Notice: This report is required by 49 CFR Part 191. Failure to report may result in a civil penalty as provided in 49 USC 60122.

OMB No. 2137-0522 Expires: 8/31/2026

		DOT USE ONLY	
U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration	**UNDERGROUND NATURAL GAS STORAGE FACILITY ANNUAL REPORT FOR CALENDAR YEAR 20___**	**Original Date Submitted**	
		Report Type	
		Date Submitted	

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. Public reporting for this collection of information is estimated to be approximately 20 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: *Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at https://www.phmsa.dot.gov/forms/pipeline-forms.*

PART A – OPERATOR INFORMATION

A1. Operator's OPS-issued Operator Identification Number (OPID): *auto-populated based on PHMSA Portal log-in*

A2. Name of Operator: *auto-populated based on OPID*

A3. Address of Operator

A3a. Street Address: *auto-populated based on OPID*

A3b. City: *auto-populated based on OPID*

A3c. State: *auto-populated based on OPID*

A3d. Zip Code: *auto-populated based on OPID*

PART B – STORAGE FACILITY ***Complete Part B once for each independent storage facility***

B1. Facility Name (chosen by operator): _____

B2. Select only one: ☐ INTERstate ☐ INTRAstate

PHMSA USE ONLY Unit ID: _____

B3. Facility Location Latitude: /__/__/ . /__/__/__/__/__/

Longitude: -/__/__/__/ . /__/__/__/__/__/

State: _____ County: _____

B4. Energy Information Administration Gas Field Code: _____

Names of Reservoirs within this facility: *populated from Parts C1*

Gas Volumes

B5. Working gas capacity (billion standard cubic feet (BCF)), *include two decimal places*: _____

B6. Base (also known as Cushion or Pad) gas (billion standard cubic feet (BCF)), *include two decimal places*: _____

B7. Total gas capacity (billion standard cubic feet (BCF)): *calc*

B8. Metered volume of natural gas ***withdrawn from the facility*** for calendar year (billion standard cubic feet (BCF)), *include two decimal places*: _____

B9. Metered volume of natural gas ***injected into the facility*** for calendar year (billion standard cubic feet (BCF)), *include two decimal places*: _____

PART C – RESERVOIRS AND WELLS ***Complete Part C once for each reservoir or geologic storage formation within a facility***

Facility Name: *populated from Part B1*

C1. Reservoir name (chosen by operator): _____

C2. Year reservoir placed in storage service: _____

C3. Type (select only one): ☐ Salt Cavern ☐ Hydrocarbon Reservoir ☐ Aquifer Reservoir
☐ Other Description of type: _____

C4. Maximum Wellhead Surface Pressure

C4a. Name of the representative well: _____

C4b. Maximum surface pressure (pounds per square inch gauge (psig)) at the representative well: _____

Reservoir or Cavern(s) Depth

C5. Approximate Maximum Depth (feet): _____

C6. Approximate Minimum Depth (feet): _____

Wells

C7. Number of Injection and/or Withdraw Wells by Year Range Placed in Storage Operation:

	pre-1930	**1930-1959**	**1960-1969**	**1970-2004**	**2005-present**	**Total**
Injection and/or Withdrawal Wells						*calc*

C8. Number of Monitoring and/or Observation Wells by Year Range Placed in Storage Operation:

	pre-1930	**1930-1959**	**1960-1969**	**1970-2004**	**2005-present**	**Total**
Monitoring and/or Observation Wells						*calc*

C9. Number of Wells drilled during the calendar year: _____

C10. Wells plugged and abandoned during the calendar year:

C10a. Number of wells re-plugged during the calendar year:

C10b. Number of wells plugged but not abandoned during the calendar year:

C10c. Number of wells plugged and abandoned during the calendar year:

Well Safety Valves

C11. Number of Wells with automated surface safety valves: _____

C12. Number of Wells with subsurface safety valves: _____

Well Gas Flow

C13. Number of Wells with gas flow only through production tubing: _____

C14. Number of Wells with gas flow only through production casing: _____

C15. Number of Wells with gas flow through both production tubing and production casing: _____

C16. Number of Wells with some "other type" of gas flow: _____ Describe the "other type" of gas flow through the well: _____

