



## **Stormwater Management Plan**

Date: 5/15/2025

Location: Brahman OGD / Bodacious State F33-10 Pad

Legal Description: NWSE Section 33, Township 5 North, Range 65 West, 6<sup>th</sup> P.M., Weld County, Colorado

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## 1. Plan Administration

- 1.1. Introduction.** This Stormwater Management Plan (SWMP) covers construction activities within a permitted area of the Denver-Julesburg Basin during the Bodacious State F33-10 Pad (Bodacious Pad) construction, which will occur within this permitted area. The Bodacious Pad will consist of eighteen (18) proposed horizontal wells and produce to the Maximus State G04-11 Multi production facility. The anticipated operations schedule is provided below.

Phase	Duration (days)	Estimated Start Date
Construction (Daylight Only)	143 days	3rd Quarter 2026
Drilling	93 days	4th Quarter 2026
Completion	74 days	1st Quarter 2027
Flowback	N/A	Flowing back directly to permanent facility
Production	30 years	2nd Quarter 2027
Interim Reclamation (Daylight Only)	24 days	3rd Quarter 2027

The Energy and Carbon Management Commission (ECMC) requires operators to develop and implement an SWMP detailing practices to manage and inhibit contaminated stormwater generation and runoff. Noble has prepared this document to satisfy the requirements of ECMC Rule 304.c.(15) to develop a site-specific SWMP, consistent with the requirements of ECMC Rule 1002.f., to accompany the Form 2A in order to demonstrate the Commission's Rules for the operation of the proposed oil and gas location in a manner that is protective of and minimizes adverse impacts to public health, safety, welfare, the environment, and wildlife resources.

Control measures (CMs), formerly known as best management practices (BMPs), will be employed in accordance with good engineering, hydrologic, and pollution control practices in order to prevent pollution in stormwater discharges associated with the construction of the subject facility. All information and conditions represented herein are estimated and intended as a preliminary plan. Actual placement of CMs, etc. may deviate from the preliminary plan based on actual conditions discovered in the field and updates will be made accordingly.

## 1.2. Plan Availability

The Colorado Department of Public Health and Environment (CDPHE) SWMP Permit (Permit) requires this plan be provided upon request to any agency (CDPHE, ECMC, local authority, etc.) with the authority to oversee erosion control, stormwater practices, or related construction activities. A signed certification statement must accompany agency submittals. Additionally, SWMPs must be available to the public in accordance with Colorado Department of Public Safety (CDPS) regulations. In the event of public requests, Noble retains the right to claim any portion of the SWMP confidential.

## 1.3. Qualified Stormwater Manager

This SWMP will be implemented and executed by Qualified Stormwater Managers (QSMs). The Permit defines a QSM as:

“An individual knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and with the skills to assess conditions at construction sites that could impact stormwater quality and to assess the effectiveness of stormwater controls implemented to meet the requirements of this Permit.”

Noble will utilize QSMs as appropriate to conduct stormwater inspections, reporting, and maintenance. Overall SWMP implementation, however, is the responsibility of the Administrative QSMs. The Administrative QSMs are responsible to ensure the SWMP is fully implemented, and coordinates/delegates SMWP related activities.

The following individuals has been designated Administrative QSMs:

<b>Name</b>	<b>Title</b>	<b>Phone</b>	<b>Email</b>
Phillip Porter	Environmental Team Lead	(303) 597-6847	Phillip.porter@chevron.com
Kirsten Martin	Reclamation Advisor	(970) 473-0022	Kirsten.martin@chevron.com

QSMs will work under the direction of the Administrative QSMs and may include both Noble employees and consultants/contractors. Routine tasks undertaken by QSMs will include:

- Conducting inspections;
- Coordinating the construction of control measures (CMs);
- Coordinating CM repairs, corrective actions, and/or maintenance;
- Agency reporting and coordination; and
- Recordkeeping.

#### **1.4. Spill Prevention and Response Plans**

Prompt and effective spill response practices will be used at Noble locations. Some locations qualify for Spill Prevention Control and Countermeasure (SPCC) Plans under 40 Code of Federal Regulations (CFR) Part 112, and applicable SPCC plan requirements and obligations are incorporated by reference. Spill response guidance, including agency and chain of command reporting, is included as Appendix A.

#### **1.5. Plan Review and Revision**

This SWMP is intended to be a “living” document, updated as site conditions evolve and/or CMs are found inadequate. SWMP changes/revisions must be documented, including the date and a modification description. The types of changes that should be captured, include:

- A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised CMs;

- The SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
- Control measures identified in the SWMP are no longer necessary and are removed; and
- Corrective actions are taken on-site that result in a change to the SWMP.

Changes to practices described in this SWMP will be recorded on the *Plan Modification Record* page at the front of this document. Due to the large number of locations monitored at any given time, site conditions at individual disturbance locations are documented using an electronic database (SWMPcompliance.com). The database is used to document site-specific CMs, ineffective CMs or corrective actions, and inspections are recorded in the database. The database is updated routinely in coordination with the SWMP inspection program (Section 5).

## 1.6. Plan Retention

The master SWMP document will be stored electronically in the Noble network. Individual copies of the SWMP will be distributed to QSMs, as well as other groups (e.g., Production, Operations, etc.) as warranted. Records associated with SWMP activities – including inspections, maps, maintenance records, etc. – must be kept a minimum of 3 years following Permit termination or expiration.

## 2. Site Description

### 2.1. Nature of Construction Activities

The total initial and long-term surface disturbance from construction of the Bodacious Pad oil and gas location is summarized below. The proposed working pad surface will be approximately 6.5 acres.

<b>Bodacious Pad</b>	<b>Initial Disturbance (acres)</b>	<b>ECMC Long-Term Disturbance (acres)</b>	<b>WOGLA Long-Term Disturbance (acres)</b>
Oil and Gas Location	10.9	2.1	3.3
Access Road	2.4	1.8	1.8
Flowline Corridor	14.7	0.0	0.0
<b>Total</b>	<b>28.0</b>	<b>3.9</b>	<b>5.1</b>

Generally, oil and natural gas operations encompasses three distinct work phases: building infrastructure/drilling and completions (construction phase), operating facilities (production phase), and plugging/abandoning/reclaiming (abandonment phase). Ground-disturbing work is typically limited to the construction and abandonment phases.

Typical activities where ground disturbance may occur include:

- Well pad or facility construction;
- Flowline installation;
- Access road development; and

- Reclamation.

## 2.1.2 Long-Term Stormwater Management and Final Stabilization

Long-term stormwater management and final stabilization are achieved through reclamation practices. Reclamation activities include site grading, preparation, and revegetation that inhibits stormwater runoff and promotes surface stabilization. Together, these practices stabilize disturbed soils until the location meets CDPHE and ECMC Final Stabilization criteria. CDPHE's *Fact Sheet for Modification, 1 Permit Number COR400000, GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY* defines Final Stabilization as:

*"The condition reached when construction activities at the site have been completed, permanent stabilization methods are complete, and temporary control measures are removed. Areas being stabilized with a vegetative cover must have evenly distributed perennial vegetation. The vegetation coverage must be, at a minimum, equal to 70 percent of what would have been provided by native vegetation in a local, undisturbed area or adequate reference site."*

Additionally, CDPHE determines that Final stabilization is reached when (1), (2), and (3) below are complete:

- (1) All construction activities are complete.
- (2) Permanent stabilization methods are complete. Permanent stabilization methods include, but are not limited to, permanent pavement or concrete, hardscape, xeriscape, stabilized driving surfaces, vegetative cover, or equivalent permanent alternative stabilization methods. The division may approve alternative final stabilization criteria for specific operations. Vegetative cover must meet the following criteria:
  - a. Evenly distributed perennial vegetation, and
  - b. Coverage, at a minimum, equal to 70 percent of what would have been provided by native vegetation in a local, undisturbed area or adequate reference site.
- (3) The permittee must ensure all temporary control measures are removed from the construction site once final stabilization is achieved, except when the control measure specifications allow the control measure to be left in place (i.e. biodegradable control measures).

In order to satisfy these requirements, locations must be contoured to minimize erosions, seeded, and CMs installed. However, locations must be monitored and maintained until Final Stabilization is achieved. Locations will be routinely inspected and repaired as needed as the location progresses to satisfactory revegetation. Inspection and maintenance practices are described in Section 5.

