip.	Outer Diameter (in)	Annual Report Attribute Group
20	20	20	20
22	22	22	22
24	24	24	24
26	26	26	26
28	28	28	28
30	30	30	30
32	32	32	32
34	34	34	34
36	36	36	36
38	38	38	38
40	40	40	40
42	42	42	42
44	44	44	44
46	46	46	46
48	48	48	48
52	52	52	52
54	54	54	54
56	56	56	56
58	58	58	58
60	60	60	58 and over
64	64	64	58 and over
68	68	68	58 and over
72	72	72	58 and over

Figure 3-1: Required Diameter Values Accepted in the NPMS

3.5 Building the Attribute Data File

Attribute data may be provided in one of the following formats: common GIS export, DBASE (.dbf) format, Microsoft Excel (.xlsx) format, or American Standard Code for Information Interchange (ASCII) text file. In all cases, operators should be careful to follow the field name, field type, and field length standards listed in Appendix A.

The Pipeline and Hazardous Materials Safety Administration has developed blank pipeline, LNG plant, and breakout tank attribute templates to be used by operators that do not have the ability to incorporate the NPMS attributes directly into their spatial data (e.g., GPS coordinates captured in an ASCII text file). The attribute templates have been created in Microsoft Excel (.xlsx) format and may be downloaded from the NPMS website.

- **Common GIS export format:** Operators using GIS systems can package attribute data with the associated geospatial data. Acceptable GIS formats are discussed in Section 4.1, General Requirements for Digital Geospatial Data. For your convenience, NPMS staff developed a template ESRI shapefile and file geodatabase containing attributes that meet the NPMS requirements. If you wish to utilize these templates, you may download a zipped file containing the shapefile and geodatabase for [pipelines](#), [LNG plants](#), or [breakout tanks](#) from the relevant Summary of Required Components page within the [Pipeline Operator](#) page on the NPMS website. Please note that the defined projection for these templates is Geographic Latitude/Longitude, NAD83, Decimal Degrees, if your data is projected in a different way, please re-project as necessary before adding data.
- **Microsoft Excel (.xlsx):** Operators can use the [pipeline](#), [LNG plant](#), or [breakout tank](#) attribute template to create a properly formatted .xlsx file for submission. Each is available for download from the relevant Summary of Required Components page within the [Pipeline Operator](#) page on the NPMS website.
- **ASCII format:** The file should be a comma-delimited text file.

Uploading pipeline, LNG plant, or breakout tank submissions via the OSAVE workflow allows for the upload of the geospatial and the attribute data file(s), along with any supporting documentation that the pipeline operator would like to include.

To accommodate a range of capabilities, the NPMS accepts the geospatial and attribute data for pipelines, LNG plants, and breakout tanks in several different combinations. Please refer to Section 4 of the [NPMS Operator Submission Supplemental Instructions](#) to learn more about the combinations.

Additionally, for operators submitting separate geospatial and attribute components for their pipeline, LNG plants, or breakout tanks, a unique OPER_LINK value must be included on each feature in the geospatial data file and its corresponding record in the attribute file. Please refer to Section 5 of the [NPMS Operator Submission Supplemental Instructions](#), which provides a detailed explanation along with examples and scenarios on how this should be completed.

4. Geospatial Data

Geospatial data represent pipeline (linear), LNG plant (point), or breakout tank (point) elements (collectively referred to as pipeline facilities). Geospatial pipeline facility data must be submitted in digital format. All submissions must meet the ± 100 or 50-foot accuracy standards. Section 4.3 below describes the geospatial accuracy requirements in detail.

4.1 General Requirements for Digital Geospatial Data

The following discusses various requirements and formats for submitting digital geospatial data.

1. Use a real-world coordinate system such as those based on North American Datum (NAD) 1983. NPMS staff accept un-projected data in decimal degrees and data that employ a common projection scheme such as Universal Transverse Mercator (UTM) or State Plane. Projected data may employ either English (feet) or metric (meters) measurement units. For pipeline and breakout tank data submissions, the OSAVE workflow will gather information about **the datum, coordinate system/projection, and measurement units** from the operator as part of the submission process.
Please note that as part of the processing of the NPMS submission, NPMS staff will re-project data to Geographic, NAD83, Latitude Longitude, Decimal Degrees, if necessary, before it is incorporated into the NPMS national layer.
2. Always submit pipelines (lines), LNG plants (points), and breakout tanks (points) in separate files.
3. Submit only qualifying pipeline, LNG plant, and breakout tank data. The submitted digital file should contain only pipeline segments representing gas transmission lines, hazardous liquid lines (including regulated rural hazardous liquid gathering lines), or points representing LNG plants or breakout tanks. **The submission data should not contain any other types of data such as non-regulated gathering lines; small, intricate piping or devices such as spur lines, valves, blow offs, stubs, launchers, or receivers; or facility, plant, or station piping (potentially associated with a 'site' within the PODS data model). Also, all pipeline segments shorter than .00005 miles should be omitted regardless of their location.**

These small, intricate pipes and instrumentation are not compatible with the goal of the NPMS and should be omitted from NPMS submittals. However, it is not considered an error to include a section of a pipe that crosses the fence line into a plant, station, or facility. We understand omitting small, intricate pipeline instrumentation and plant, station, or facility data may result in certain operators omitting small segments from an NPMS submittal that are included on the annual report; NPMS staff mitigate this circumstance by accepting up to a 5% mileage discrepancy between the reporting methods. **PHMSA expects operators to use their best judgement considering pipeline safety benefits and consistency in NPMS reporting when applying this instruction, and for operators to indicate such decisions in their OSAVE notes to help NPMS analysts understand changes or omissions without the need for additional discussion.** This instruction is unique to your NPMS submission; it has no implication on your annual report or any other regulation or reporting requirement that would apply to a pipeline facility.

If these small, intricate pipes and instrumentation are the only pipeline facilities reported on the annual reports to PHMSA for your operating company, you may choose to submit an **omitted pipe submission notification** via

email to npms@dot.gov in lieu of an NPMS submission. This notification is required each year this scenario occurs and should include the following:

- a. Summarize the annual report mileage by state, interstate status and pipeline type.
- b. Include a statement that confirms (a) all these pipelines are intricate instrumentation or facility pipe, and (b) the operator chooses to omit these lines from the NPMS per the guidance in Section 4.1 of the operator standards.

An operator with only intricate instrumentation or facility piping on their gas transmission or hazardous liquid annual report to PHMSA is not in compliance with the NPMS submission requirement until they choose to complete the NPMS submission or properly notify the NPMS of their choice to omit these pipelines. NPMS staff may request GIS data or a map to help verify that the omitted pipe complies with the guidance in Section 4.1 of the Operator Standards.

4. Curves should be represented by a pipeline segment with as many vertices/shape points as is required to provide the appropriate cartographic appearance.
5. **Abandonment of pipeline facilities is permanent.** Do not resubmit pipeline facilities your company previously submitted to the NPMS as abandoned. Read more about abandoned facilities in the NPMS and additional certification requirements in Section 7.
6. Review data for quality. Common problems include:
 - a. Missing points or lines where a pipeline, LNG plant or breakout tank was operated during the reporting year.
 - b. Duplicate points and lines.
 - c. Including in-plant pipeline, intricate facility or station piping, instrumentation, blow offs or pipeline devices.
 - d. Stray points and lines that do not represent a pipeline, LNG plants, or breakout tanks, often left from deleting non-NPMS data.
 - e. Overshoots and undershoots at pipeline intersections.
 - f. Not segmenting a pipe as necessary to reflect the correct Revision Code.

4.2 Suitable Geospatial Data Formats

Operators may submit data to the NPMS using any of the following suitable formats:

- Shapefile Format Data Submission
- Esri File Geodatabase Format Data Submission
- Coordinate Data Submission

If opting to submit a Coordinate data submission please refer to the [NPMS Operator Submission Supplemental Instructions](#) for further information.

4.3 Geospatial Accuracy Requirements

Information Collection 2137-0596 requires that hazardous liquid pipeline operators submit data with a positional accuracy within +/- 50. Gas transmission operators must also submit data within a +/- 50-foot accuracy for all segments that meet one or more of the following criteria:

- In a Class 2, Class 3, or Class 4 area;
- Within an HCA or MCA;
- Required to be assessed under 49 CFR 192.710; or
- Has one or more buildings intended for human occupancy or an identified site within its potential impact radius.

All other gas transmission pipeline segments, abandonments, LNG plants, and breakout tanks must be mapped to a positional accuracy within +/- 100 feet.

5. Operator Contact Information

All operators must designate contacts as part of their annual NPMS submission requirement. For pipelines and breakout tanks there are three contacts – primary, technical, and public – associated with each submission per OPID. For LNG plants there are only primary and technical contacts. If you're preparing more than one submission type for the same OPID, you will be required to submit the required contacts for each submission type (e.g., a pipeline submission and an LNG plant submission for the same OPID).

In addition to the annual submission or notification workflows in OSAVE, operators can update contact information at any time throughout the year (Section 5.2 includes an overview of that process). In OSAVE, both approaches allow you to view the current contact information and change only the information that needs to be updated.

5.1 Types of NPMS Submission OPID Contacts

➤ Primary Contact Person:

- The primary contact is required for all pipeline, LNG plant, and breakout tank submissions for your OPID and must be an employee of the operating company.
- This contact is used by NPMS staff for questions about the OPID and its pipelines, LNG plants, or breakout tanks.
- This contact also receives general notifications from PHMSA that relate to the NPMS, such as updates to the NPMS Operator Standards, High Consequence Area data layers or the NPMS submission deadline dates.
- This contact will be included in all NPMS regulation compliance communications from PHMSA.