Maintenance

C17. Number of Wells with new production tubing installed during the calendar year: _____

C18. Number of Wells with new production casing, new liner, or repairs to casing or liner during the calendar year: _____

C19. Number of Wells with wellhead remediation or repair during the calendar year: _____

C20. Number of Wells with casing, wellhead, or tubing leaks during the calendar year: _____

C21. Number of Wells with Pressure Test during the calendar year: _____

C22. Number of Wells with Casing Evaluation for Corrosion/metal loss during the calendar year: _____

C23. Number of Wells inspected using a downhole assessment method other than "Pressure Test" and "Casing Evaluation for Corrosion/metal loss" during the calendar year*: _____

* describe other assessment method(s): _____

PART D – CONTACT INFORMATION

D1. Name of person submitting report: _____

D2. Title of person in D1: _____

D3. Work e-mail address of person in D1: *auto-populated based on Portal login*

D4. Work phone number of person in D1: _____

D5. Name of person to contact with questions about this report: _____

D6. Title of person in D5: _____

D7. Email address of person in D5: _____

D8. Phone number of person in D5: _____

Instructions (rev 3/1/2022) for PHMSA Form 7100.4-1 (rev 3/1/2022)
UNDERGROUND NATURAL GAS STORAGE FACILITY
ANNUAL REPORT FOR CALENDAR YEAR 20__

GENERAL INSTRUCTIONS

All section references are to Title 49 of the Code of Federal Regulations (49 CFR). This Annual Report is required per §191.17 and must be filed per §191.7. Read through the Annual Report and instructions carefully before beginning the Report.

Each operator of an underground natural gas storage facility must submit an Annual Report for that system on DOT Form PHMSA 7100.4-1. This report must be submitted each year, not later than March 15, and provide information about wells, reservoirs, and geologic storage formations as-of December 31 of the previous year. Surface piping should be reported on PHMSA Form F7100.2-1, Gas Transmission and Gathering Annual Report. If an operator discovers an error in a submitted annual report, a supplemental report should be filed. Changes made to the underground natural gas storage facility after the end of the reporting year should not result in a supplemental report.

The term "underground natural gas storage facility" is defined in §192.3. Additional terms are defined in American Petroleum Institute (API) Recommended Practice (RP) 1170, "Design and Operation of Solution-mined Salt Caverns used for Natural Gas Storage" and API RP 1171, "Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs."

If you need copies of the Form PHMSA F 7100.4-1 and/or these instructions, they can be found on https://www.phmsa.dot.gov/forms/pipeline-forms. The documents are included in the section titled Accident/Incident/Annual Reporting Forms.

ONLINE REPORTING REQUIREMENTS

Annual Reports must be submitted online through the PHMSA Portal at https://portal.phmsa.dot.gov/portal, unless an alternate method is approved (see Alternate Reporting Methods below).

You will not be able to submit reports until you have met all of the Portal registration requirements – see https://portal.phmsa.dot.gov/PHMSAPortal2/staticContentRedesign/howto/PortalAccountCreation.pdf Completing these registration requirements could take several weeks. Plan ahead and register well in advance of the report due date.

REPORTING METHOD

Use the following procedure for online reporting:

1. Go to the PHMSA Portal at https://portal.phmsa.dot.gov/portal
2. Enter PHMSA Portal Username and Password; press *enter*
3. Select OPID; press "*continue"* button.
4. Under "**Create Reports**" on the left side of the screen, under *Annual* select "Underground Natural Gas Storage Facility" and proceed with entering your data. Only

one annual report for an OPID may be submitted per year.

5. To save intermediate work without formally submitting it to PHMSA, click **Save**. To modify a draft of an annual report that you saved, go to **Saved Reports** and click on *Underground Natural Gas Storage Facility*. Locate your saved report by the date or report year. Select the record by clicking on it once, and then click **Modify** above the record.

6. Once all sections of the form have been completed, click on **Validate** to ensure all required fields have been completed and data meets all other requirements. A list of errors will be generated that must be fixed prior to submitting an Annual Report.

7. Click **Submit** when you have completed the Report (for either an Initial Report or a Supplemental Report), and are ready to initiate formal submission of your Report to PHMSA.

