

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.

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

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 <http://www.phmsa.dot.gov/pipeline/library/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     INTRAsate

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*

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 Volume of natural gas ***withdrawn from the facility*** for calendar year (billion standard cubic feet (BCF)), include two decimal places: \_\_\_\_\_

B9. 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. Text identifying the indicator well: \_\_\_\_\_

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

\_\_\_\_\_

Reservoir or Geologic Storage Formation Depth

C5. Approximate Maximum Depth (feet): \_\_\_\_\_

C6. Approximate Minimum Depth (feet): \_\_\_\_\_

**Wells**

C7. Number of Injection and/or Withdraw Wells: \_\_\_\_\_

C8. Number of Monitoring and/or Observation Wells: \_\_\_\_\_

C9. Number of Wells drilled during the calendar year: \_\_\_\_\_

C10. Number of Wells plugged and abandoned during the calendar year:

**Well Safety Valves**

C11. Number of Wells with 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: \_\_\_\_\_

\_\_\_\_\_

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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 Mechanical Integrity Tests (MIT) during the calendar year:

C22. Number of Wells with Logged for Corrosion/wall loss MIT during the calendar year:

C23. Number of Wells with MIT other than "Pressure Test" and "Logged for Corrosion/wall loss" during the calendar year\*:

\* describe other MIT:

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 ??-201?) for PHMSA Form 7100.4-1 (rev ??-201?) 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 <http://www.phmsa.dot.gov/pipeline/library/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/PHMSAPortal2>, 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 [http://opsweb.phmsa.dot.gov/portal\\_message/PHMSA\\_Portal\\_Registration.pdf](http://opsweb.phmsa.dot.gov/portal_message/PHMSA_Portal_Registration.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/PHMSAPortal2>
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.

**Instructions (rev ??-201?) for PHMSA Form 7100.4-1 (rev ??-201?) UNDERGROUND NATURAL GAS STORAGE FACILITY ANNUAL REPORT FOR CALENDAR YEAR 20\_\_**

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.**

Instructions (rev ??-201?) for PHMSA Form 7100.4-1 (rev ??-201?) UNDERGROUND NATURAL GAS STORAGE FACILITY ANNUAL REPORT FOR CALENDAR YEAR 20\_\_

**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 commonly used by your company to identify the facility.

**B2. INTERstate or INTRAsate**

**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.).

**INTRAsate** 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. 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 – see <http://www.eia.gov/naturalgas/fieldcode/>.

**Gas Volumes**

**B5. Working gas capacity**

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

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**B6. Base (also known as Cushion or Pad) gas**

Enter the base gas volume 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. Volume of natural gas withdrawn from the facility for calendar year**

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

**B9. Volume of natural gas injected into the facility for calendar year**

Enter the 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 Name**

Enter the name used by your company to identify the reservoir or geologic storage formation.

**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 an indicator well for measuring pressure. Enter text identifying the indicator well for the reservoir or geologic storage formation in C4a. In C4b, enter the maximum surface pressure at the indicator well in pounds per square inch gauge (psig).

**Reservoir Depth**

**C5. Approximate Maximum Depth**

Enter the approximate distance from grade to the bottom of the reservoir or geologic storage formation in feet.

**C6. Approximate Minimum Depth**

Enter the approximate distance from grade to the top of the reservoir or geologic storage formation 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**

Instructions (rev ??-201?) for PHMSA Form 7100.4-1 (rev ??-201?)  
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**C8. Number of Monitoring and/or Observation Wells**

**C9. Number of Wells drilled during the calendar year**

**C10. Number of Wells plugged and abandoned during the calendar year**

**Well Safety Valves**

**C11. Number of Wells with 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.**

“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 Mechanical Integrity Tests (MIT) during the calendar year**

**C22. Number of Wells with Logged for Corrosion/wall loss MIT during the calendar year**



**Instructions (rev ??-201?) for PHMSA Form 7100.4-1 (rev ??-201?)  
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**C23. Number of Wells with MIT other than “Pressure Test” and “Logged for Corrosion/wall loss” during the calendar year**

If greater than zero, enter text describing the other MIT.

**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.