➤ Technical Contact Person:

- The technical contact is required for all pipeline, LNG plant, and breakout tank submissions for your OPID.
- This contact is the person who compiled the NPMS submission or would be the best person to answer questions from NPMS staff or provide corrections to the NPMS submission.
- This contact may be an employee of the operating company or a contractor/consultant if they are responsible for submitting, correcting, and responding to questions about the NPMS submission.
- The same person may fulfill the role of both the primary and technical contact. In OSAVE, the operator may indicate that the technical contact is the same as the primary contact. For pipeline, LNG plant, breakout tank data submissions not sent with OSAVE, the cover letter should clearly state that the same person fulfills both roles.
- This contact is used by NPMS staff for questions about or corrections necessary to the NPMS submission.
- This contact may also receive communications sent to the primary contact.

➤ Public Contact Person:

- The public contact is required for all pipeline and breakout tank submissions for your OPID and must be an employee of the operating company.

- This contact is posted on the NPMS website, specifically, the [Find Who's Operating Pipelines in Your Area](#) tool, [PIMMA](#), and the [Public Viewer](#), and is expected to receive communications from the general public, emergency responders as well as local, state, and federal government staff.
- The public contact that is chosen to be responsible for handling public questions about their pipelines or tanks may be either an individual (example: "Joe Smith") or an entity (example: "Public Relations Department"). **One or the other of these options must be selected; not both.**
- There may be multiple public contacts based on geography or operating units within the company; however, **operators with this scenario (i.e., having more than one public contact) must contact NPMS staff before submitting this information via the OSAVE workflow.**

For pipeline, LNG plant, and breakout tank submissions the following information is captured for each contact:

- Full name
- Job title
- Entity (pipelines and breakout tanks public contact only; in lieu of an individual)
- Company employed by
- Work mailing address
- Work phone number and, if applicable, extension
- Work email address
- Public Awareness Website URL (pipelines and breakout tanks public contact only)

5.2 Submitting NPMS Pipeline, LNG Plant, and Breakout Tank Submission OPID Contact Information via OSAVE

Most of the information is self-explanatory. Figure 5-1 illustrates how to review and update contact information separately from the annual pipeline and breakout tank NPMS submission process. Figure 5-2 reflects how the screen appears when submitting/reviewing/updating contact information either during or separate from the pipeline and breakout tank annual submission process. Similarly, Figure 5-3 illustrates how to review and update contact information separately from the annual LNG plant submission process, but Figure 5-4 reflects how the screen appears when submitting/review/updating contact information either during or separate from the LNG plant annual submission processes.

Please note that you will need to go through each tab on the OSAVE contact information interface before clicking the Submit button. Under the Technical Contact tab, you will need to select “Same as Primary Contact” if the role of the technical contact is fulfilled by the primary contact. For pipelines and breakout tanks, under the Public Contact tab, you will need to decide whether you are designating an individual or an entity. If you choose an individual, fill in the individual’s first name, last name, and job title. If you choose an entity, fill in the “Contact Entity” field. When finished reviewing/updating all three Contact tabs, click on the Submit button.

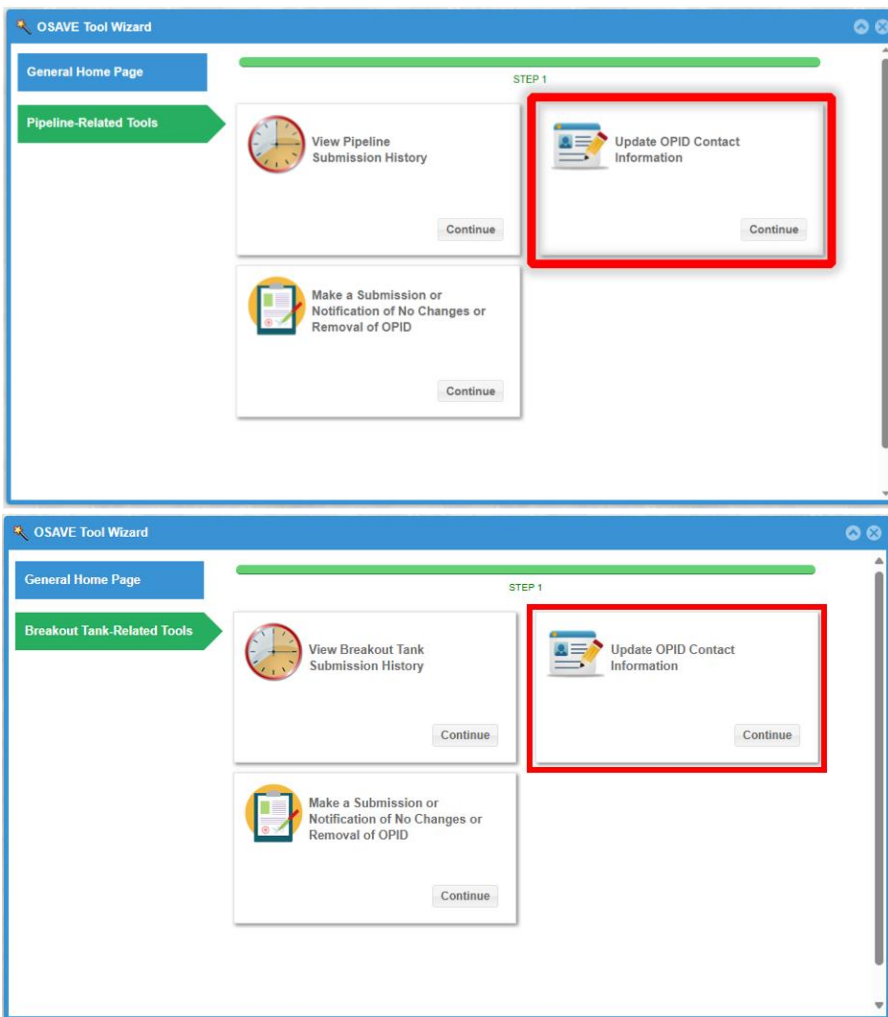


Figure 5-1. Update OPID Contact Information in OSAVE Tool Wizard.

Contact Info

Primary Contact

Technical Contact

Public Contact

Name:

Job Title:

Company:

Mailing Address 1:

Mailing Address 2:

City: State: ZIP Code:

Phone: () - Ext.

Email:

Cancel

Submit

Tab 1: Primary Contact Form

Tab 2: Technical Contact Form

Tab 3: Public Contact Form

Figure 5-2. Contact Information: Primary, Technical, and Public Contact Form.

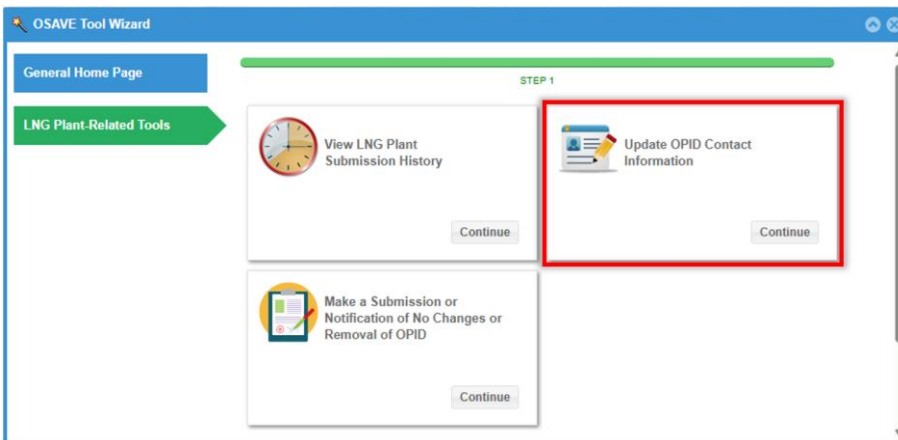


Figure 5-3. Update OPID Contact Information in OSAVE Tool Wizard.

The screenshot shows the 'Contact Info' form. It has two tabs: 'Primary Contact' and 'Technical Contact'. The 'Primary Contact' tab is active. The form contains the following fields: Name (First and Last), Job Title, Company, Mailing Address 1, Mailing Address 2, City, State (dropdown), ZIP Code, Phone (Area, Prefix, Suffix, and Extension), and Email. There are 'Cancel' and 'Submit' buttons at the bottom right.

Tab 1: Primary Contact Form

Tab 2: Technical Contact Form

Figure 5-4. Update OPID Contact Information in OSAVE Tool Wizard.

6. Metadata

Metadata is textual information that describes your NPMS data submission, particularly the geospatial data component. It describes the content, quality, condition, and other characteristics of this data submission. It provides additional background information such as descriptions and points of contact.

Using OSAVE eliminates the need for a separate metadata file within a data package. Instead, the metadata-related questions are incorporated into the submission workflow as a series of questions.

6.1 Background

Metadata was developed to help “insure an organization’s investment in data. As personnel change or time passes, information may be lost and the data may lose their value.”¹ Where metadata is not collected, future staff may not trust the data due to its unknown quality. Metadata also provides information necessary for data transfer. It allows the receiver to process, interpret, and incorporate the data properly with another data set.

Executive Order 12906 requires that each federal agency use the Federal Geographic Data Committee (FGDC) Metadata Standard, “Content Standards for Digital Geospatial Metadata,” to document digital geospatial data that they produce. The FGDC is an interagency committee that promotes the coordinated use, sharing, and dissemination of geospatial data on a national basis. PHMSA must produce metadata compliant with the FGDC Metadata Standard.

