

# **Delaware Basin Midstream, LLC**

**OGRID: 314437**

**NGGS FACILITY ID: FAPP2122957910**

**NEW MEXICO OIL CONSERVATION DIVISION**

**OPERATIONS PLAN**

**COMPLIANCE TO PROVISIONS – 19.15.28.8.C(1)**

**EFFECTIVE DATE – MARCH 31, 2023**

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## 1.0 PURPOSE

The purpose of this Operations Plan, as required by Subsection C of 19.15.28.8 NMAC, is to document programs and policies that minimize the waste of natural gas throughout the Natural Gas Gathering System (NGGS) operated by Delaware Basin Midstream, LLC (Delaware Basin Midstream), Facility ID **fAPP2122957910**.

Delaware Basin Midstream will take all reasonable actions to prevent and minimize leaks and releases of natural gas from the NGGS, as highlighted in this Operations Plan.

Our top priority is keeping our employees, the public, and our assets safe from failures. It is the responsibility of all Delaware Basin Midstream employees and contract personnel to maintain and operate our pipelines and facilities in the safest and most prudent manner possible, using standard industry practices and internal policies as a guide. This directly aligns with the New Mexico Oil Conservation Division's (NMOCD) priorities of minimizing waste and protecting the environment.

Delaware Basin Midstream deploys a series of robust processes to monitor the status of, and ensure the integrity of, the NGGS. Multiple internal teams are involved in the operations of the NGGS including implementation of best practices for routine maintenance, cathodic protection, corrosion control, and integrity management.

It is Delaware Basin Midstream's policy to meet or exceed industry standards and PHMSA/DOT and State regulations when designing, constructing, testing, and inspecting all new pipeline and pipeline facility installations, whether or not these facilities are deemed to be regulated by one of these regulatory agencies.

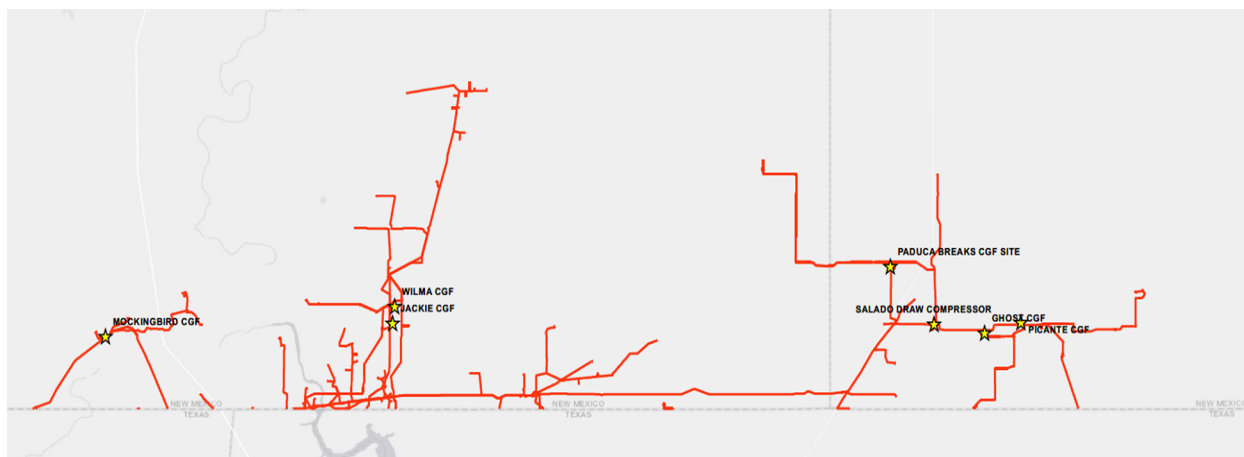
## 2.0 SYSTEM OVERVIEW

### 2.1 Description of the Gathering System

Delaware Basin Midstream operates a NGGS (fAPP2122957910) in Lea and Eddy Counties, in Southeast New Mexico, proximate to the Texas/New Mexico state line. The NGGS consists of a series of interconnected carbon steel, polyethylene, and fiberglass gas gathering pipelines, compressor stations, and aboveground appurtenances. Specifically, the NGGS is comprised of:

- Approximately 157.94 Miles of gas gathering pipeline
- 7 Surface Facilities
  - Ghost CGF
  - Jackie CGF
  - Mockingbird CGF
  - Paduca Breaks CGF
  - Picante CGF
  - Salado Draw CGF
  - Wilma CGF

An overview map of the system and associated facilities is provided below.



Additional details can be found in the As-Built GIS Submittal for NGGS fAPP2122957910.