8. A confirmation message will appear that confirms a record has been successfully submitted. To save or print a copy of your submission, go to **Submitted Reports** on the left hand side, and click on *Underground Natural Gas Storage Facility Gas*. Locate your submitted report by the date or report year, and then click on the PDF icon to either open the file and print it, or save an electronic copy.

9. To submit a *Supplemental Report*, go to **Submitted Reports** on the left hand side, and click on *Underground Natural Gas Storage Facility*. Locate your submitted report by the date or report year. Select the record by clicking on it once, and then click "Create Supplemental".

Alternate Reporting Methods

Operators for whom electronic reporting imposes an undue burden and hardship may submit a written request for an alternative reporting method. Operators must follow the requirements in §191.7(d) to request an alternative reporting method and must comply with any conditions imposed as part of PHMSA's approval of an alternate reporting method.

SPECIFIC INSTRUCTIONS

Make an entry in each block for which data is available. Estimate data only if necessary. Avoid entering any data as **UNKNOWN or 0 (zero)** except where zero is appropriate to indicate that there were no instances or amounts of the attribute being reported.

Enter the Calendar Year for which the Report is being filed, bearing in mind that the report should reflect the system as-of the end of that calendar year.

The **Initial Report** or **Supplemental Report** box will be populated by the online system.

For a given OPID, a single Annual Report is permitted each year. Create a Part B for each facility operated under your OPID. Create a Part C for each reservoir or geologic storage formation within a facility.

PART A – OPERATOR INFORMATION

Part A is completed once for each Annual Report.

A1. Operator's 5-digit Identification Number (OPID)

For online entries, the OPID will automatically populate based on the selection you made when entering the Portal. If you have log-in credentials for multiple OPID, be sure the report is being created for the appropriate OPID. Contact PHMSA's Information Resources Manager at 202-366-8075 if you need assistance with an OPID.

A2. Name of Operator

This is the company name associated with the OPID. For online entries, the name will be automatically populated based on the OPID entered in A1. If the name that appears is not correct, you need to submit an Operator Name Change (Type A) Notification.

A3. Address of Operator

This is the headquarters address associated with the OPID. For online entries, the address will automatically populate based on the OPID entered in A1. If the address that appears is not correct, you need to change it in the online Contacts module.

PART B – STORAGE FACILITY

Part B is completed once for each underground natural gas storage facility operated by your OPID.

B1. Facility Name

Enter the name used by your company to identify the facility to federal government or state government agencies.

B2. INTERstate or INTRAstate

INTERstate means a facility subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act (15 U.S.C. 717 et seq.).
INTRAstate means a facility not subject to the jurisdiction of FERC under the Natural Gas Act (15 U.S.C. 717 et seq.).

B3. Facility Location

Enter the latitude, longitude, State, and County for the storage facility. If you have already selected a latitude and longitude within the facility for other reporting or communication purposes, report it in this question. Otherwise, identify a latitude and longitude within the facility and report it in this question. If the facility is in multiple Counties, enter the single County with the largest portion of the facility.

Report latitude and longitude as Decimal Degrees with a minimum of 5 decimal places (e.g. Lat: 38.89664 Long: -77.04327), using the WGS84 datum. All locations in the United States have a negative

longitude coordinate**, which is added by the data collection software. Do not enter the negative sign in the longitude field**.

B4. Energy Information Administration (EIA) Gas Field Code
Enter the EIA gas field code for the facility. Navigate to https://www.eia.gov/naturalgas/data.php. Select "Storage", then select "U.S. field level storage data" to see the most current EIA codes.

Gas Volumes

B5. Working gas capacity
Enter the design working gas capacity in billion standard cubic feet (BCF) and *include two decimal places*.

B6. Base (also known as Cushion or Pad) gas
Enter the base gas volume, including native gas, in billion standard cubic feet (BCF) and *include two decimal places*.

B7. Total gas capacity
The data collection software will add B5 and B6 to calculate B7 in billion standard cubic feet (BCF).

B8. Metered volume of natural gas *withdrawn from the facility* for calendar year
Enter the metered volume of gas withdrawn from the facility during the calendar year in billion standard cubic feet (BCF) and *include two decimal places*.