The *FGDC Metadata Standard for Digital Geospatial Metadata* provides a standard format, specifies the requirements for data collection, and establishes a common set of terminology and definitions. The standard is somewhat complex and is composed of mandatory, mandatory if applicable, and optional Sections. PHMSA is collecting only mandatory information or information that is critical to clear understanding of the operator submittal.

¹ Content Standards for *Digital Geospatial Metadata Workbook*, Version 1.0, March 24, 1995.

7. Abandoned Pipeline Facilities

Information Collection 2137-0596 also requires that all pipeline facilities previously subject to NPMS submission regulations and abandoned during or after 2023, be submitted as part of an operator's annual NPMS submission. Many attributes are not collected for abandoned lines, and you report them using the Status Code "PA" (see Appendix A).

For the NPMS, abandoned pipelines are only those permanently abandoned in place in accordance with the PHMSA definition of abandoned and the 2016 Advisory Bulletin titled [Clarification of Terms Relating to Pipeline Operational Status](#). Abandoned does not include decommissioned facilities or any facilities that may be used again in the future, facilities physically removed from the ground, or removal of assets through divestitures or changes in operatorship.

Because abandonment is permanent, operators must only submit abandoned facilities once during the reporting year when the abandonment was completed. In other words, once a pipeline facility is officially abandoned in the NPMS, do not include it in future NPMS submissions. For example, an operator completed operations to permanently abandon a gas transmission pipeline in place on 12/31/2026; they will submit that line to the NPMS one last time in their CY26 NPMS submission due in 2027 with Status Code "PA", and they will exclude that line in every future submission starting with the CY27 submission due in 2028.

While you submit abandoned facilities under your OPID and Operator Name as the last known operator, NPMS staff will convert them to an abandoned status. This includes an OPID placeholder value = 99999, but last known operator and contact information will be available for NPMS users. Anytime you submit a pipeline facility that matches a previously abandoned pipeline, NPMS staff will put the submission on hold and contact you for corrections.

If you are unsure which pipelines your company previously reported to the NPMS as abandoned you can review them in OSAVE on the Data Reviewer Map (Review Current Data option on the General Homepage, abandoned gas transmission and abandoned hazardous liquid pipelines are visible in separate layers from your active pipelines). You can also contact NPMS staff at npms@dot.gov with further questions about your abandoned pipelines, LNG plants or breakout tanks, or to request a GIS data export of your company's previously abandoned facilities.

Additionally, according to 49 CFR 195.59 (a) and 49 CFR 192.727 (g) Abandonment or Deactivation of Facilities: "For each abandoned offshore pipeline facility or each abandoned onshore pipeline facility that crosses over, under or through a commercially navigable waterway, the operator of that facility must file a report upon abandonment of that facility." In addition to the NPMS-required attributes, operators must submit a letter that contains the date of abandonment, diameter, method of abandonment, and certification that, to the best of the operator's knowledge, all of the reasonable available information requested was provided and, to the best of the operator's knowledge, the abandonment was completed in accordance with applicable laws. **A template to assist operators in providing this information is available in Appendix B of this document;** additionally, a MS Word version of the template is available for download in the [Overview of the Pipeline Submission Process](#) page on the NPMS website.

8. Upload or Complete your NPMS Submission through OSAVE

The Operator Submission And Validation Environment (OSAVE) tool is a one-stop shop for operators to complete all NPMS submission-related tasks:

- Review the pipeline data currently in the NPMS national layer for the OPID via a web map viewer,
 - Note: The OSAVE Data Summary tools only reflect the pipelines in the NPMS national layer for that OPID.
- View and print receipts for the NPMS pipeline, LNG plant or breakout tank submission history for the OPID,
- Review and update contact information for a pipeline or breakout tank submission OPID's primary, technical, and public contacts,
- Review and update contact information for an LNG plant submission OPID's primary and technical contacts,
- Run an automated QC Validation on pipeline, LNG plant or breakout tank data submissions (pre-validate your data files to identify and resolve attribute requirement errors before uploading your submission to NPMS staff),
- Submit pipeline, LNG plant or breakout tank data intended to fully replace existing feature(s) in the NPMS national layer for the OPID (traditional data submission),
- In lieu of a traditional data submission when applicable:
 - Submit a notification of no changes for pipelines, LNG plants or breakout tanks,
 - Mark desired attribute edits and spatial deletions for the OPID's pipelines, LNG plants or breakout tanks via a web map viewer,
 - Submit pipeline, LNG plant or breakout tank data to be added to existing data in the NPMS national layer for the OPID,
 - Request that all pipelines in the NPMS national layer for the OPID be removed.

For all data submissions, OSAVE eliminates the need for the operator to create separate cover/transmittal letter and metadata components; this information, including a review of all required contact information, is gathered from the operator in a series of questions as part of the various submission workflows. Detailed information and step-by-step instructions on the different submission workflows within the OSAVE tool can be found in the [OSAVE User Guide](#) and the [NPMS Operator Submission Supplemental Instructions](#).

[OSAVE](#) is accessible from the internet at <https://www.npms.phmsa.dot.gov/OSAVE/> and requires an NPMS account to log in. If you do not have an NPMS account, please complete the [online application](#) on the NPMS website. Contact NPMS staff at npms@dot.gov if you need to add additional OPIDs associated with your company to your existing NPMS account.

Sharing of NPMS accounts between individuals is expressly prohibited by multifactor authentication (MFA) protocols and in the NPMS Access Policy. A contractor (e.g., consultant, subcontractor) cannot request an NPMS account. However, if you have a contractor working on the NPMS data submission on your behalf, and you have an active NPMS account, you may opt to sponsor an NPMS contractor account. To sponsor access for your contractor you must have a confidentiality agreement in place that limits the contractor's use of information or access you provide to them for the purposes of the contract and does not allow them to redistribute the information or access you provide to them. NPMS contractor accounts can access the same NPMS data and functionality in OSAVE as the operator account holder (NPMS Sponsor). The NPMS Sponsor accepts responsibility for the contractor's usage in accordance with the NPMS Access

Policy. At the end of the contracted period, the NPMS Sponsor must terminate the contractor's access to the NPMS. An active pipeline operator NPMS account holder can read about the NPMS Sponsor process and requirements and submit a request from the [NPMS Sponsor Request](#) page.

The OSAVE map viewer is updated approximately every two to three months with newly processed NPMS data. If your submission data was recently incorporated into the NPMS national layer but is not yet viewable on the map viewer, please contact NPMS staff for information regarding the potential "live" date.

For additional information regarding the Operator Submission And Validation Environment (OSAVE), please refer to the [OSAVE User Guide](#), the [NPMS Operator Submission Supplemental Instructions](#), and the [About OSAVE page](#) from the [NPMS website](#).