### 2.1.1 High and Low Pressure Gathering

Delaware Basin Midstream operates approximately 157.94 miles of high and low pressure natural gas gathering pipeline in southeast New Mexico. The system is comprised of:

- Approximately 38 Miles of high-pressure gas pipeline; and
- Approximately 119 Miles of low-pressure gas pipeline.

Portions of the NGGS are designed to operate at either high or low pressures. In certain circumstances, these pipelines may be converted from high pressure to low pressure or vice versa. If a conversion occurs, standard industry and internal practices shall be followed to ensure safe operating conditions. Delaware Basin Midstream performs a management of change (MOC) review prior to any conversion.

### 2.2 PHMSA/NMPRC Regulated/Non-Regulated Lines

Delaware Basin Midstream operates approximately 157.94 miles of Class I, gas gathering pipeline in Southeast New Mexico.

Delaware Basin Midstream does not operate regulated gathering pipelines in New Mexico.

### 2.3 Sweet/Sour Natural Gas

Delaware Basin Midstream gathers gas throughout southeast New Mexico from various third-party producers.

The gas gathered in Lea and Eddy counties is generally considered sweet gas and contains minimal H<sub>2</sub>S concentrations.

### 2.4 Aboveground and Buried Pipelines

Except for surface facilities, valves, and other appurtenances, the NGGS is comprised entirely of buried pipelines.

### 2.5 Age of Pipelines and Facilities

The majority of pipelines in the NGGS were installed between the 1980's and 2020's; however, in some instances, where pipeline assets have been acquired, an exact install date is not available.

Compressor stations were installed in the 2010's and 2020's.

All Pipelines and Facilities in the NGGS, regardless of install date, are subject to the programs outlined in this Operations Plan.

## **2.6 Construction Materials**

The NGGS contains steel, polyethylene, and fiberglass pipelines.

## **3.0 ROUTINE OPERATIONS AND MAINTENANCE**

### **3.1 Physical Pipeline Marking and Identification**

Line markers are placed and maintained as close as practical over each buried regulated pipeline to identify the location of the pipeline and reduce the possibility of damage or interference

Any damaged or missing line markers are repaired or replaced as soon as possible.

Delaware Basin Midstream also participates in the New Mexico 811 One Call program and supports calling before digging. In accordance with state, local and federal guidance (law), Delaware Basin Midstream registers all gas gathering pipelines through the state's one call program

### **3.2 Pipeline Integrity**

To aid in the prevention and minimization of leaks and releases of natural gas, the Delaware Basin Midstream asset integrity program adheres to standard industry and internal practices. This program includes, but is not limited to, internal and external corrosion control, leak detection, inspection program, and testing and repair programs.

Delaware Basin Midstream employs a team of engineers and operations personnel who design and operate gas gathering pipelines and facilities to ensure their integrity. Delaware Basin Midstream also employs an inspection and testing program when facilities and pipelines are constructed and throughout the life of the equipment.

To maintain pipeline integrity through the usable life, pipelines are initially buried with a minimum ground cover of 36".

#### **3.2.1 Routine Pipeline and Facility Inspections**

##### Pipelines

Pipeline inspections are performed on an annual basis via either AVO inspection, advanced leak detection and repair technology, or aerial detection.

The results of these inspections are recorded and will be kept on file for a period of five years.

Valves are periodically inspected by qualified personnel to ensure they are in good condition and functioning properly.

## Facilities

Weekly AVO inspections are performed on compressors, dehydrators and treatment facilities associated with the NGGS.

This includes, but is not limited to, comprehensive external visual inspection, listening for pressure and liquid leaks and smelling for unusual and strong odors.

The results of these inspections are recorded and will be kept on file for a period of five years.

### **3.3 Pipeline Pigging**

Delaware Basin Midstream utilizes a pigging program to proactively ascertain pipeline integrity as required through industry and internal standard practices. The company performs pigging operations to clean liquids from HP and LP systems to prevent potential corrosion points. Periodic pigging allows Delaware Basin Midstream to move liquids to processing stations that are intended to handle liquids, thus removing them from the pipelines.

#### **3.3.1 Schedule**

The Delaware Basin Midstream operations team manages a pigging schedule and is responsible for adhering to the internal standard practices. Each line is analyzed by a cross-functional team and is assigned a schedule. Depending on the specifics of the gathering line, the frequency of pigging will range from daily to quarterly.

#### **3.3.2 Pigging Types and Applications**

The company uses different types of pigs depending on the type of launchers and receivers currently installed in the field. Examples include cup pigs, foam pigs, sphere pigs, or foam brush pigs. In some instances, 'smart pigs' are used to proactively analyze internal corrosion and wall thicknesses. The type of pig used is determined by the nature of the pigging operation that will be performed on the gathering line.