Once a location has achieved Final Stabilization, CDPHE coverage is no longer required. The site may, however, still require stormwater management under ECMC's 1000 Series rules. In these instances, Noble has prepared and implemented a Post-Construction SWMP for the DJ Basin Core (COR-403291) Operations. The Post-Construction SWMP outlines procedures for

maintaining stormwater compliance per ECMC regulations and is independent of the CDPHE Permit.

## **2.2. Sequence of Major Construction Activities**

As noted in the previous section, oil and natural gas operations occur across three general work phases: construction, production, and abandonment. The general construction sequence is as follows:

- (1) Site clearing/grubbing;
- (2) Site excavation and location construction;
- (3) Well drilling and completion (well pads);
- (4) Installation of equipment, utilities, and appurtenances (well pads and facility pads);
- (5) Stabilization, reclamation, and long-term stormwater management

Table 1 provides a summary of CMs used through construction activities, and Table 2 details structural controls specific to the phases described in the following subsections. CM implementation is discussed in Section 4.

For stormwater management and compliance purposes, construction sites have been divided into four stormwater stages: Construction, Completed, Interim Stabilization, and Final Stabilization. This classification allows for alignment of CDPHE and ECMC stormwater and reclamation regulations specific to oil and gas development. The following sections define individual stormwater stages and their respective activities. Details regarding inspection frequency at these locations is presented in Section 5.

### **2.2.1 Construction Stage**

The Construction Stage includes activities associated with infrastructure development from initial pad clearing through interim reclamation. The typical construction sequence includes site clearing/grubbing; site excavation, material import, construction, and compaction; well drilling and completion; installation of equipment, utilities, and appurtenances; and pad minimization through material export, recontouring, and decompaction. Well pads, production facilities, flowlines, and roads are built during this phase. CMs are installed prior to beginning construction activities. Temporary structural controls are installed prior to disturbance work, while permanent structural CMs are installed as applicable during construction.

### **2.2.2 Completed Stage**

Once the site has been built and construction activities have ceased, either temporarily or permanently, and the permanent CMs have been installed and determined adequate, the location progresses to the Completed Stage. Locations in the Completed Stage have not been revegetated. Activities normal to the Completed Stage include routine production work (liquids hauling, routine location maintenance, etc.). Ground-disturbing activities are uncommon during this stage.

### **2.2.3 Interim Stabilization Stage**

Site activities during the Interim Stabilization Stage are similar to the Completed Stage. However, to progress to the Interim Stabilization Stage, the location must meet the site preparation requirements for interim reclamation in accordance with ECMC 1000 series rules. This includes that the site has no further disturbance activities ongoing or planned, disturbed surfaces have been built on, compacted, covered/paved or otherwise stabilized, and the location has been seeded. Temporary and permanent CMs may be employed. Locations remain in the Interim Stabilization phase, including requirements for inspections and maintenance, until Final Stabilization criteria are met.

### **2.2.4 Final Stabilization Stage**

As defined in Section 2.1.1, CDPHE considers a location to have achieved Final Stabilization when that site has met the interim reclamation preparation requirements and has achieved vegetative cover equal to or exceeding 70% of pre-disturbance coverage. Croplands, however, are exempt from the 70% coverage requirement. Sites built in cropland may progress to Final Stabilization as long as construction activities have been completed, have been prepared in accordance with ECMC Rule 1003.e, and have been returned to agricultural use.

Although they will undergo abandonment and reclamation following its productive lifespan, producing oil and gas sites are considered finally stabilized under CDPHE requirements once site conditions meet the criteria above. Accordingly, CDPHE Permit coverage may be terminated at locations meeting CDPHE's final stabilization requirements. However, as long as the site is in production, annual inspections will be performed per ECMC requirements.

If a location has wells that are no longer economical to operate, they will be plugged & abandoned (P&A'd) and the location recontoured and reclaimed to pre-disturbance conditions and/or in accordance with the surface owner's wishes. When a well is P&A'd, the well head assembly is removed and the well permanently plugged downhole. All equipment associated with the well is removed from the location unless the equipment is also used by other wells on the pad or in the area. Flowlines may be re-routed or abandoned as necessary.

Once all equipment has been removed from a location and any associated wells are P&A'd, the location and associated access roads will be recontoured and reclaimed to pre-disturbance conditions and/or in accordance with the surface owner's wishes. Rock surfacing on the pad and access roads will be removed for beneficial re-use or offsite disposal. Topsoil will be respread following recontouring and decompaction to pre-disturbance conditions. All culverts, cattle guards, or other extractable structural CMs will be removed and either reused at new construction sites, recycled as scrap, or disposed of as solid waste. Once the location is recontoured, topsoil is reapplied across the location in preparation for seeding. The reclamation is monitored until ECMC requirements are met and the location is cleared for final reclamation.

## **2.3. Total Disturbance Area**

As depicted within Section 2.1, the total initial proposed disturbance area for the Bodacious Pad, including access roads and flowline corridors, is 28.0 acres. The ECMC long-term disturbance during the production phase will be 3.9 acres, once interim reclamation is complete. The permitted fieldwide DJ Basin Core (COR-403291) boundaries are shown on

Figure 1. The disturbed area is recorded in the SWMP Comp database as a component of routine inspections (see Section 5).

#### **2.4. Soil Description**

To determine anticipated site characteristics for the project site, Geographic Information System (GIS) data from the Natural Resource Conservation Service (NRCS, <http://websoilsurvey.nrcs.usda.gov/app/>) along with aerial photography was overlain on the site proposed disturbance boundary to derive potential ecological site descriptions (ESDs) and NRCS soil map units. A desktop review of the proposed project area indicates the presence of the following soil types at the oil and gas location:

- 1 - Altvan loam, 0 to 1 percent slopes.

#### **2.5. Vegetation Description**

The location is zoned as Agricultural and is currently used for irrigated crop. The location will be returned to cropland following interim reclamation.

#### **2.6. Receiving Waters and Stream Crossings**

The nearest downgradient surface water feature is an irrigation ditch location 1,054 feet southeast of the working pad surface (WPS) of the location.

Nearest water body information also can be viewed at following website:  
[https://cogccmap.state.co.us/cogcc\\_gis\\_online/](https://cogccmap.state.co.us/cogcc_gis_online/).

#### **2.7. Non-Stormwater Discharges and Construction Dewatering**

Except in specific circumstances, the Permit does not cover non-stormwater discharges from permitted locations. A non-stormwater discharge is considered any discharge from the facility that is not entirely composed of rainfall/snowmelt. Non-stormwater discharges that are permissible under the permit include:

- Discharges from uncontaminated springs that do not originate from an area of land disturbance;
- Discharges to the ground of concrete washout water associated with the washing of concrete tools and concrete mixer chutes. Discharges of concrete washout water must not leave the site as surface runoff, or otherwise reach receiving waters; and
- Discharges of landscape irrigation return flow.

Incidental construction dewatering, which is classified as a non-stormwater discharge, may occur at Noble Energy construction locations. CDPHE has implemented a separate low-risk dewatering guidance which enables groundwater dewatering discharge under specific circumstances. Prior to conducting dewatering activities, locations will be assessed to determine if they meet the low-risk criteria. Appropriate controls and procedures must be implemented prior to discharge. When dewatering activity that does not meet low-risk discharge criteria, Noble Energy will apply for a separate construction dewatering permit from

the state, as required. Should dewatering take place, appropriate CMs will be implemented to prevent erosion or other contamination.

### **3. Identification of Potential Pollution Sources**

#### **3.1. Potential Pollution Source Assessment**

Stormwater pollutants may include any potentially detrimental material capable of offsite transport when mobilized by precipitation or wind. Generally, potential stormwater pollutant sources in oil and gas operations include soil disturbance, bulk storage, and operation and maintenance activities. Typical pollutants associated with these activities are sediment (resulting from site erosion) and so-called significant materials. The Permit defines significant materials broadly as materials that have the potential to be released with stormwater discharges and includes raw materials, fuels, solvents, fertilizers, pesticides, hazardous substances, and waste products.