Appendix A.1: Pipeline Attribute Table

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (<i>Gas, Liquid, Both or otherwise as indicated</i>)	Public Viewer Attribute ¹
OPER_LINK	Character	20	Unique Link ID	Link between the geospatial elements (pipeline segments) and their respective attribute records. Assigned by the operator or the operator's software package (i.e., COVER-ID, MSLINK_ID, etc.). Note: the OPER_LINK and the PLINE_ID may be identical. Once processing is complete, the OPER_LINK value will be removed from the data by NPMS staff as it will no longer be needed.	Character	Both – If your attributes are not included in the geospatial file; refer to Section 3.5	Not Public
OPID	Integer	5	Operator ID Number	Unique tracking number assigned by PHMSA to the company that physically operates the pipeline system. If you do not know your company's OPID, check with your DOT/Regulatory Compliance department or the NPMS website. Always use the same OPID for all PHMSA reporting requirements that apply to the pipeline segment. For example, if you use OPID 100 for this pipeline segment in the NPMS, you must use OPID 100 for this pipeline segment on the Annual Report to PHMSA.	Positive Integer	Both	Public
OPER_NM	Character	100	Operator Name	The name of the company that physically operates the pipeline system. This is the company name associated with this OPID Number in PHMSA records.	Character	Both	Public
SYS_NM	Character	40	Pipeline System Name	Assigned by the operator. The operator's name for a functional grouping of pipelines.	Character	Both	Public
SUBSYS_NM	Character	40	Pipeline Sub-System Name	Assigned by the operator. A unique name for a smaller sub-section of a pipeline system. A subset of Pipeline System Name.	Character	Not Required	Public
PLINE_ID	Character	20	Pipeline Segment ID	Assigned by the operator. A unique identifier for a specific segment of pipeline within a pipeline system.	Character	Both	Public
DIAMETER	Double	5, 3	Diameter reported in Nominal Pipe Size (NPS)	Nominal pipe size of the pipeline segment; identifies the diameter with a dimensionless value, (e.g., 8.625" outside diameter pipe is reported as NPS 8, 5" outside diameter pipe is NPS 4.5). Decimals are only accepted when less than NPS 5. OSAVE and NPMS data templates reflect all available NPS values for pipelines expected in NPMS submittals. Send an email to npms@dot.gov if you believe you have a valid NPS value that is not included.	Positive Integer or Decimal when less than NPS 5 Refer to Section 3.4 (Figure 3-1) for the list of acceptable values.	Both	Not Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (Gas, Liquid, Both or otherwise as indicated)	Public Viewer Attribute ¹
COMMODITY	Character	3	Primary Commodity Category	Identifies the primary commodity carried by the pipeline system. Valid Liquid Commodities: CRD=crude oil, PRD=non-HVL petroleum product, AA=anhydrous ammonia, LPG=liquefied petroleum gas, NGL=natural gas liquids, OHV=other HVLs, CO2=carbon dioxide, ETH=fuel grade ethanol, and EPL=permanently abandoned pipeline segment that previously transported a liquid (only acceptable when Pipeline Status Code is reported as PB). Valid Gas Commodities: NG=natural gas, PG=propane gas, SG=synthetic gas, HG=hydrogen gas, LG=landfill gas, OTG=other gas, and EPG=permanently abandoned pipeline segment that previously transported a gas (only acceptable when Pipeline Status Code is reported as PB). Note that when propane is transported as a liquid, report the Primary Commodity Category as LPG. The PG value should only be reported when the propane is transported as a gas. Note that when the pipeline segment is permanently abandoned, the use of EPL or EPG should represent the commodity that was previously transported. For instance, a natural gas transmission line that was later filled with water during the permanent abandonment process would be coded EPG because a gas commodity was last transported. Please report if the abandoned pipeline segment is refilled with water, nitrogen, or another permanent abandonment material in the Commodity Description field. Note that EPG and EPL may only be used for permanently abandoned pipelines. Active unfilled pipelines, even if they are purged, should reflect the commodity last transported. If the pipeline is purged and refilled with a non-transported material, please report the fill material (e.g., water, nitrogen) in the Commodity Description field.	Liquid Commodities: CRD, PRD, AA, LPG, NGL, OHV, CO2, ETH, EPL Gas Commodities: NG, PG, SG, HG, LG, OTG, EPG	Both	Public
CMDTY_DTL1	Character	3	Commodity Detail 1	Identifies the primary commodity's first subcategory detail. Required for active filled pipeline segments if the primary commodity defined in the Commodity Category field is CRD, PRD, or NG. This field should be blank for pipeline segments reporting all other primary commodities. The primary commodity CRD has the following subcategories: CRW=sweet crude, CRR=sour crude. The primary commodity PRD has the following subcategories: RGS=refined non-ethanol blended gasoline, RFD=refined fuel oil, diesel, RKJ=refined kerosene, jet fuel, OTR=other, ETB=ethanol blended gasoline, BDB=biodiesel blend, OBI=other biofuels. The primary commodity NG has the following subcategories: NG1=pipeline quality or tariff quality natural gas, NG2=wet but non-sour natural gas, NG3=sour but non wet natural gas, NG4=wet, sour natural gas.	CRW, CRR, RGS, RFD, RKJ, OTR, ETB, BDB, OBI, NG1, NG2, NG3, NG4	Both – If Status Code is active filled (AF) and Primary Commodity Category is crude oil (CRD), non-HVL petroleum product (PRD) or natural gas (NG).	Not Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (<i>Gas, Liquid, Both or otherwise as indicated</i>)	Public Viewer Attribute ¹
CMDTY_DTL2	Character	3	Commodity Detail 2	Identifies the primary commodity's secondary subcategory detail if more than one applies. Refer to the Commodity Detail 1 field for additional information and valid values. If only one commodity detail applies, this field should be blank.	CRW, CRR, RGS, RFD, RKJ, OTR, ETB, BDB, OBI, NG1, NG2, NG3, NG4	Not Required	Not Public
CMDTY_DTL3	Character	3	Commodity Detail 3	Identifies the primary commodity's tertiary subcategory detail. Refer to the commodity field for additional information and valid values. If only one or two commodity details apply, this field should be blank.	CRW, CRR, RGS, RFD, RKJ, OTR, ETB, BDB, OBI, NG1, NG2, NG3, NG4	Not Required	Not Public
CMDTY_DESC	Character	40	Commodity Description	Describes additional details about the commodity carried by the pipeline segment. If a pipeline segment is permanently abandoned or purged, report if that pipeline segment was filled with water, nitrogen, or another material. For example, "PURGED WITH NITROGEN".	Character	Not Required	Public
INTERSTATE	Character	1	Interstate Yes/No	Yes / No designator to identify if the pipeline system is an interstate pipeline. Y=interstate, N=intrastate. (Use PHMSA definitions for interstate status; see NPMS Operator Standards Manual glossary).	Y, N	Both	Public
LOW_STRESS	Character	1	Low Stress Yes/No	Yes / No designator to identify if the hazardous liquid pipeline segment is a low stress pipeline. Y=low stress, N=not low stress. Required for active filled liquid pipeline segments. If the hazardous liquid pipeline operates at 20% or less of SMYS, the segment is a low stress pipeline. Field should be left blank for gas pipelines, active unfilled pipelines or permanently abandoned pipelines.	Y, N	Liquid – If Pipeline Status Code is active filled (AF)	Not Public
STATUS_CD	Character	2	Pipeline Status Code	Identifies the status of the pipeline segment as of the reporting year (i.e., December 31 of the previous year). AF=active filled (transported a commodity), AU=active unfilled (option when a pipeline segment is not permanently abandoned in place, but also did not transport a commodity), PA=permanently abandoned in place in accordance with federal regulations.	AF, AU, PA	Both	Public
QUALITY_CD	Character	1	Data Quality Code (Positional Accuracy)	Identifies the positional accuracy of the submitted data. A=less than 5 feet, B=5-25 feet, C=25.01-50 feet, D=50.01-100 feet, E=greater than 100 feet	A, B, C, D, E	Both	Not Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (<i>Gas, Liquid, Both or otherwise as indicated</i>)	Public Viewer Attribute ¹
REVIS_CD	Character	1	Revision Code	Identifies the type of revision that applies to this pipeline segment. Describes how this pipeline segment has changed compared to the previous NPMS submission for this OPID. NPMS staff rely on this attribute to support change detection and creation of spatialized pipeline history and will consider improvements to revision codes as change detection systems are designed. C=this segment is a new addition to the NPMS for this OPID this year, due to new construction that adds mileage or is a re-route (e.g., laid a new segment of pipe around a separate pipeline segment), J=this segment is a new addition to the NPMS for this OPID this year, due to mileage that is new to the NPMS reporting requirement (e.g., upgraded from gas gathering to gas transmission, new to Part 195 reporting regulations), E= this segment is a new addition to the NPMS for this OPID this year to correct an error in not submitting previously, Q= this segment is a new addition to the NPMS for this OPID this year, due to an acquisitions/transfer from another operator/OPID B=a spatial and/or attribute modification to a pipeline segment included in the previous NPMS submittal for this OPID, or N=no change to the matching pipeline segment included in the previous NPMS submittal for this OPID (e.g., nothing about the operation of this pipeline segment or the data representing this pipeline segment has changed – the spatial and attribute components are an exact match). Please read more about selecting the correct Revision Code value in the NPMS Operator Submission Supplemental Instructions. If you submit a pipeline segment with Revision Code C, J, Q or E and it appears to match a pipeline segment included in the previous NPMS submittal for this OPID, NPMS staff cannot accept and process your data submission. The same is true if you submit a pipeline segment with Revision Code N and there is no exact match for that pipeline segment in the previous NPMS submittal for this OPID.	C, J, E, Q, B, N	Both	Public
MATERIAL	Character	3	Type of Pipeline Material	Identifies the material of the pipeline segment. C=cast iron, P=plastic, S=steel, CM=composite, W=wrought iron, O=other.	C, P, S, CM, W, O	Both – If Status Code is active filled (AF) or active unfilled (AU)	Public
MATERIALO	Character	40	Other Pipeline Material Type	Describes the type of pipeline material if other (O) is selected in the Type of Pipeline Material field.	Character	Both – If Type of Pipeline Material is other (O) and Status Code is active filled (AF) or active unfilled (AU)	Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (Gas, Liquid, Both or otherwise as indicated)	Public Viewer Attribute ¹
COATED	Character	1	Coated Yes/No	Yes / No designator to identify if the pipeline segment is coated. Y=coated, N=not coated.	Y, N	Both – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
PIPE_JOIN	Character	1	Predominant Pipeline Joining Method	Identifies the actual or predominant (90% of pipeline segment) pipeline joining method for this pipeline segment. W=welded, C=coupled, S=screwed, F=flanged, P=plastic pipe joint, U=unknown, O=other.	W, C, S, F, P, U, O	Both – If Status Code is active filled (AF) or active unfilled (AU)	Public
PIPE_JOIN_O	Character	40	Other Pipeline Join Method	Describes the pipeline joining method when Predominant Pipeline Join Method is reported as other (O).	Character	Both – If Pipeline Joining Method is other (O) and Status Code is active filled (AF) or active unfilled (AU)	Public
OFFSHORE	Character	1	Offshore Yes/No	Yes / No designator to identify if the pipeline segment is offshore. Y=offshore, N=onshore per 49 CFR §191.3 and 49 CFR §195.2. Must reflect onshore/offshore designations reflected in operator's Annual Report to PHMSA.	Y, N	Both – If Status Code is active filled (AF) or active unfilled (AU)	Public
ILI_ABLE	Character	1	Inline Inspection Yes/No	Yes / No designator to identify if the pipeline is capable of accepting an inline inspection (ILI) tool with currently available technology. Y=capable, N=not capable. Per NACE Standard RP0102-2002: Inline Inspection is defined as the inspection of a pipeline from the interior of the pipe using an in-line inspection tool. Also called intelligent or smart pigging. Inline Inspection Tool is defined as a device or vehicle that uses a nondestructive testing technique to inspect the pipeline from the inside. Also known as intelligent or smart pig.	Y, N	Both – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
CLASS	Integer	1	Predominant Class Location	Actual or predominant (90% of pipeline segment) class location for a gas transmission pipeline segment (per 49 CFR § 192.5). 1=class 1, 2=class 2, 3=class 3, 4=class 4	1, 2, 3, 4	Gas – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
GAS_HCA	Character	1	Gas HCA Segment Yes/No	Yes / No designator to identify if a gas pipeline segment is in a gas HCA (High Consequence Area) per 49 CFR § 192.903. Y=in a gas HCA, N=not in a gas HCA. If a pipeline segment is in an MCA or is subject to assessment under 192.710 it cannot be in an HCA.	Y, N	Gas – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
GAS_MCA	Character	1	Gas MCA Segment Yes/No	Yes / No designator to identify if a gas pipeline segment is in a gas MCA (Moderate Consequence Area) per 49 CFR § 192.3. Y=in a gas MCA, N=not in a gas MCA. If a pipeline segment is in an HCA, it cannot be in an MCA. If a segment is in an HCA, it cannot be in an MCA.	Y, N	Gas – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
GAS_ASSESS	Character	1	Gas Assessment under 192.710 Yes/No	Yes / No designator to identify if a gas pipeline segment is subject to assessment per 49 CFR § 192.710. Y=subject to 192.710 Assessment, N=not subject to 192.710 Assessment. If a pipeline segment is in an HCA, it cannot be subject to assessment under 192.710.	Y, N	Gas – If Status Code is active filled (AF) or active unfilled (AU)	Not Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field (<i>Gas, Liquid, Both or otherwise as indicated</i>)	Public Viewer Attribute ¹
FRP_SEQ	Integer	10	FRP Sequence Number	Facility Response Plan (FRP) Sequence Number assigned by PHMSA and provided to the operator in the Letter of Approval (LOA) for the operator's submitted FRP. If PHMSA has not assigned the FRP Sequence Number yet, submit 9999. If the Primary Commodity Category field is CRD or PRD, and the Offshore Yes/No field is N, this field cannot be left blank.	Positive Integer	Not Required	Not Public
NOTES: 1 Public = Yes, this attribute is visible on NPMS Public Viewer tools; Not Public = No, this attribute is not visible on NPMS Public Viewer tools.							