### **3.4 Pipeline and Facility Maintenance Program**

Delaware Basin Midstream administers a routine maintenance program that is consistent with industry standard practices for gas gathering pipelines and associated facilities. The routine maintenance program is currently employed by all facilities and pipelines in New Mexico. The intent of the program is to identify leaks proactively and to minimize waste of natural gas.

Key elements of the routine maintenance program include:

- Pigging
- Chemical Program
- Continuous remote monitoring via the central command center

If any abnormalities are discovered, an investigation occurs, and issues are addressed quickly and safely to minimize waste.

#### **3.4.1 Depressurization Procedures**

Natural gas produced during pipeline and compressor station depressurization will be flared rather than vented, whenever it is both safe and technically feasible.

When flaring is technically infeasible or poses a risk to safe operations or personnel or public safety, minimal venting will occur.

In certain cases, the operator can connect the HP gas to the LP system and transfer gas until equalization. The remaining gas will be flared, when technically feasible and safe to do so.

### **3.4.2 Cathodic Protection/Anode Installation**

Delaware Basin Midstream utilizes cathodic protection with industry recommended anodes to prevent corrosion to the pipeline system. The cathodic protection program is explored in greater detail in the forthcoming sections.

## **4.0 Pressure Testing**

Per industry and internal standard management practices, pressure testing is conducted immediately prior to placing a line into service or returning a line to service following replacement or repair.

Pressure testing will comply with standard industry practices, as appropriate.

## **5.0 CORROSION CONTROL, CATHODIC PROTECTION, AND LIQUIDS MANAGEMENT**

Corrosion of pipeline infrastructure or within gas processing facilities can lead to waste. Delaware Basin Midstream utilizes internal and industry standard practices to minimize corrosion. There are multiple programs in place which may be deployed to minimize corrosion in pipelines and facilities.

### **5.1 Corrosion Control**

A team of engineers and operations personnel are employed to create and carry out the procedures of the corrosion control program.

There are multiple programs in place to minimize corrosion in pipelines and facilities. The following items and descriptions are examples that may be utilized to prevent corrosion, to preserve the resource, and prevent waste.

- External Corrosion Control – pipelines will be coated according to industry and internal standard practices to resist external corrosion. Coatings applied could either be insulating or conductive depending on the purpose of the external corrosion control.
- Electrical Isolation - underground infrastructure may be designed to be electrically isolated from other underground metallic structures unless to be cathodically protected holistically. Insulating devices shall be inspected and tested per internal standard practices.
- Encroachment Monitoring – assets will be continually monitored for any encroachment that poses a risk of electrical interference and developers will be engaged proactively to maintain integrity of buried pipelines.
- Atmospheric Corrosion Control – any gathering line exposed to atmosphere will be periodically evaluated and inspected for corrosion to ensure integrity. These segments of



pipeline will be inspected for pitting, flaking, or loss of wall thickness at a given interval based on industry and internal standard practices.

- Internal Corrosion Control – Remedial measures shall be taken to mitigate internal corrosion. These measures may include the use of inhibitors and biocides and will be deployed to ensure pipeline integrity. Pipelines are designed to minimize liquid collection and include liquid removal features.

If internal or external corrosion of a pipeline requires remedial action, an investigation will occur, and issues addressed quickly and safely to minimize waste.

Additional details regarding Delaware Basin Midstream's Cathodic Protection Program are provided in the following section.

#### **5.1.1 Cathodic Protection**

Delaware Basin Midstream has a robust cathodic protection program.

Where applicable, and according to internal and industry standard practices, coatings supplemented with cathodic protection is used as the main method of external corrosion control for below ground metallic assets. The cathodic protection program is employed on a case specific basis, as necessary, to minimize corrosion. Delaware Basin Midstream uses standard practices for corrosion control including a rectifier/ground bed system and/or sacrificial galvanic anodes. These systems are routinely inspected to ensure their proper operation and to verify adequate protection.

#### **5.1.2 Installation on New Pipelines**

Where applicable, and according to internal and industry standard practices, cathodic protection is considered and routinely installed on new pipelines.

#### **5.1.3 Installation or Retrofit on Existing Pipelines**

Should corrosion be detected on an existing pipeline, the team will evaluate the need for installation of new or additional corrosion control mechanisms, including but not limited to, cathodic protection.

#### **5.1.4 Monitoring and Testing of Cathodic Protection System**

As applicable, rectifiers are tested and inspected at specified intervals to ensure they are functioning properly.

### **5.2 Chemical Treatments**

Per internal and industry standard practices, chemical treatments are conducted on an as-needed basis.