The Permit requires a detailed assessment of potential site pollutant sources. Specifically, the following sources must be evaluated:

- Disturbed and stored soil;
- Vehicle tracking controls;
- Management of contaminated soil;
- Loading and unloading operations;
- Outdoor storage activities;
- Vehicle and equipment maintenance and fueling;
- Dust- or particulate-generating processes;
- Routine maintenance activities;
- On-site waste management practices;
- Concrete truck washing/equipment washing;
- Dedicated asphalt/concrete batch plants and masonry mixing stations; and
- Non-industrial waste sources.

The following subsections detail potential pollutant exposure resulting from these individual sources. Additionally, a summary of pollutant source applicability and corresponding mitigating CMs is presented in Table 3.

##### **3.1.1 Disturbed and Stored Soils**

During initial location construction and during reclamation, activities will include significant soil-

disturbing activities, which may introduce erosion as a potential pollutant source. Soil disturbance will also occur during site reclamation activities. Additionally, topsoil and/or overburden may be stored on site, intended for post-abandonment reclamation.

### **3.1.2 Vehicle Tracking Controls**

Locations are anticipated to experience offsite traffic during both construction and routine production operations. Accordingly, offsite tracking of sediment may pose stormwater pollution potential.

### **3.1.3 Management of Contaminated Soils**

During both construction and routine production activities, significant materials may be present. Incidental spills of these materials would conceivably generate contaminated soils. Contaminated soils may subsequently be stored in stockpiles on-site to await characterization and either treatment or disposal.

### **3.1.4 Loading and Unloading Operations**

Outdoor loading and unloading activities occur during construction, well drilling, well completion, and production activities. This includes loading/unloading of significant materials. Well drilling and completion materials are unloaded from trucks into site tanks or directly into the well. During construction, on-site fuel tanks may be refilled as needed.

Spills during these processes may present potential stormwater pollutants. Similarly, outdoor non-petroleum chemical storage may occur at locations as part of routine operations and maintenance. These items may be restocked from bulk transport.

### **3.1.5 Outdoor Storage Activities**

Short-term and/or long-term outdoor significant material storage may occur at Noble locations, particularly at well pads or production facilities. Materials stored temporarily are generally associated with drilling and completion activities, while materials stored long term are associated with routine production activities (e.g., maintenance, operation, etc.). Materials stored outside are subject to good housekeeping and material handling CMs (Section 4.0) but may still be exposed to precipitation.

### **3.1.6 Vehicle and Equipment Maintenance and Fueling**

Noble may periodically conduct re-fueling operations on location. Equipment subject to on-site refueling includes dirt moving equipment, vehicles, and generators. Routine vehicle maintenance is typically not conducted on-site. However, in some instances such as breakdown, vehicle maintenance may need to occur on-site. Additionally, maintenance of well heads, separators, or other production equipment will be a routine occurrence during production. During these activities, lubricants, oils, fuels, and solvents may be spilled or otherwise exposed to stormwater.

### **3.1.7 Dust or Particulate Generating Processes**

Routine site traffic and/or site construction and excavations may produce dusty conditions,

depending on soil and weather conditions. Dust and particulate generation tend to occur in areas with fine soils, dry conditions, and high winds – conditions which exist in some portions of the Permit area.

### **3.1.8 Routine Maintenance Activities**

Once locations have been constructed and are fully operational, routine maintenance will be part of standard operations. Well heads, separators/treaters, etc. might all require routine maintenance. Equipment maintenance may include the use of solvents, lubricants, or other chemicals. Additionally, herbicides will be applied, as warranted, to control noxious weeds; however, they will not be stored in bulk on-site.

### **3.1.9 On-Site Waste Management Practices**

Waste generated at oil and gas facilities is generally classified as Exploration and Production (E&P) waste. E&P wastes generated at Noble sites may include drilling byproducts, completion waste products, tank bottoms, workover wastes, pigging wastes, and other common E&P waste. Wastes are managed according to applicable State and Federal regulations. Contaminated materials may be stored or stockpiled on-site during accumulation, treatment, or characterization activities. Although proper segregation practices will be used, potential for stormwater impacts exist.

### **3.1.10 Concrete Truck/Equipment Washing**

Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment, is not anticipated at the Bodacious Pad. Concrete is typically mixed in the drill hole and concrete truck/equipment washing is conducted offsite.

### **3.1.11 Dedicated Concrete and Asphalt Batch Plants and Masonry Mixing Stations**

Noble does not own or operate dedicated concrete/asphalt batch plants or masonry mixing stations located within the Permit area.

### **3.1.12 Non-Industrial Waste Sources**

During site construction when large numbers of workers may be present on a site, general rubbish (litter, packaging, etc.) may be generated as part of routine work. Similarly, during these activities, portable toilets may be present on-site to service field staff. Cleanup of trash and discarded materials will be conducted as needed. Although Noble requires both to be monitored, improper management may allow wastes to impact stormwater.

## **4. Stormwater Management Controls**

### **4.1. Control Measure Implementation**

The incidence of pollutants reaching State Waters may be reduced or eliminated through CM implementation at the Bodacious Pad. Noble utilizes two types of CMs to manage stormwater pollutants: structural CMs and nonstructural CMs. Structural CMs include physical barriers that prevent or minimize stormwater impacts. Nonstructural CMs are not physical devices and are implemented at the administrative or planning level. A summary of structural and non-

structural CMs used by Noble are shown in Table 1. Typically, a combination of structural and non- structural CM will be implemented at Noble construction sites. CMs will be selected according to potential pollutant sources and site-specific conditions. Table 3 summarizes potential pollutant sources and corresponding CMs. Site stormwater controls will be implemented based on best management practices, including structural and nonstructural controls, and will ultimately be stabilized for long-term operations. Structural and nonstructural CM practices are discussed in the following subsections, and a concise list of site-specific CMs (BMPs) that will be implemented at the location is provided in Section 6.1.

Physical CMs are intended to be used as part of a treatment train (consecutive CMs, working in tandem) that is both compliant with current rules and acceptable to the landowner. Operations specifically conducted within the boundaries of the DJ Basin Core (COR-403291) will utilize CMs specified in the CM manual.

#### **4.2. Structural Practices for Erosion and Sediment Control**

Structural practices are physical devices or barriers employed to reduce erosion, manage stormwater, or inhibit sediment transport. Site construction normally requires the removal of vegetative cover and topsoil, subsequently increasing peak flood flows, runoff velocity, and the total stormwater runoff volume. These factors contribute to increased runoff, erosion, and offsite sediment transport. Accordingly, the primary objective of structural controls is to inhibit erosion and sediment transport.

Structural CMs (formerly BMPs) broadly fit into two categories: erosion controls and sediment controls. Erosion control measures typically inhibit erosion through surface stabilization and reduced runoff velocities. Sediment control measures are hydraulic controls that promote deposition of suspended particles. Erosion control and sediment control measures are used in conjunction with one another. Common structural CMs implemented during various construction stages (Section 2.2) are shown in Table 2. Structural CMs will be implemented based on good hydraulic and engineering practices. Common structural CM practices include:

- Berm (B);
- Compost filter socks (Filtrexx or similar) sediment control logs (CFS);
- Culvert (C);
- Ditch/channel (D);
- Hydro-mulch (HM);
- Riprap (R);
- Sediment basins/detention ponds (SB);
- Seeding (S);
- Soil roughening (SR); and
- Vehicle tracking control (VTC).

In order to be effective, structural CMs must be properly installed/constructed and routinely maintained. Noble's CM Manual provides detailed specifications regarding CM construction and maintenance. Additionally, details regarding Noble's inspection and maintenance program are presented in Section 5.

#### **4.2.1 Detailed Structural Practices**

The following guidelines should be implemented, to the extent practicable, as minimum structural CMs. See Section 6.1 for a concise, comprehensive list of site-specific CMs.