B9. Metered volume of natural gas *injected into the facility* for calendar year
Enter the metered volume of gas injected into the facility during the calendar year in billion standard cubic feet (BCF) and *include two decimal places*.

PART C – RESERVOIRS AND WELLS

Part C is completed once for each reservoir or geologic storage formation within a facility reported in Part B.

Facility Name is populated based on your entry in Part B.

C1. Reservoir/Salt Dome Name
Enter the name used by your company to identify the reservoir or geologic storage formation. For caverns, enter the salt dome name.

C2. Year reservoir placed in storage service
Enter the year the reservoir or geologic storage formation was first used for storage of natural gas.

C3. Type
Select the type of reservoir or geologic storage formation for the facility. If other is selected, provide text describing the type.

C4. Maximum Wellhead Surface Pressure
A single well at each reservoir or geologic storage facility is typically selected as a representative well for measuring pressure. Enter the name of the representative well selected for the reservoir or geologic storage formation in C4a. In C4b, enter the maximum surface pressure recorded for the applicable year at the representative well in pounds per square inch gauge (psig).

Reservoir Depth

C5. Approximate Maximum Depth
Enter the approximate distance from ground level to the bottom of the reservoir or cavern(s) in feet.

C6. Approximate Minimum Depth
Enter the approximate distance from ground level to the top of the reservoir or cavern(s) in feet.

Wells
Enter the number of wells in C7 through C23 as-of the end of the calendar year.

C7. Number of Injection and/or Withdraw Wells by Year Range Placed in Storage Operation
Enter the number of well(s) using the year each well was placed into storage operation or the year the well was re-completed with cemented tubing/casing for storage operation.

C8. Number of Monitoring and/or Observation Wells by Year Range Placed in Storage Operation
Enter the number of well(s) using the year each well was placed into storage operation or the year the well was re-completed with cemented tubing/casing for storage operation. Include Monitoring and/or Observation wells outside of the storage zone.

C9. Number of Wells drilled during the calendar year

C10. Wells plugged and abandoned during the calendar year

C10a. Number of wells re-plugged during the calendar year

C10b. Number of wells plugged but not abandoned during the calendar year. Do not report temporary bridge plugs in C10b.

C10c. Number of wells plugged and abandoned during the calendar year

Well Safety Valves

C11. Number of Wells with automated surface safety valves
Triggered valves are to be considered automated.

C12. Number of Wells with automated subsurface safety valves

Well Gas Flow

C13. Number of Wells with gas flow only through production tubing.
"Production tubing" is often referred to as "tubing-on-packer."

C14. Number of Wells with gas flow only through production casing

C15. Number of Wells with gas flow through both production tubing and production casing
"Production tubing" is often referred to as "tubing-on-packer."

C16. Number of Wells with some "other type" of gas flow
If greater than zero, enter text explaining the "other type" of gas flow through the well.

Well Maintenance

C17. Number of Wells with new production tubing installed during the calendar year
"Production tubing" is often referred to as "tubing-on-packer." Include wells where production tubing was replaced during the calendar year.

C18. Number of Wells with new production casing, new liner, or repairs to casing or liner during the calendar year

C19. Number of Wells with wellhead remediation or repair during the calendar year

C20. Number of Wells with casing, wellhead, or tubing leaks during the calendar year
Include leaks reported as incidents on form PHMSA F7100.2, "Incident Report – Natural and Other Gas Transmission and Gathering Pipeline Systems." A non-hazardous release that does not meet the incident definition and can be eliminated by lubrication, adjustment, or tightening is not a leak.

In C21 through C23, report the number of wells tested, regardless of the test results.

C21. Number of Wells with Pressure Test during the calendar year

C22. Number of Wells with Casing Evaluation for Corrosion/metal loss during the calendar year

C23. Number of Wells inspected using a downhole assessment method other than "Pressure Test" and "Casing Evaluation for Corrosion/metal loss" during the calendar year
If greater than zero, enter text describing the other assessment method(s). Sonar testing, nuclear logs, and noise/temperature logs are examples of other downhole assessment methods.

PART D – CONTACT INFORMATION

In D1 through D4, enter information about the person submitting the report. In D5 through D8, enter information about the person designated to answer technical questions about this report.