Appendix A.2: LNG Plant Attribute Table

Field Name	Field Type ¹	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field	Public Viewer Attribute ¹
OPER_LINK	Character	20	Unique Link ID	Link between the geospatial elements (points) and their respective attribute records. Assigned by the operator or the operator's software package (i.e., COVER-ID, MSLINK_ID, etc.). Note the OPER_LINK and the LNG_ID may be identical. Once processing is complete, the OPER_LINK value will be removed from the data by NPMS staff as it will no longer be needed.	Character	Required – If your attributes are not included in your geospatial file; refer to Section 3.5	Not Public
OPID	Integer	5	Operator ID Number	Unique tracking number assigned by PHMSA to the company that physically operates the LNG plant. If you do not know your company's OPID check with your DOT/Regulatory Compliance department or the NPMS website. Always use the same OPID for all PHMSA reporting requirements that apply to the LNG plant. For example, if you use OPID 100 for this LNG plant in the NPMS, you must use OPID 100 for this LNG plant on the Annual Report to PHMSA.	Positive integer	Required	Public
OPER_NM	Character	100	Operator Name	The name of the company that physically operates the LNG Plant. This is the company name associated with this OPID in PHMSA records.	Character	Required	Public
LNG_NM	Character	40	LNG Plant Name	Assigned by the operator. The operator's name for the LNG plant. The operator must submit the same value on their LNG Annual Report to PHMSA.	Character	Required	Public
LNG_ID	Character	20	LNG Plant ID	Assigned by the operator. A unique identifier for a specific LNG plant. Operators must use the same LNG ID value for this specific plant in the LNG Impoundments attribute table, LNG Exclusion Zones attribute table and LNG Annual Report to PHMSA. The LNG ID will be used to relate information from the Annual Report, Impoundment and Exclusion Zone data to this LNG plant. NPMS staff will also use the LNG ID to support updates to the NPMS LNG database.	Character	Required	Public
STATUS_CD	Character	1	LNG Status Code	Identifies the status of the LNG plant as of the reporting year (i.e., December 31 of the previous year). AF=active filled, AU=active unfilled, PA=permanently abandoned in accordance with federal regulations.	AF, AU, PA	Required	Public
QUALITY_CD	Character	1	Data Quality Code (Positional Accuracy)	Identifies the positional accuracy of the submitted plant centroid location. A=less than 5 feet, B=5-25 feet, C=25.01-50 feet, D=50.01-100 feet, E=100.01 or greater.	A, B, C, D, E	Required	Not Public

Field Name	Field Type ¹	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field	Public Viewer Attribute ¹
REVIS_CD	Character	1	LNG Plant Revision Code	Identifies the type of revision that applies to this LNG plant. Describes how this LNG plant has changed compared to the previous LNG NPMS submission for this OPID. NPMS staff rely on this attribute to accurately update the NPMS LNG database. C=this LNG plant is a new addition to the NPMS for this OPID this year, due to new construction, J=this LNG plant is a new addition to the NPMS for this OPID this year, due to a plant that is new to the NPMS reporting requirement, E=this LNG plant is a new addition to the NPMS for this OPID this year, to correct an error in not submitting previously, Q=this LNG plant is a new addition to the NPMS for this OPID this year, due to an acquisition/transfer from another operator/OPID, B=a spatial and/or attribute modification to a LNG plant point location included in the previous NPMS submittal for this OPID, or N=no change to the matching LNG plant included in the previous LNG NPMS submittal for this OPID (e.g., nothing about this LNG plant or the data representing this LNG plant changed – the spatial and attribute components are an exact match). Please read more about selecting the correct Revision Code value from the NPMS Operator Submission Guide.	C, J, E, Q, B, N	Required	Public
TYPE	Character	2	Type of LNG Plant	Identifies the type of LNG Plant. BL=base load, PS=peak shaving, SA=satellite, MT=mobile/temporary, O=other. When the Type of LNG Plant is mobile/temporary the centroid location should reflect the location where it is typically stored.	BL, PS, SA, MT, O	Required – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
CAPACITY	Integer	5	Total Capacity	Total capacity of LNG storage in barrel units (bbl)	Positive Integer	Required – If Status Code is active filled (AF) or active unfilled (AU)	Not Public
CNSTR_YEAR	Integer	4	Year Constructed	Identifies the year the LNG Plant was constructed (matches “date put in service” from the operator’s Annual Report). Leave this field blank if TYPE is MT.	Positive 4 Digit Integer	Required – If Type of LNG Plant is not MT and Status Code is active filled (AF) or active unfilled (AU)	Not Public
NOTES: 1 Public = Yes, this attribute is visible on NPMS Public Viewer tools; Not Public = No, this attribute is not visible on NPMS Public Viewer tools.							

Appendix A.3: Breakout Tank Attribute Table

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field	Public Viewer Attribute ¹
OPER_LINK	Character	20	Unique Link ID	Link between the geospatial elements (breakout tanks) and their respective attribute records. Assigned by the operator or operator's software package (i.e., COVER-ID, MSLINK_ID, etc.) Note the OPER_LINK and the TANK_ID may be identical. Once processing is complete, the OPER_LINK value will be removed from the data by NPMS staff as it will no longer be needed.	Character	Required – If your attributes are not included in the geospatial file; refer to Section 3.5	Not Public
OPID	Integer	5	Operator ID Number	Unique tracking number assigned by PHMSA to the company that physically operates the breakout tank. If you do not know your company's OPID check with your DOT/Regulatory Compliance department or the NPMS website. Always use the same OPID for all PHMSA reporting requirements that apply to the breakout tank. For example, if OPID 100 is used for this breakout tank in the NPMS, OPID 100 must be used for this breakout tank on the Annual Report to PHMSA.	Positive integer	Required	Public
OPER_NM	Character	100	Operator Name	The name of the company that physically operates the breakout tank. This is the company name associated with this OPID in PHMSA records.	Character	Required	Public
TANK_ID	Character	20	Breakout Tank ID	Assigned by the operator. A unique identifier for a specific breakout tank. Operators must use the same TANK ID value for this specific breakout tank in the breakout tank Annual Report to PHMSA. The TANK ID will be used to relate information from the Annual Report to this breakout tank.	Character	Required	Public
FAC_NAME	Character	100	Breakout Tank Facility Name	Assigned by the operator. A functional name for a functional grouping of tanks (e.g., a tank facility, a tank farm). The operator must submit the same value on the breakout tank Annual Report to PHMSA.	Character	Required	Public
CNSTR_YEAR	Integer	4	Construction Year	Four-digit year of facility construction (e.g., "1990").	Positive 4 Digit Integer	Required	Public
TANKSIZE	Integer	3	Nominal Size of Breakout Tank	Nominal size of the tank in thousands of barrels (e.g., a tank that holds 50,000 barrels would be reported as 50). Report all tanks that hold less than 1000 barrels as TANKSIZE 1, otherwise, round to the nearest thousand.	Positive Integer	Required	Not Public
COMMODITY	Character	5	Primary Commodity Category	Identifies the primary commodity stored in the breakout tank. CRD=crude oil, PRD=non-HVL petroleum product, AA=anhydrous ammonia, LPG=liquefied petroleum gas, NGL=natural gas liquids, OHV=other HVLs, CO2=carbon dioxide, ETH=fuel grade ethanol, and NONE=the tank did not store a commodity during the reporting year Active Unfilled (STATUS_CD = AU) tanks must report the last commodity stored. Note that NONE may only be used for abandoned tanks (i.e., STATUS_CD = PA).	CRD, PRD, AA, LPG, NGL, OHV, CO2, ETH, NONE	Required	Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field	Public Viewer Attribute ¹
COMMODITY2	Character	5	Commodity Category 2	Identifies the secondary commodity stored in the breakout tank. Use this field only if more than one commodity type is stored in this tank. CRD=crude oil, PRD=non-HVL petroleum product, AA=anhydrous ammonia, LPG=liquefied petroleum gas, NGL=natural gas liquids, OHV=other HVLs, CO2=carbon dioxide, ETH=fuel grade ethanol. Leave this field blank if the tank does not store a secondary commodity.	CRD, PRD, AA, LPG, NGL, OHV, CO2, ETH	Not Required	Public
COMMODITY3	Character	5	Commodity Category 3	Identifies the tertiary commodity stored in the breakout tank. Use this field only if more than two commodity types are stored in this tank. CRD=crude oil, PRD=non-HVL petroleum product, AA=anhydrous ammonia, LPG=liquefied petroleum gas, NGL=natural gas liquids, OHV=other HVLs, CO2=carbon dioxide, ETH=fuel grade ethanol. Leave this field blank if the tank does not store a tertiary commodity.	CRD, PRD, AA, LPG, NGL, OHV, CO2, ETH	Not Required	Public
FRP_SEQ	Character	20	FRP Sequence Number	Facility Response Plan (FRP) Sequence Number assigned by PHMSA and provided to the operator in the Letter of Approval (LOA) for the operator's submitted FRP. If PHMSA has not assigned the FRP Sequence Number yet, submit 9999. Required if the Primary Commodity Category is CRD or PRD. Leave this field blank if the Commodity is not CRD or PRD.	Character	Required – If applicable, per 49 CFR §194 and Status Code is active filled (AF) or active unfilled (AU)	Not Public
STATUS_CD	Character	2	Breakout Tank Status Code	Identifies the status of the breakout tank as of the reporting year (i.e., December 31 of the previous year). AF=active filled (stored a commodity), AU=active unfilled (option when a breakout tank is not permanently abandoned in place, but also did not store a commodity), PA=permanently abandoned in place in accordance with federal regulations	AF, AU, PA	Required	Public
QUALITY_CD	Character	1	Data Quality Code (Positional Accuracy)	Identifies the positional accuracy of the submitted data. A=less than 5 feet, B=5-25 feet, C=25.01-50 feet, D=50.01-100 feet, E=100.01 or greater.	A, B, C, D, E	Required	Not Public