- A sediment control log or perimeter berm will be installed along the boundary of the oil and gas location and maintained until final stabilization or until it is replaced by another approved CM.
- To prevent tracking of sediment off site, vehicle tracking controls should be installed at the start of work.
- Where conditions warrant, run-on will be diverted prior to reaching the pad.
- Stormwater leaving the site will encounter at least one treatment (sedimentation) CM prior to discharge.
- Culverts, discharge pipes, and emergency spillway outlets will be fortified with riprap or slope protection to prevent erosion.
- Erosion and sediment control CMs will be installed in conjunction. CDPHE and ECMC consider site erosion a violation of effluent limits, even if sediment is not transported off site. Sediment controls alone are not considered sufficient.
- During construction near perennial streams, lakes, wetlands, or other State Waters minimum vegetation requirements will be observed, as practicable.
- At stream crossings, 50' buffer areas should be maintained. On buffers, clearing, sod disturbances, excavation, and equipment traffic should be minimized.
- Activities such as stacking logs, burning cleared brush, discharging rainwater from trenches, welding pipe sections, refueling and maintaining equipment should be accomplished outside of buffers.
- Mulch with netting or erosion control mats will be installed on all slopes 3:1 and steeper and within 100' of special protection waters or 50' of surface waters.
- At landowner request, locations will be fenced to limit access to cattle and unauthorized travel. Fencing should include cattle guards (which may also serve as tracking controls).
- Structural CMs should be installed in accordance with the CM manual specification. CM manual available upon request.

### **4.3. Non-Structural Practices for Erosion and Sediment Control**

Nonstructural CMs are not physical CMs but may promote similar hydrologic effects as structural CMs (i.e., inhibiting runoff and erosion). They include a broad set of administrative practices that reduce potential stormwater impacts. Good waste management practices, good housekeeping, routine inspections/maintenance, good material handling practices, and construction phasing are all examples of nonstructural CMs. Non-structural practices are summarized in Table 1. The following subsections generally describe Noble's nonstructural CMs.

#### **4.3.1 Phased Construction and Vegetation Preservation**

Phased construction scheduling can limit the disturbed area exposed to stormwater at a given time. Using this practice, permittees perform construction/disturbance activities in a phased manner and only clear areas as when they intend to perform work in the near term (as opposed to clearing an entire development area at once). This approach reduces erosion from areas that may not be immediately scheduled for construction by allowing existing vegetative cover to reduce stormwater runoff.

Similarly, preserving existing vegetative cover when possible will reduce the area susceptible to erosion and reduce sediment transport. Construction practices should be implemented that preserve existing vegetation and limit unnecessary disturbances.

#### **4.3.2 Material Handling and Spill Prevention**

Significant materials that may be stored on-site include fuel and lubricants for construction equipment and vehicles, small quantities of paints and solvents, water- or gel-based drilling fluids used during well completion, concrete, produced water, and crude oil/condensate. Safety Data Sheets (SDS) for materials to be used or that are produced are maintained in Noble's online database or maintained on site. Significant materials should be limited to as-needed quantities for the immediate operations underway.

Materials management practices will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. This includes the use of drip pans, properly covering containers, and proper material storage (e.g., on pallets). Additionally, materials stored in bulk (i.e., exceeding 55 gallons) will have secondary containment or equivalent protection. Excess material that accumulates within secondary containment that comingles with stormwater will be removed when one-half ( $\frac{1}{2}$ ) of containment capacity is reached. All material removed from containment will be disposed of at an approved and permitted disposal facility.

Any unintentional release will be promptly reported according to Noble's Incident Reporting Procedure. Spills will be contained and cleaned up using approved spill procedures. If spill impacts warrant further attention, sites may also undergo remediation.

Stockpiled materials, such as topsoil or overburden, will have appropriate structural CMs installed. Most commonly, this will include surface roughening/vehicle tracking and/or tackifier application. Additionally, good segregation practices will be employed to prevent material comingling (e.g., topsoil segregated from overburden or contaminated materials segregated from clean materials).

### **4.3.3 Vehicle Tracking Control**

As described in Section 4.2, Noble will introduce structural CMs to mitigate vehicle sediment tracking. If these are found to be inadequate, Noble may introduce nonstructural CMs, such as street sweeping or surface stabilization, into the construction planning process.

### **4.3.4 Waste Management Practices**

Typical wastes generated at Noble project area construction sites include trash, portable toilet liquids, maintenance lubricants/liquids, drill cuttings, and flowback wastes. These wastes may be temporarily stored on location. Wastes will be properly stored on-site and prevented from comingling with stormwater or being blown offsite. Segregation techniques may include proper containerizing, berm/containment construction, or absorbent boom deployment. All collected waste will be properly characterized and, when practicable, it will be reused or recycled. All waste that is not reused or recycled will be disposed of at an approved and permitted disposal facility. Wastes generated at Noble facilities include multiple categories. Specific waste management practices for individual categories that may be stored on site are described in the following subsections.

#### **4.3.4.1 Non-Industrial Waste**

Non-industrial wastes include litter, package materials, shipping materials, food wastes, portable toilets, and all other general wastes. At Noble locations, trash is stored in covered dumpsters to limit stormwater contact and wind transport. Dumpsters are routinely emptied by a dedicated contractor and disposed of at an approved and permitted facility.

Portable facilities are anchored to prevent them from tipping over. These facilities are also emptied and maintained by a dedicated contractor on an as-needed basis. During stormwater inspections, portable facilities are checked for the presence of anchoring devices.

#### **4.3.4.2 Preventative Maintenance Waste**

Routine equipment maintenance during production activities may produce wastes. All routine maintenance lubricants/liquids (used or unused) 55 gallons or greater are kept in secondary containment. Used lubricants/liquids are removed from the site and disposed of at an approved and permitted facility.

#### **4.3.4.3 Exploration and Production Waste**

E&P wastes are wastes generated during exploration, development, or production at oil and gas sites. All E&P waste will be disposed of or recycled in accordance with ECOM 900 series rules and regulations.

#### **4.3.4.4 Non-Routine Waste Generation**

Periodically, non-routine wastes (such as tank bottoms) may be generated at a location. Non-routine wastes will be characterized and disposed of in accordance with applicable regulations.

### **4.3.5 Good Housekeeping**

Noble has implemented good housekeeping practices as part of routine operations.

Housekeeping CMs include procedures to promote regular cleaning, organization, and maintenance of temporary and permanent equipment, and routine maintenance of structural CMs. Conducting routine site inspections is a critical component of good housekeeping. Noble's inspection and maintenance program is described in Section 5.

The following good housekeeping practices are part of routine operations:

- Bulk storage containers 55 gallons or greater housed on-site for production operations are stored in secondary containment;
- Use of drip pans and or sorbent materials during vehicle maintenance or material handling;
- Properly cover/seal material containers;
- Conduct routine site inspections;
- Promptly address corrective actions identified during inspections;
- Maintain stormwater management structures and components;
- Routine trash collection and disposal;
- Properly labeling significant material containers;
- Promote quick spill response/clean up by familiarizing employees and contractors with spill cleanup procedures; and
- Familiarize employees and contractors with good housekeeping procedures and pollution prevention procedures.

## **5. Inspection and Maintenance Procedures**

### **5.1. Inspection Scope**

Routine inspections are conducted to evaluate the implementation, effectiveness, and condition of structural and nonstructural control measures. Inspections will be conducted by individuals trained to evaluate stormwater management practices and meeting the definition of a QSM (Section 1.3).

Inspections have four objectives:

- Visually verify structural CMs are installed and operating according to specifications;
- Identification of new or changing on-site pollutant sources;
- Assess the adequacy of structural and nonstructural CMs and identify areas requiring new or modified control measures to minimize pollutant discharges; and
- Identification of any areas of maintenance, non-compliance, and/or corrective actions.

Inspectors will document non-compliance conditions or maintenance items identified during inspections. Corrective actions and/or routine maintenance items identified during inspections will be addressed in a timely manner. Corrective actions and routine maintenance are discussed in Section 5.2. As a site evolves during the construction cycle, inspectors will document changes on reports and site figures, as warranted. Inspection report contents are detailed in Section 5.5.

During an inspection, inspectors should evaluate locations for pollutants leaving the site, or discharging to state waters. The Permit requires the following areas be inspected at each site:

- Construction site perimeter;
- All disturbed areas;
- Designated haul routes;
- Material and waste storage areas exposed to precipitation;
- Locations where stormwater has the potential to discharge offsite; and
- Locations where vehicles exit the site.