### **5.3 Fluid Management – Centralized vs. Field Dehydration**

There are liquids that separate from gas when gathering natural gas through the gathering system. To effectively and efficiently separate the gas stream to preserve as much of the resource as possible, the following best practice is employed:

As the gas stream enters a compressor station, liquids are separated from the gas at the inlet. Liquids are separated into gas, water, and hydrocarbons. The gas enters the compressor downstream of the

separator. From the separator, water is routed to closed top tanks. Hydrocarbons are routed to the compressor station discharge line. The gas and hydrocarbons remain fully contained in the pipe and are routed downstream.

#### **5.4 Tank Operations and Maintenance**

All tanks are operated and maintained in accordance with applicable state and federal regulations with regards to emissions limits and control requirements.

Internal and industry standard practices are utilized for liquids management to proactively identify emission sources and address any findings quickly and safely to minimize waste of the resource.

Weekly AVO inspections are performed on facilities associated with the NGGS to quickly ascertain the source of any waste.

### **6.0 PROCEDURES TO REDUCE VENTING AND FLARING**

Delaware Basin Midstream has an obligation to minimize waste and will resolve emergencies and malfunctions as quickly and safely as is technically feasible.

#### Venting and Flaring of Natural Gas

Natural Gas will be vented or flared only as authorized in Subsection B of 19.15.28.8 NMAC.

Natural gas will be flared rather than vented except when flaring is technically infeasible or would pose a risk to safe operations or personnel safety and venting is a safer alternative than flaring.

#### Design of New Facilities

Per Subsection C of 19.15.28.8, facilities constructed after May 25, 2021, will be designed to minimize waste.

#### Gas Capture Requirements

Delaware Basin Midstream will utilize standard industry practices and internal subject matter experts to design and operate pipelines and facilities to minimize leaks and releases from the NGGS.

Beginning April 1, 2022, a Gas Capture Rate will be calculated and reported. Every effort will be made to reach the 98% gas capture target identified in Subsection A of 19.15.28.10 NMAC.

It is in the operator's best interest to keep gas in the closed system and not allow waste.

#### **6.1 During Maintenance**

During scheduled or unscheduled maintenance, replacement, or repair of a new or existing NGGS, to the extent that it is technically feasible and would not pose a risk to safe operations or personnel safety, natural gas will be routed to a portable flare stack which complies with the flare stack standards, inspection, and recordkeeping in Subsection E of 19.15.27.8 NMAC.

#### **6.2 Reporting of Scheduled Maintenance and Emergencies to Upstream Operators**

In the event of scheduled maintenance, replacement or repair of a NGGS, Delaware Basin Midstream will provide written notification to each upstream operator whose natural gas is gathered by the system. The written notification will include the date and expected duration that the system will not gather natural gas.

In the event of an emergency or malfunction, or the need for unscheduled maintenance, Delaware Basin Midstream will provide verbal notification to each upstream operator whose natural gas is gathered by the system. The verbal notification will be issued as soon as possible, but no more than 12 hours after discovery of the emergency, malfunction, or need for unscheduled maintenance, and will include the date and expected duration that the system will not gather natural gas. Written notification will follow within 24 hours of discovery and will include the date, time, person, and telephone number to whom verbal notification was given.

Delaware Basin Midstream will make and keep a record of all notifications to upstream operators for no less than five years.

### **6.3 Emergency Response Plan**

#### **6.3.1 Source Elimination**

Delaware Basin Midstream will resolve emergencies and malfunctions as quickly and safely as possible. The company has emergency response plans on file as required by local, state, and federal agencies.

#### **6.3.2 Reporting to Regulatory Agencies**

As applicable, all spills and releases will be reported in accordance with local, state, and federal law.

## **7.0 DOCUMENT REVIEW AND UPDATE**

This document will be reviewed annually in first quarter of the calendar year and provided to the division by March 31<sup>st</sup> if new gathering pipelines are added or the plan is determined to be substantially different than the original plan submitted on March 31, 2023.

This document was last reviewed and updated on March 31, 2023.

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**District IV**  
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Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

QUESTIONS  
  
Action 202614

QUESTIONS

Operator:  DELAWARE BASIN MIDSTREAM, LLC 9950 Woodloch Forest Drive The Woodlands, TX 77380	OGRID:  314437
	Action Number:  202614
	Action Type:  [NGGS] NGGS Operations Plan (NGGS-OP)

QUESTIONS

Verification	
Does the operator own the selected facility	Yes
Is the selected facility a natural gas gathering system	Yes

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

ACKNOWLEDGMENTS  
  
Action 202614

ACKNOWLEDGMENTS

Operator: DELAWARE BASIN MIDSTREAM, LLC 9950 Woodloch Forest Drive The Woodlands, TX 77380	OGRID: 314437
	Action Number: 202614
	Action Type: [NGGS] NGGS Operations Plan (NGGS-OP)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Gathering System Operations Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
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