Field Name	Field Type	Field Length	Short Description	Full Description	Acceptable Values (UPPERCASE)	Required Field	Public Viewer Attribute ¹
REVIS_CD	Character	1	Breakout Tank Revision Code	Identifies the type of revision that applies to this breakout tank. Describes how this breakout tank has changed compared to the previous breakout tank NPMS submission for this OPID. NPMS staff rely on this attribute to accurately update the NPMS breakout tank database. C=this breakout tank plant is a new addition to the NPMS for this OPID this year, due to new construction, J=this breakout tank is a new addition to the NPMS for this OPID this year, due to a tank that is new to the NPMS reporting requirement, E=this breakout tank is a new addition to the NPMS for this OPID this year, to correct an error in not submitting previously, Q=this breakout tank is a new addition to the NPMS for this OPID this year, due to an acquisition/transfer from another operator/OPID, B=spatial and/or attribute modification to a breakout tank point location included in the previous NPMS submittal for this OPID, or N=no change to the matching breakout tank included in the previous breakout tank NPMS submittal for this OPID (e.g., nothing about this breakout tank or the data representing this breakout tank changed – the spatial and attribute components are an exact match). Please read more about selecting the correct Revision Code value from the NPMS Operator Submission Guide.	C, J, E, Q, B, N	Required	Public
NOTES: 1 Public = Yes, this attribute is visible on NPMS Public Viewer tools; Not Public = No, this attribute is not visible on NPMS Public Viewer tools.							

Appendix B: Abandonment Certificate Template

Leigha Gooding
 GIS Program Manager
 U.S. Department of Transportation
 Pipeline and Hazardous Materials Safety Administration
 Operations Systems Division - PHP6
 1200 New Jersey Ave, S.E.
 E21-106
 Washington, D.C. 20590

NPMS-required attributes:

OPID	System Name	Sub-System	PLINE_ID	Commodity	Diameter	Date of Abandonment	Method of Abandonment (e.g., "capped and filled with salt water")

I certify that, to the best of my knowledge, all of the reasonably available information requested was provided and, to the best of my knowledge, the abandonment was completed in accordance with applicable laws.

 Name

 Signature

 Date

NOTES:

1. "Abandoned" or "Abandoned in place" is NOT a valid description for the Method of Abandonment.
2. 49 CFR 192.3 and 195.2 define Abandoned as "*permanently removed from service*". Pipelines that could potentially return to service in the future or were sold **are not abandoned** per the regulations and should be submitted to the NPMS per guidance in the NPMS Operator Standards and NPMS Operator Submission Supplemental Instructions. Pipelines physically removed rather than abandoned in place should be excluded or removed from the NPMS per guidance in the NPMS Operator Standards and NPMS Operator Submission Supplemental Instructions.
3. This report is required for abandoned pipeline facilities that are offshore or cross over, under or through a commercially navigable waterway, per 49 CFR 192.727(g) and 195.402(c)(10)

Appendix C: Cover/Transmittal Letter Templates

Pipeline Data Submission Cover/Transmittal Letter Templates

Please note that submitting via the OSAVE workflow eliminates the need for the following questions to be submitted as a separate cover/transmittal letter file within a data package as required in the past. Instead, the cover/transmittal letter-related questions are incorporated into the submission workflow as a series of questions. If OSAVE is not used to submit to the NPMS, these questions must be included in the cover letter:

1. The submission and operator information (i.e., the Operator ID and the Operator Name).
2. Provide the primary, technical, and public contact information of the OPID. The full name, job title, company name, work mailing address, work phone number, and work email address should be included for each contact person. (NOTE: You can review your contact information on the [NPMS website](#) by logging into [OSAVE](#))
 - a. **The Primary Contact (required).** This person must be an employee of the operator and is only used by NPMS staff for questions about the Operator ID and its pipelines. This contact also receives general notifications from the NPMS that impact submissions, such as when the NPMS Operator Standards is updated or a reminder to operators about the submission deadline dates.
 - b. **The Technical Contact (required).** This person puts together the submissions to the NPMS and is only used by NPMS staff for questions about the submission(s) made to the NPMS. This person may be an employee of the operator or a designated contractor. If the same person as the primary contact fulfills the role of the technical contact, then clearly state that the contact represents both the primary and technical contact.
 - c. **The Public Contact (required).** This person must be an employee of the operator and is expected to receive communications from the general public, emergency responders as well as local, state, and federal government staff. The contact that is chosen to be responsible for handling public questions about their pipelines may be either an individual (e.g., “Joe Smith”) or an entity (e.g., “Public Relations Department”).
3. Does this pipeline data reflect conditions in the field as of December 31 of last year?
(NOTE: If the OPID operates both gas transmission and hazardous liquid pipelines and both are included in the submission, clearly state if the response to this question pertains to both the gas transmission and hazard liquid portions.)
4. A brief description of the pipeline data changes reflected in the submission (e.g., were pipelines sold, acquired, re-routed, abandoned, etc. since the previous submission). If some of the pipelines were sold or transferred to another OPID, please try to include as much information as possible such as affected systems/subsystems or PLINE_ID values. Be sure to also include the information of whom the pipelines were sold or transferred to, if known. If the purchasing company is unknown, state that as well. If portions of your data have been reclassified from transmission to gathering or distribution since your last submission, or from PHMSA to DOI/BSEE jurisdiction in an offshore area, please provide a brief description of the impacted System, Subsystem, or PLINE_ID values to assist NPMS staff in the comparison of this year’s submission to your previously submitted pipeline data.
5. Which of the submission types described below indicates how this submission as a whole should affect the previously submitted data for this OPID? You can read more about these submission types in Section 2.2:

- a. **Initial Submission:** This is the first pipeline submission to the NPMS for this OPID. Pipeline data has never been submitted to the NPMS for this OPID in previous year(s). This submission type can only include revision types that add pipeline mileage (e.g., additions, new construction, or new to NPMS submission requirements).
 - a. **Full Replacement Submission:** This submission should replace all data currently in the NPMS for this OPID. Submissions to the NPMS have been made in previous year(s) for this OPID. This submission type can include any type of revision, including additions and modifications, to the existing data. This submission should replace all breakout tank data currently in the NPMS for this OPID. This submission type can include any type of revision ("C" for addition to the NPMS due to new construction, "J" for addition to the NPMS due to being new to the NPMS reporting requirement, "E" for addition to the NPMS due to not previously submitting in error, "Q" for addition to the NPMS due to an acquisition/transfer from another operator/OPID, "B" for spatial or attribute modification to a pipeline location included in the previous NPMS submittal for this OPID, or "N" for no change to the matching pipeline included in the previous pipeline NPMS submittal for this OPID) to the existing data.
 - b. **Removal of OPID Submission:** This submission is to inform NPMS staff that all of your pipeline data needs to be removed from the NPMS national layer. Provide an explanation under Question 4, including an effective date for any change. If a sale has taken place, include a company name, contact name, and phone number for the new company. If the purchasing company/contact is unknown, please clearly state it under Question 4 as well. Similarly, if all pipelines in this OPID have been reclassified to gathering/distribution, please indicate so under Question 4.
6. Include the answers for the following questions:
 - a. Does this specific OPID operate only gas, only liquid, or both gas and liquid lines?
 - b. Does this specific submission contain only gas, only liquid, or both gas and liquid lines? (NOTE: *It is preferable that operators with both gas and liquid lines make a single NPMS submission with both types included.*)
 - c. Does this specific submission contain any lines permanently abandoned during the previous calendar year (STATUS_CODE value "PA")?
 - d. If the submission does contain abandoned lines, have you confirmed that the abandoned lines in this submission have not been previously submitted to NPMS? (NOTE: *Never resubmit abandoned lines to the NPMS; even Full Replacement submissions should only include lines abandoned during the previous calendar year. Your previously submitted abandoned lines are not visible when you sign into PIMMA. Previously submitted abandoned pipelines may be viewed via the OSAVE map viewer. Please contact NPMS staff at npms@dot.gov with any questions regarding previously submitted abandoned pipelines.*)
7. List the state(s) covered by the submitted Pipeline data.
8. Provide the projection/reference system of the geospatial data.
 - a. What is the datum of the geospatial data? (e.g., WGS84, NAD27, NAD83, etc.)
 - b. What are the measurement units of the geospatial data? (e.g., Decimal Degrees, Feet, Meters, Miles, etc.)
 - c. What is the projection of the geospatial data? (e.g., Geographic (Lat/Long), State Plane Coordinate System (SPCS), Universal Transverse Mercator (UTM), etc.)