For stormwater compliance purposes, construction sites have been divided into stormwater inspection stages (Section 2.2): Construction, Completed, Interim Stabilization, and Final Stabilization. Under this SWMP, only Construction, Completed, and Interim Stabilization phase sites will be inspected. Once a site achieves Final Stabilization, Permit coverage for that site is terminated. The inspection schedule across the various construction phases is discussed in Section 5.3.

## **5.2. Preventative Maintenance and Corrective Actions**

During an inspection, inspectors may identify CMs that require maintenance. Generally, these CM repairs will fall into two categories: preventative maintenance and corrective actions.

Preventative maintenance repairs are those where the CMs are still performing adequately, but the CM requires proactive maintenance. An example of preventative maintenance would be clearing small amounts of sediment from a sediment trap. Individual CM maintenance requirements are detailed in the CM Manual. There is no mandatory Permit timeline for repair; however, preventative maintenance should be conducted as soon as practicable – otherwise the finding may move to a corrective action.

A corrective action, in contrast, is when a CM is found to have failed or would fail during the next rain event or is inadequate. Examples of corrective actions include a sediment log which has been overwhelmed (leading to sediment discharge) or sediment accumulating above acceptable levels identified in manufacturer specifications. Maintenance specifications are provided in the CM Manual. The Permit requires corrective actions to be repaired upon discovery and the permittee is noncompliant with the Permit until the corrective action(s) are resolved. Additionally, materials (e.g., sediment) leaving the site may need to be recovered. If immediate action on a corrective action is infeasible, Noble will document why it is infeasible and include a repair schedule.

Noble will manage repairs through its database system. Repair items identified during inspections will be captured in the database. Repair items will be summarized and sent to construction foreman or contractors for assignment. Contractors performing repairs subsequently document repairs as completed in the database, and repairs identified as completed are automatically rescheduled to undergo follow-up inspections.

### **5.3. Inspection Schedule**

Noble conducts routine site inspection from the start of construction through Final Stabilization. The Permit allows for varying inspection frequencies based on what construction stage the locations is currently in. For stormwater tracking and compliance, Noble has designated four stormwater stages: Construction, Completed, Interim Stabilization, and Final Stabilization. Project stages are described in Section 2.2.

ECMC does not specify frequency of stormwater inspections; however, Noble is bound to comply with CDPHE stormwater requirements until a location (non-crop) reaches 70% of original vegetation and enters the final stabilization stage. In the final stabilization stage, Noble continues to inspect the location on an annual basis to ensure sites are continuously monitored per ECMC 1000 series rules. The inspection frequencies discussed in the following subsections 5.3.1 to 5.3.5 meet both ECMC and CDPHE requirements for each stage of stormwater compliance.

Effective August 12, 2020, CDPHE granted the approval of an alternate inspection schedule only for locations that have been plugged and abandoned (P&A). The approval is limited to the construction activities identified in the applications on file for permit certifications COR403291, COR403294, COR403293.

When evaluating locations for “elevated risk,” two primary factors will be considered: slope and proximity to State Waters.

- Locations with slopes greater than or equal to 3:1 slope will be categorized as increased risk locations.
- Locations within 500 feet of a spring, stream, wetland, municipal system, other State Waters will be considered increased risk. This distance is based on ECMC Tier 1 stormwater criteria and was selected to maintain alignment with ECMC rules.

Under the alternative inspection schedule, inspection frequency would be based on risk categorization. Locations will be assigned to one of two categories for initial inspections: “standard sites” or “elevated risk.” Additionally, inspection frequencies would be increased on an individual basis at locations where corrective actions have been observed (corrective actions will be addressed as required in the LCGP). Under this approach, inspections would be completed at the following frequencies:

- Bi-annual inspection site visits for standard risk locations.
- Quarterly visits for locations with elevated risk, until 50% revegetation is achieved; bi-annual inspections thereafter.

- Regardless of initial risk categorization, locations with corrective actions will be inspected within 14 days of the corrective measure implementation to ensure satisfactory performance and then returned to their original category.

### **5.3.1 Construction Stage Inspections**

When the Bodacious Pad is being actively constructed, it is considered to be in the Construction Stage. During active construction, CDPHE allows permittees to select one of the following two inspection frequencies:

- At least one inspection every 7 calendar days; OR
- At least one inspection every 14 calendar days, if post-storm event inspections are conducted within 24 hours following precipitation which causes surface erosion.

Under scenario 2, an additional reduced inspection frequency provision exists. If no construction activities will occur following a storm event at a temporarily idle site, post-storm event inspections will be conducted prior to re-commencing construction activities, but no later than 72 hours following the storm event. Routine inspections will still be conducted at least every 14 calendar days.

The selected inspection frequency will be noted on inspection forms. During wetter months, typically April to October, inspections will fall under scenario 1. For the remainder of the year, November to March, Noble will shift to inspection scenario 2 and complete inspections every 14 days since there is a reduced potential for erosion. Alternating between inspection frequencies meets both the requirements in ECMC 1000 series rules and CDPHE stormwater regulations.

### **5.3.2 Completed Stage Inspections**

A location will enter the Completed Stage once disturbance activities have ceased and all of the interim reclamation work has been completed, except that the site has not yet been revegetated. For example, this may occur if a site cannot be re-seeded due to weather or seasonal conditions, but all other construction and reclamation is complete. Once the Pad enters the Completed Stage, it will be inspected a minimum of once every 30 days. Post-precipitation inspections are not required once the Pad is in the Completed Stage. However, more frequent inspections may be directed by Noble to confirm adequate maintenance or repairs.

### **5.3.3 Interim Stabilization Stage Inspections**

Interim Stabilization is generally similar to the Completed stage, except the site has also undergone re-seeding. As with the Completed Stage, inspections will be conducted at least once every 30 days (but are not needed after precipitation events) until Final Stabilization is reached.

### **5.3.4 Final Stabilization Stage Inspections**

Once the site achieves sufficient revegetation and meets the CDPHE requirements, its Permit coverage is terminated. Inspections will no longer be required under CDPHE requirements; however, they will be conducted annually under aforementioned ECMC rules.

### **5.3.5 Bond Release Inspections**

Once equipment has been removed from a location and associated wells are plugged and abandoned, the site is inspected under an alternate inspection frequency until bond release:

- Bi-annual inspection site visits; or
- Quarterly visits for locations with “elevated risk,” until location achieves 50% revegetation, with bi-annual inspections thereafter.
- Regardless of initial risk categorization, locations with corrective actions will be inspected within 14 days of the corrective measure implementation to ensure satisfactory performance and then returned to their original category.

### **5.4. Winter Conditions Exclusion**

Inspections will not be required at facilities meeting all of the following conditions: construction activities have been temporarily halted; snow cover exists over the entire site for an extended period; and melting conditions do not exist. This exception applies to all Construction stages. When this exclusion is implemented, Noble will document the following:

- Dates when snow cover existed;
- Date when construction ceased; and
- Date melting conditions began.

#### **5.4.1 Precipitation Event Inspections**

When necessary, site inspections will be conducted within 24 hours after a precipitation or snowmelt event that causes surface erosion on sites where construction is occurring. Surface erosion generally occurs when precipitation or snowmelt results in surface water flow. If the precipitation infiltrates, then no inspection is required. In order to determine if surface erosion or surface water flow resulted from a precipitation or snowmelt event, locations with active construction within the area of rainfall will be evaluated for surface erosion, offsite sediment transportation, and/or offsite release of muddy water. If the selected locations and associated areas do not show any on-site surface erosion, offsite sediment release, or offsite muddy water releases, none of the remaining construction sites will be inspected.

Inspection results of the locations will determine or trigger the inspection of all locations in the construction phase. Selection of sites to be evaluated may be based on one or more of the following criteria:

- A site that has a cut or fill slope that has a steeper grade than 4:1;
- A site that has erosion and/or sediment control structures installed and is near surface water; and
- Total precipitation in an area based on available weather data.

## 5.5. Inspection Reporting

The Permit requires Noble to conduct inspections at individual disturbance sites. Additionally, permittees are required to document inspections, including recording noncompliance incidents. Inspection observations are recorded on an electronic inspection report form, which is integrated into Noble's stormwater database. Inspections reports should contain the following elements:

- (1) Inspection date
- (2) Names(s) and title(s) of personnel making the inspection
- (3) Weather conditions at the time of inspection
- (4) Construction phase observed during inspection
- (5) Estimated acreage of disturbance at inspection
- (6) Location(s) of discharges of sediment or other pollutants from the site
- (7) Location(s) of CMs that need to be maintained
- (8) Location(s) and identification of inadequate CMs
- (9) Locations and identification of additional CMs are needed that were not in place at time of inspection
- (10) Description of current site inspection schedule assignment
- (11) Deviations from the minimum inspection schedule
- (12) When a site is free from corrective actions, or following resolution of corrective actions, a designated QSM will sign/certify the following statement: *"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the Permit."*

Maintenance items identified on inspections reports are summarized and distributed to individuals responsible for repairs. When repairs cannot be promptly completed, Noble will document the reason for the delay and include a completion timeline.

As part of routine inspections, QSMs will update individual site maps to reflect conditions during field inspections. Individual site maps will be created for each disturbance location and updated continuously until Final Stabilization. Required site map elements are discussed in the following subsection.

## 5.6. Site Maps

Permittees are required to develop and maintain site maps, detailing current site conditions. Under Noble's Permit, individual maps will be created for disturbed areas (pad, facility, etc.). QSMs will update maps following site visits as part of routine inspection reporting. Site maps will contain the following information:

- Construction site boundaries
- Flow arrows depicting stormwater overland flow and runoff directions
- All areas of ground disturbance, including borrow and fill
- Soil stockpile areas
- Location of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt
- Locations of dedicated asphalt, concrete batch plants and masonry mixing stations
- Locations of all structural control measures
- Locations of all non-structural control measures
- Locations of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, as feasible
- Locations of all stream crossings within the construction site boundary
- Individual site maps will be stored in the stormwater database.

## 6. Summary of Best Management Practices (BMPs)

A summary of physical sediment and erosion BMPs that Noble will implement at the Bodacious Pad is listed below. The SWMP is intended to be a living document that will change and be updated routinely as field conditions change. BMP placement may deviate from the preliminary plan detailed below based on actual conditions and recommendations from qualified field personnel.

### 6.1. Site-Specific Physical Sediment and Erosion BMPs

#### All Phases

- Per commitment to CPW for protection of the adjacent wetlands/waterway within 500 feet, chemical injection skids will include secondary containment structures.
- A sediment control log will be installed along the boundary of the oil and gas location and maintained until final stabilization or until it is replaced by another approved CM.
- Vehicle traffic controls such as rock stabilized construction exits, trackout control mats, or cattle guards will be located on-site near location exits to prevent offsite tracking of soils. The type of control measure will depend on local availability, landowner request, and location specific needs. Any sediment tracked off-site will be swept or scraped from roadways and returned to the construction site by the end of each workday. No sediment will be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface waterbody. Controls will be maintained throughout the life of the location.

#### Construction

- Stormwater on this location will drain predominantly to the southeast. Perimeter berms along the location will drain run-off to a detention pond on the southeastern side of the location to settle and capture on-site sediment from stormwater before being discharged off-site through an outlet pipe within the detention pond. The berms northern and western berms will also divert stormwater run-on around the location.
- Stockpiled soils located on the east side(s) of the working pad surface will be protected against erosion with temporary seeding, hydromulch, surface roughening, or a combination of erosion controls.
- The detention pond will include an emergency spillway. Riprap will be installed on the outlet side of both the emergency spillway and the detention pond discharge pipe.
- At landowner request, Pads will be fenced to limit access to cattle and unauthorized travel. Fencing should include cattle guards (which may also serve as tracking controls).
- Mulch with netting or erosion control mats will be installed on all slopes 3:1 and steeper and within 100' of special protection waters or 50' of surface waters.
- Temporary seeding, hydro mulching, and/or surface roughening will be conducted along the berms, detention pond, and stockpiled soils during initial construction and maintained

until interim reclamation. Additional soil stabilization and seeding activities will occur during interim reclamation, to ensure vegetative coverage and prevent erosion.

#### Completed, Interim, and Final Stabilization

- As part of interim reclamation, one channel on the eastern side of the permanent disturbance area, will be constructed to run south to a level spreader. The channel, level spreader, and long-term seeding will reduce stormwater runoff volume and speed and minimize sediment erosion at the location. The channel, remaining soil stockpiles, and reclaimed areas will be stabilized with seeding, hydromulching, and/or surface roughening.

## **Attachments**

### Tables

- Table 1 – CM Selection Guidelines
- Table 2 – Structural and Non-Structural CM Classification
- Table 3 – Pollutant Assessment and Associated Control Measures

### Figures

- Figure 1 – DJ Basin Core (COR-403291)

### Appendices

- Appendix A – Spill Response Information

## TABLES

**TABLE 1**  
**CM SELECTION GUIDELINES**  
 Bodacious Pad

<b>ACTIVE</b>	<b>COMPLETED</b>	<b>INTERIM STABILIZATION</b>	<b>FINAL STABILIZATION</b>
<b>Pads, Flowlines, and Access Roads</b>			
Berm	Berm	Berm	Berm
Compost Filter Socks	Compost Filter Socks	Compost Filter Socks	Culvert
Culvert	Culvert	Culvert	Ditch / Channel
Ditch / Channel	Ditch / Channel	Ditch / Channel	Hydro-mulch
Hydro-mulch	Hydro-mulch	Hydro-mulch	Riprap
Riprap	Riprap	Riprap	Sediment Basin/Detention Pond
Sediment Basin/Detention Pond	Sediment Basin/Detention Pond	Sediment Basin/Detention Pond	Seeding
Seeding	Seeding	Seeding	Surface Roughening / Ripping
Surface Roughening / Ripping	Surface Roughening / Ripping	Surface Roughening / Ripping	

Notes:  
 CM = Control Measure (Formerly Best Management Practices)

**TABLE 2**  
**STRUCTURAL AND NON-STRUCTURAL CM CLASSIFICATION**  
 Bodacious Pad

<b>NON-STRUCTURAL CMs</b>		
<b>Program Oversight</b>	<b>Construction Site Planning and Management</b>	<b>Good Housekeeping/Materials Management</b>
Construction Phase Plan Review  Contractor Training and Certification Database  Development and Maintenance	Timing of projects  Construction Sequencing  Site Operator CM Inspection and Maintenance Training  Preserving Natural Vegetation/Buffer  Minimize Initial Pad Site Acreage  Slope Pad to the Reserve Pit	General Construction Site Waste Management  Spill Prevention, Control, and Countermeasure Plan

<b>STRUCTURAL CMs</b>		
<b>Erosion Control</b>	<b>Sediment Control</b>	<b>Runoff Control</b>
Dust Control	Compost Filter Socks	Berm
Hydro-mulching	Sediment Basin / Detention Pond	Culvert
Riprap	Vehicle Tracking Control	Ditch / Channel
Seeding		
Surface Roughening / Ripping		

**TABLE 3**  
**POLLUTANT ASSESSMENT AND ASSOCIATED CONTROL MEASURES**  
 Bodacious Pad SWMP

<b>POLLUTANT SOURCE</b>	<b>ASSOCIATED PHASE<sup>1</sup></b>	<b>TYPICAL MITIGATING CONTROL MEASURES<sup>2</sup></b>
Disturbed and Stored Soils	Construction Completed Interim	- Administrative CMs - Planning CMs - Housekeeping/Materials Management CMs - Erosion Control CMs - Sediment Control CMs - Runoff Control CMs
Vehicle Tracking Controls	Construction	- Administrative CMs - Sediment Control CMs
Management of Contaminated Soils	Construction Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs
Loading/Unloading Operations	Construction Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs
Outdoor Storage Activities	Construction Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs
Vehicle/Equipment Maintenance and Fueling	Construction	- Administrative CMs - Housekeeping/Materials Management CMs
Dust/Particle Generation	Construction	- Administrative CMs - Erosion Control CMs
Routine Maintenance	Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs
On-Site Waste Management	Construction Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs
Concrete Truck Washing/Equipment Washing	NA	NA
Dedicated Asphalt/Concrete Batch Plants and Masonry Mixing Stations	NA	NA
Non-Industrial Waste	Construction Completed Interim	- Administrative CMs - Housekeeping/Materials Management CMs