- d. If the projection is State Plane Coordinate System (SPCS), Universal Transverse Mercator (UTM), you must also include the State Plane Zone or UTM Zone.
9. Does your NPMS submission match your PHMSA Annual Report? (NOTE: *Your NPMS submission must correspond with your PHMSA Annual Report. Discrepancies between the two regarding mileage, interstate/intrastate designation or commodities could result in the rejection of your submission.*)
10. Include any additional information you would like to convey to NPMS staff.

LNG Plant Data Submission Cover/Transmittal Letter Templates

Please note that submitting via the OSAVE workflow eliminates the need for the following questions to be submitted as a separate cover/transmittal letter file within a data package as required in the past. Instead, the cover/transmittal letter-related questions are incorporated into the submission workflow as a series of questions. If OSAVE is not used to submit to the NPMS, these questions must be included in the cover letter:

1. The submission and operator information (i.e., the Operator ID and the Operator Name).
2. The primary and technical contact information of the Operator ID. The full name, job title, company name, work mailing address (including city, state, and zip code), work phone number, and work email address should be included for each contact person.
 - a. **The Primary Contact (required).** This person must be an employee of the operator and is only used by NPMS staff for questions about the Operator ID and its pipelines. This contact also receives general notifications from the NPMS that impact submissions, such as when the NPMS Operator Standards is updated or a reminder to operators about the submission deadline dates.
 - b. **The Technical Contact (required).** This person puts together the submissions to the NPMS and is only used by NPMS staff for questions about the submission(s) made to the NPMS. This person may be an employee of the operator or a designated contractor. If the same person as the primary contact fulfills the role of the technical contact, then clearly state that the contact represents both the primary and technical contact.
3. Does this LNG plant data reflect conditions in the field as of December 31 of last year?
4. A brief description of the LNG plant changes reflected in the submission (e.g., were LNG plants sold, acquired, removed from the ground, abandoned, etc. since the previous submission). If portions of the LNG plants were sold or transferred to another OPID, please try to include as much information as possible such as LNG_ID values. Be sure to also include the information of whom the LNG plants were sold or transferred to, if known. If the purchasing company is unknown, state that as well.
5. Which of the submission types described below indicates how this submission as a whole should affect the previously submitted data for this OPID? You can read more about these submission types in Section 2.2:
 - a. **Initial Submission:** This is the first LNG submission to the NPMS for this OPID. LNG plant data has never been submitted to the NPMS for this OPID in previous year(s). This submission type can only include revisions that add LNG plants to the NPMS for your OPID (e.g., additions, new construction, or new to NPMS submission requirements).
 - b. **Full Replacement Submission:** This submission should replace all data currently in the NPMS for this OPID. Submissions to the NPMS have been made in previous year(s) for this OPID. This submission type can include any type of revision, including additions and modifications, to the existing data. This

submission should replace all LNG plant data currently in the NPMS for this OPID. This submission type can include any type of revision ("C" for addition to the NPMS due to new construction, "J" for addition to the NPMS due to being new to the NPMS reporting requirement, "E" for addition to the NPMS due to not previously submitting in error, "Q" for addition to the NPMS due to an acquisition/transfer from another operator/OPID, "B" for spatial or attribute modification to a LNG plant point location included in the previous NPMS submittal for this OPID, or "N" for no change to the matching LNG plant included in the previous LNG plant NPMS submittal for this OPID) to the existing data.

- b. **Removal of OPID Submission:** This submission is to inform NPMS staff that all of your LNG plant data needs to be removed from the NPMS national layer. Provide an explanation under Question 4, including an effective date for any change. If a sale has taken place, include a company name, contact name, and phone number for the new company. If the purchasing company/contact is unknown, please clearly state that under Question 4 as well.
6. Include the answers to the following questions:
 - a. Does this specific submission contain any plants permanently abandoned during the previous calendar year (STATUS CODE value "PA")?
 - b. If the submission does contain abandoned plants, have you confirmed that the abandoned plants in this submission have not been previously submitted to the NPMS? (NOTE: *Never resubmit abandoned plants to the NPMS; even Full Replacement submissions should only include plants abandoned during the previous calendar year. Your previously submitted abandoned plants are not visible when you sign into PIMMA. Please contact NPMS staff at npms@dot.gov with any questions regarding previously submitted abandoned plants.*)
7. List the state(s) covered by the submitted LNG plant data.
8. Provide the projection/reference system of the geospatial data.
 - a. What is the datum of the geospatial data? (e.g., WGS84, NAD27, NAD83, etc.)
 - b. What are the measurement units of the geospatial data? (e.g., Decimal Degrees, Feet, Meters, Miles, etc.)
 - c. What is the projection of the geospatial data? (e.g., Geographic (Lat/Long), State Plane Coordinate System (SPCS), Universal Transverse Mercator (UTM), etc.)
 - d. If the projection is State Plane Coordinate System (SPCS), Universal Transverse Mercator (UTM), you must also include the State Plane Zone or UTM Zone.
9. Include any additional information you would like to convey to NPMS staff.

Breakout Tank Data Submission Cover/Transmittal Letter Templates

Please note that submitting via the OSAVE workflow eliminates the need for the following questions to be submitted as a separate cover/transmittal letter file within a data package as required in the past. Instead, the cover/transmittal letter-related questions are incorporated into the submission workflow as a series of questions. If OSAVE is not used to submit to the NPMS, these questions must be included in the cover letter:

1. The submission and operator information (i.e., the Operator ID and the Operator Name).

2. The primary and, technical, and public contact information of the Operator ID. The full name, job title, company name, work mailing address (including city, state, and zip code), work phone number, and work email address should be included for each contact person.
 - a. **The Primary Contact (required).** This person must be an employee of the operator and is only used by NPMS staff for questions about the Operator ID and its data. This contact also receives general notifications from the NPMS that impact submissions, such as when the NPMS Operator Standards is updated or a reminder to operators about the submission deadline dates.
 - b. **The Technical Contact (required).** This person puts together the submissions to the NPMS and is only used by NPMS Staff for questions about the submission(s) made to the NPMS. This person may be an employee of the operator or a designated contractor. If the role of the technical contact is fulfilled by the same person as the primary contact, then clearly state that the contact represents both the primary and technical contact.
 - c. **The Public Contact (required).** This person must be an employee of the operator and is expected to receive communications from the general public, emergency responders as well as local, state, and federal government staff. The contact that is chosen to be responsible for handling public questions about their breakout tanks may be either an individual (e.g., "Joe Smith") or an entity (e.g., "Public Relations Department").
3. Does this breakout tank data reflect conditions in the field as of December 31 of last year?
4. A brief description of the changes reflected in the submission (e.g., were breakout tanks sold, acquired, removed from the ground, abandoned, etc. since the previous submission). If portions of the breakout tanks were sold or transferred to another OPID, please try to include as much information as possible such as TANK_ID values. Be sure to also include the information of whom the breakout tanks were sold or transferred to, if known. If the purchasing company is unknown, state that as well.
5. Which of the submission types described below indicates how the submission as a whole should affect the previously submitted breakout tank data for this OPID? You can read more about these submission types in Section 2.2:
 - a. **Initial Submission:** This is the first breakout tank submission to the NPMS for this OPID. Breakout tank data has never been submitted to the NPMS for this OPID in previous year(s). This submission type can only include revisions that add breakout tanks to the NPMS for your OPID (e.g., additions, new construction, or new to NPMS submission requirements).
 - b. **Full Replacement Submission:** This submission should replace all data currently in the NPMS for this OPID. Submissions to the NPMS have been made in previous year(s) for this OPID. This submission type can include any type of revision, including additions and modifications, to the existing data. This submission should replace all breakout tank data currently in the NPMS for this OPID. Submissions to the NPMS have been made in previous year(s) for this OPID. This submission type can include any type of revision ("C" for addition to the NPMS due to new construction, "J" for addition to the NPMS due to being new to the NPMS reporting requirement, "E" for addition to the NPMS due to not previously submitting in error, "Q" for addition to the NPMS due to an acquisition/transfer from another operator/OPID, "B" for spatial or attribute modification to a breakout tank point location included in the previous NPMS submittal for this OPID, or "N" for no change to the matching breakout tank included in the previous breakout tank NPMS submittal for this OPID) to the existing data.