Notes:

<sup>1</sup>Construction stages detailed in Section 2 of the SWMP

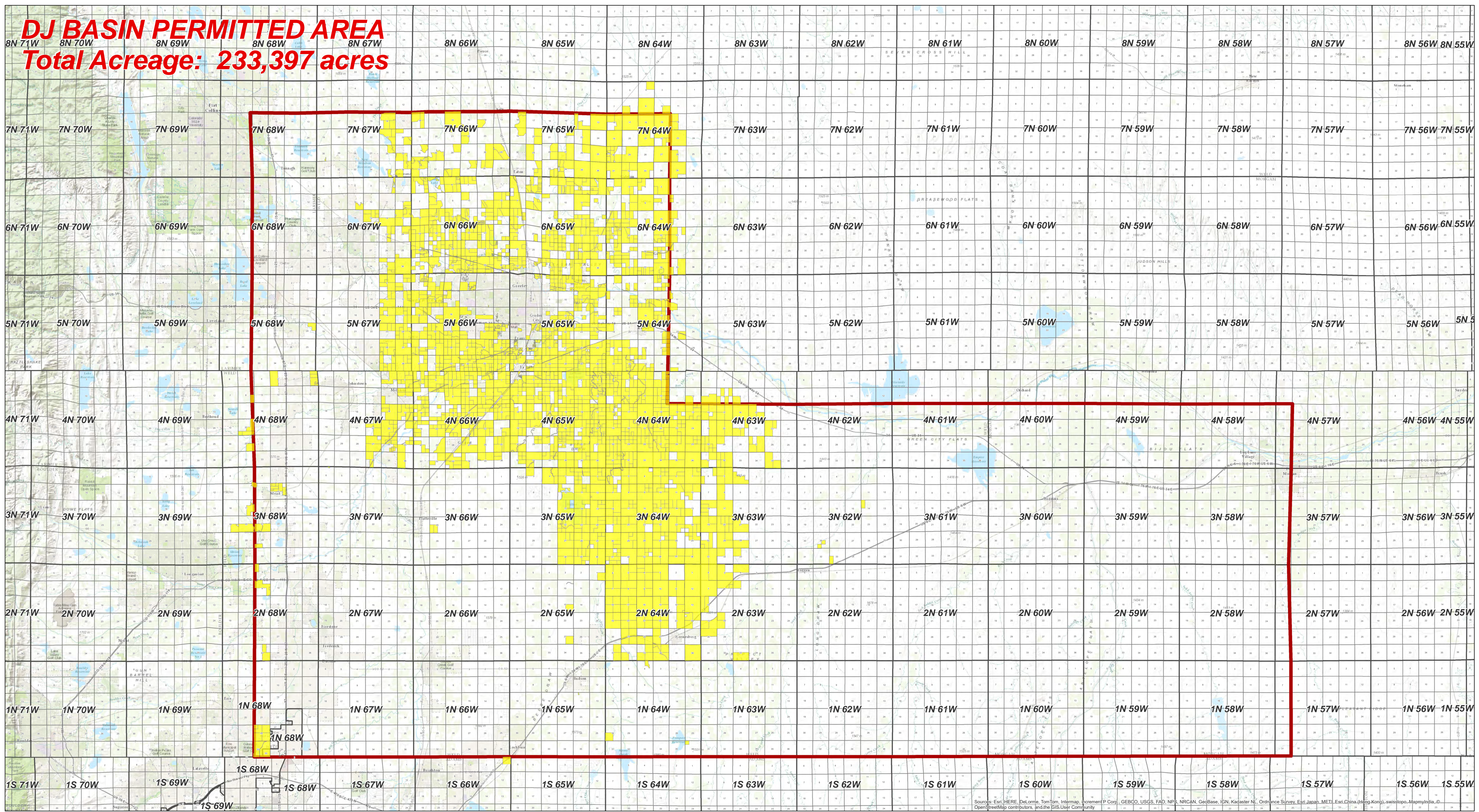
<sup>2</sup>Examples of specific CMs provided in Table 1. CMs to be implemented on a site-specific basis.

## FIGURES

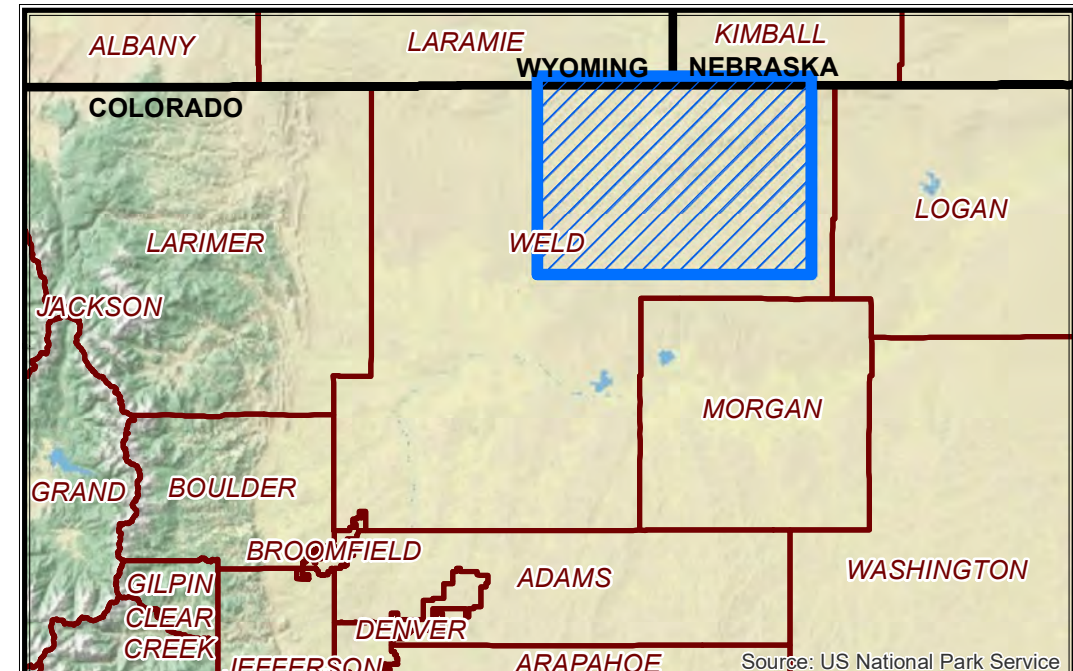
**FIGURE 1**  
**DJ BASIN CORE (COR-403291)**

# DJ BASIN PERMITTED AREA

## Total Acreage: 233,397 acres

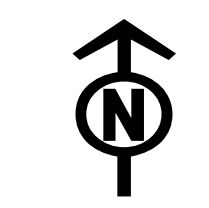


Source: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



 DJ Basin Permitted Area

 NBL Lease Acreage



1:215,000



### DJ BASIN PERMITTED AREA

Author: JAE Date: 3/11/2015  
 WGS 1984 Web Mercator Auxiliary Sphere  
 File: EHSR\_StormWater.mxd

## APPENDICES

**APPENDIX A  
SPILL RESPONSE INFORMATION**

# CHEVRON BU FACILITY UNINTENTIONAL RELEASE NOTIFICATION PROCEDURE

## FIRST RESPONDER RESPONSIBILITY

### UNINTENTIONAL RELEASE OCCURS OR IS DISCOVERED:

Unintentional Release includes unplanned spills of liquids, solids, gas or vapors (Incident Reporting Procedure Tier 2).

#### Report all releases as soon as practical

Releases resulting in a reportable quantity or reportable event often require immediate notification to State and Federal agencies.

Report any amount of a released material via the Chevron Incident Notification Number: **1-888-634-7928**

### Incident Reporting

Incident Notification Number:

**1-888-634-7928**

or 1-832-698-5850

International Reports: (Country Code) +832-698-5850

Inter Office Phone System extension: 119-5850

When calling, please be prepared to provide the following information:

- Name & Phone Number\*
- Incident Type
- Business Unit / District
- Location
- Department
- Date & Time of Incident
- Brief Description of Incident

\*Please provide a phone number where you can be easily reached. You will be contacted by your area's EHSR Representative to gather more details on the incident.