- c. **Removal of OPID Submission:** This submission is to inform NPMS staff that all of your breakout tank data needs to be removed from the NPMS national layer. Provide an explanation under Question 4, including an effective date for any change. If a sale has taken place, include a company name, contact name, and phone number for the new company. If the purchasing company/contact is unknown, please clearly state that under Question 4 as well.
6. Include the answers to the following questions:
 - a. Does this specific submission contain any tanks permanently abandoned during the previous calendar year (STATUS CODE value “PA”)?
 - b. If the submission does contain abandoned tanks, have you confirmed that the abandoned tanks in this submission have not been previously submitted to the NPMS? (NOTE: *Never resubmit abandoned tanks to the NPMS; even Full Replacement submissions should only include lines abandoned during the previous calendar year. Your previously submitted abandoned tanks are not visible when you sign into PIMMA. Please contact NPMS staff at npms@dot.gov with any questions regarding previously submitted abandoned tanks.*)
7. List the state(s) covered by the submitted breakout tank data.
8. Provide the projection/reference system of the geospatial data.
 - a. What is the datum of the geospatial data? (e.g., WGS84, NAD27, NAD83, etc.)
 - b. What are the measurement units of the geospatial data? (e.g., Decimal Degrees, Feet, Meters, Miles, etc.)
 - c. What is the projection of the geospatial data? (e.g., Geographic (Lat/Long), State Plane Coordinate System (SPCS), Universal Transverse Mercator (UTM), etc.)
 - d. If the projection is State Plane Coordinate System (SPCS) or Universal Transverse Mercator (UTM), you must also include the State Plane Zone or UTM Zone.
9. Include any additional information or concerns you would like to relate to NPMS staff.

Appendix D: Glossary

A

Abandoned pipeline	A pipeline facility that has been permanently removed from service according to federal regulations. The NPMS accepts geospatial data submissions for pipelines, LNG plants or breakout tanks that have been abandoned in place, but not for pipeline facilities removed from the ground. This pipeline facility, LNG plant, or breakout tank is not reported on the annual report to PHMSA but is submitted to the NPMS. Starting with CY2026 reporting, in the NPMS submission, the Status Code attribute for this pipeline, LNG plant, and breakout tank will be Permanently Abandoned ("PA").
Active pipeline	A pipeline facility that is subject to federal regulations. Active pipeline facilities can be transporting/storing commodity, not currently transporting/storing commodity but may again in the future, or not yet properly and permanently abandoned according to federal regulations. Active gas transmission and hazardous liquid pipelines, LNG plants and breakout tanks are submitted to the NPMS and included on annual reports to PHMSA. Starting with CY2026 reporting, the Status Code attribute for this pipeline facility, LNG plant, and breakout tank will be Active Filled ("AF") or Active Unfilled ("AU") in the NPMS submission to coincide with current regulatory terms.
ASCII	American Standard Code for Information Interchange. A popular standard for the exchange of alphanumeric data.
Attribute	A characteristic that helps to describe the data.

B

Base map	A map containing visible surface features and boundaries that is used for local reference.
Breakout tank	A Breakout tank as defined in 49 CFR §195.2 .

C

CAD or CADD	Computer Aided Drafting (CAD) and Design (CADD). An automated system for the drafting and display of graphic oriented information.
Coordinates	Pairs of numbers expressing a known horizontal location on the earth's surface.

Crude oil	Liquid petroleum out of the ground, as distinguished from refined oils manufactured from crude oil.
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D–E

Database	Structured collection of data defined for a particular use, user, system, or program; may be sequential, network, hierarchical, relational, or semantic.
Datum (geodetic)	The level surface to which elevations are referenced, such as mean sea level. A datum serves as a frame of reference for measuring a location on the surface of the earth.

F

Facilities	Components of the pipeline system, such as the pipe, valves, and compressor stations.
FGDC	Federal Geographic Data Committee. Established through OMB and charged with coordinating the development, use, sharing, and dissemination of geographic data.

G

GIS	Geographic Information System. Computer hardware, software, and geographic data used to capture, store, update, maintain, analyze, and display graphically referenced information.
GPS	Global Positioning System. Survey instrument/process using satellite-generated timing data to establish either ground or aerial coordinates.

H

Hazardous liquid	A Hazardous liquid as defined in 49 CFR §195.2 .
Highly volatile liquid (HVL)	A Highly volatile liquid or HVL as defined in 49 CFR §195.2 .

I-K

In-plant pipeline	Piping that is located on the grounds of a plant and used to transfer hazardous liquid or carbon dioxide between plant facilities or between plant facilities and a pipeline or other mode of transportation, not including any device and associated piping that are necessary to control pressure in the pipeline under CFR §195.406(b) .
Interstate gas pipeline	A gas pipeline or that part of a gas pipeline facility that is used to transport gas and is subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act (15 U.S.C. 717 et seq.).
Interstate liquid/CO2 pipeline	A hazardous liquid or CO2 interstate pipeline as defined in §195.2. Appendix A to 49 CFR 195 contains PHMSA's Statement of Policy and Interpretation on the delineation between interstate and intrastate pipelines and provides additional guidance.
Intrastate gas pipeline	A gas pipeline or that part of a gas pipeline facility that is used to transport gas within a state and is not subject to the jurisdiction of FERC under the Natural Gas Act (15 U.S.C. 717 et seq.).
Intrastate hazardous liquid pipeline	A hazardous liquid or CO2 intrastate pipeline as defined in §195.2. Appendix A to 49 CFR 195 contains PHMSA's Statement of Policy and Interpretation on the delineation between interstate and intrastate pipelines and provides additional guidance.

L

Latitude	Distance measured north or south of the equator.
Liquefied Natural Gas (LNG)	Natural gas or synthetic gas having methane as its major constituent that has been changed to a liquid or semi-solid.
Liquefied Petroleum Gas (LPG)	Butane and propane are separated from natural gasoline and sold in liquid form as fuel. Also known as bottled gas and tank gas.
LNG facility	An LNG facility as defined in 49 CFR §193.2007 .
LNG plant	An LNG plant as defined in 49 CFR §193.2007 .
Longitude	Distance measured east or west from the Prime Meridian in Greenwich, England.
Low stress pipeline	Hazardous liquid pipelines operating at 20% or less of SMYS.

M

Metadata	Descriptive information about data, such as the timeliness of the data, attribute sources, and accuracy of the data.
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N

NAD 27, 83	North American Datum (of 1927 or 1983). Two mathematical representations of the earth's surface.
Natural gas liquid	Also referred to as NGL. Can be ethane, butane, propane, or a propane-butane mix.
Natural gas transmission line	A transmission line as defined in 49 CFR §192.3 .
Nominal Pipe Size (NPS)	Identifies the diameter of a pipeline with a standardized dimensionless value, (e.g., 8.625" outside diameter pipe is reported as NPS 8, 5" outside diameter pipe is NPS 4.5). Decimals are only accepted when less than NPS 5. OSAVE and NPMS data templates reflect all available NPS values for pipelines expected in NPMS submittals. Send an email to npms@dot.gov if you believe you have a valid NPS value that is not included.

O

One-Call	Service to notify underground utilities of planned excavations.
Operator	A person or firm who operates a pipeline system and engages in the transportation of gas or hazardous liquid. The operator may or may not also be the owner of the pipeline system.

P

Petroleum	Crude oil, condensate, natural gasoline, natural gas liquids, and liquefied petroleum gas.
Petroleum product	Flammable, toxic, or corrosive products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks, and other miscellaneous hydrocarbon compounds.

Pipeline corridor	A linear area where two or more pipelines (either part of the same or different pipeline systems) are closely grouped in a single right-of-way. Pipeline corridors pose a cartographic challenge. In digital files, multiple lines are required, and operators should separate them into individual layers or files.
Pipeline crossing	A point where two or more pipelines cross, but where there is no physical connection between the pipelines. Pipeline segments should not be broken at pipeline crossings.
Pipeline facility	Any equipment, building, facility, or right-of-way that is used to transport or treat gas or hazardous liquids. For NPMS purposes, the term pipeline facility is used to collectively refer to pipelines, LNG plants and breakout tanks subject to NPMS submission requirements.
Pipeline intersection	A point where a physical connection between two pipelines occurs. A commodity from one pipeline can flow into another pipeline(s), either a branch within a pipeline system or a connection between two pipeline systems.
Pipeline segment	A linear feature representing part or all of a pipeline system on a map. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. Each pipeline segment must be uniquely identified. The number of pipeline segments should be kept to the minimum needed to represent a pipeline system and its associated attributes. A unique line segment in the computer-aided drafting (CAD) or GIS data set should represent each pipeline segment.
Pipeline system	All parts of a major natural gas transmission pipeline or hazardous liquid pipeline through which gas or hazardous liquid is transported. By definition, only one firm can operate a pipeline system. Operators should assign unique names to each of their pipeline systems. A pipeline system may have an unlimited number of branches. Each pipeline system must be represented by one or more pipeline segments.

R

ROW	Right-of-Way. A section of land designated for use by one or more pipelines. The NPMS refers to ROWs as pipeline corridors.
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S

Scale (large)	Small map area showing greater detail, e.g., 1:2,400 = 1" to 200'.
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Scale (small)	Large map area with less detail, e.g., 1:100,000 = 1" to 8333'.
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T-Z

Topographic maps	Map showing horizontal and vertical contours, or lines of equal surface elevation.
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Vector	Data composed of individual coordinate points and lines whose endpoints are defined by coordinate pairs.
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