- Full details on Incident Reporting can be found on the NearPoint\_EHSR Page -

Report release to Foreman and Environmental Representative  
**WITHIN 1 HOUR**  
(Jacob Evans 303-328-5605)

**ONLY PERFORM  
IF SAFE**

-Stop the release if ongoing;  
 -Contain any released liquids to prevent further migration;  
 -Identify the type of material released and estimate the quantity.

## ENVIRONMENTAL REPRESENTATIVE RESPONSIBILITY

**RECEIVE NOTIFICATION  
FROM FIELD AND/OR  
GSOC**

Does the quantity meet reportable threshold limits?

NO

YES

### REPORTABLE THRESHOLDS INCLUDE:

- 1) Any amount that impacts or threatens to impact waters of the State of Colorado (which includes surface water, ground water, dry gullies, and storm sewers leading to surface water).
- 2) For SPCC facilities, more than 1,000 gallons of oil in a single discharge to navigable waters or adjoining shorelines; OR  
  
More than 42 gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurring within any twelve-month period.
- 3) For SQG or LQG facilities release that threatens human health or the environment outside the facility.
- 4) One (1) barrel or more of E&P waste released outside of berms or other secondary containment.
- 5) Five (5) barrels or more of E&P oil or waste, regardless of whether the spill/release is completely contained within berms or other secondary containment.
- 6) Any release of E&P oil or waste that impacts or threatens to impact a residence or occupied structure, livestock, or public byway.
- 7) Hydrostatic test failure resulting in a release outside of an impervious surface.
- 8) Any release occurring on Bureau of Land Management property.

Update & review entry in EHSR Global Event Management System (GEMS) database. Continue incident review & updates until GEMS closure.

**IMMEDIATELY REPORT THE RELEASE**  
**Get EHSR/field leadership buy-in prior to making agency notifications.**  
**Follow Unintentional Release Notification Procedures on next page.**

# CHEVRON BU FACILITY

## UNINTENTIONAL RELEASE NOTIFICATION PROCEDURE

**- CONTACT YOUR CHEVRON ENVIRONMENTAL REPRESENTATIVE IMMEDIATELY –  
- NOTIFY ENVIRONMENTAL MANAGER OF ANY NOTIFICATIONS -**

THRESHOLD EVENT	REGULATORY CITATION	AGENCY	PHONE	REQUIRED TIME FRAME	ADDITIONAL ACTIONS
1) Oil or petroleum product which impacts or threatens to impact waters of the State	40 CFR 110.3	National Response Center	800-424-8802	Within 1 hour of discovery	Within 6-hours provide SDS to Federal On-Scene Coordinator.  Within 48-hours provide update to revise or confirm initial notice with the amount released, number of fatalities and injuries, and all other significant facts that are known and relevant to the initial report, operator must confirm the estimates in its initial report.
	40 CFR 112.4	US EPA Region 8	303-293-1788	Immediately	
Oil or other substance which may cause pollution of the waters of the state (which includes surface water, ground water and dry gullies or storm sewers leading to surface water), no matter how small.	CRS 25-8-601 (2)	CDPHE (also represents Colorado Emergency Planning Commission)	877-518-5608	Immediately	Written notification must follow within 5 days
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>
2) For SPCC facilities, more than 1,000 gallons of oil in a single discharge to navigable waters or adjoining shorelines; OR  More than 42 gallons of oil in each of two discharges to navigable waters or adjoining shorelines occurring within any twelve-month period.	40 CFR 112.4	US EPA Region 8	303-293-1788	Immediately	
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>

THRESHOLD EVENT	REGULATORY CITATION	AGENCY	PHONE	REQUIRED TIME FRAME	ADDITIONAL ACTIONS
3) SQG or LQG facility release that threatens human health or the environment outside the facility	6 CCR 1007-3	CDPHE	877-518-5608	Verbally as soon as practicable, but not more than 24 hours	
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>
4) $\geq 1$ barrel of E&P oil or waste outside of berms or containment	COGCC Rule 906. Applies only to E&P waste and E&P produced fluids.	COGCC Also notify Surface Land Owner	877-518-5608	As soon as practicable, but not more than 24-hours	If initial report was not made via COGCC Spill/Release Report Form 19, a Form 19 must be submitted within 72 hours after discovery of the release.  A supplemental report on Form 19 shall be submitted within 10 calendar days after discovery of the release. Include topographical map of spill location.  Form 19 to be filled out electronically only: <a href="https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf">https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf</a>
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>
5) $\geq 5$ barrels of E&P oil or waste, regardless if completely contained or not	COGCC Rule 906. Applies only to E&P waste and E&P produced fluids.	COGCC Also notify Surface Land Owner	877-518-5608	As soon as practicable, but not more than 24-hours	If initial report was not made via COGCC Spill/Release Report Form 19, a Form 19 must be submitted within 72 hours after discovery of the release.  A supplemental report on Form 19 shall be submitted within 10 calendar days after discovery of the release. Include topographical map of spill location.  Form 19 to be filled out electronically only: <a href="https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf">https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf</a>
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>

THRESHOLD EVENT	REGULATORY CITATION	AGENCY	PHONE	REQUIRED TIME FRAME	ADDITIONAL ACTIONS
6) Any release of E&P oil or waste that impacts or threatens to impact a residence or occupied structure, livestock, or public byway. <i>Distance in which a threat is present is not defined.</i>	COGCC Rule 906. Applies only to E&P waste and E&P produced fluids.	COGCC  Also notify Surface Land Owner	877-518-5608	As soon as practicable, but not more than 24-hours	If initial report was not made via COGCC Spill/Release Report Form 19, a Form 19 must be submitted within 72 hours after discovery of the release.  A supplemental report on Form 19 shall be submitted within 10 calendar days after discovery of the release. Include topographical map of spill location.  Form 19 to be filled out electronically only: <a href="https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf">https://cogcc.state.co.us/forms/PDF_Forms/form19.pdf</a>
	40 CFR 355.32-33	Weld County Office of Emergency Management LEPC		Within 24-48 hours of discovery	Online spill report form: <a href="https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm">https://www.co.weld.co.us/apps1/oem/spillreport/index.cfm</a>
7) Hydrostatic test failure resulting in a release outside of an impervious surface.	CWQCD Policy WQE-10; CRS 25-8-601 (2)	CDPHE	877-518-5608	Immediately	Refer to Colorado Discharge Permit System (CDPS) Discharge Permit for spill reporting requirements.  All non-permitted hydrotest activities require reporting of any release.  Non-Reportable spills include: <ul style="list-style-type: none"> <li>• Releases of potable water from a public water system that do not reach surface waters.</li> <li>• Release to generally impervious surface or structure.</li> <li>• Release that is managed consistent with BMPs established in accordance with a CDPS discharge permit.</li> </ul>

THRESHOLD EVENT	REGULATORY CITATION	AGENCY	PHONE	REQUIRED TIME FRAME	ADDITIONAL ACTIONS
<p>8) Release on Bureau of Land Management property:</p> <p>Major Undesirable Events:</p> <ul style="list-style-type: none"> <li>A. Oil, saltwater and toxic liquid spills which result in the release of <math>\geq 100</math> bbls;</li> <li>B. Equipment failures or other accidents which result in the venting of <math>\geq 500</math> MCF gas;</li> <li>C. Any fire which consumes the volumes of A and B above;</li> <li>D. Any spill, venting or fire, regardless of the volume involved, which occurs in a sensitive area, e.g., areas such as parks, recreation sites, wildlife refuges, lakes, reservoirs, streams, and urban or suburban areas;</li> <li>E. Each accident which involves a fatal injury.</li> </ul>	NTL-3A	Bureau of Land Management		As soon as practicable, but not more than 24 hours	<p>Written Report submitted to the District Engineer no later than 15 days following all major undesirable events.</p> <p>All volumes of oil spilled, gas vented, and all hydrocarbons consumed by fire or otherwise lost must be reported monthly on the Monthly Report of Operations (Form 9-329). The volume and value of such losses must also be reported in the Monthly Report of Sales and Royalty (Form 9-361).</p>
<p>Other Than Major Undesirable Events:</p> <ul style="list-style-type: none"> <li>A. Oil, saltwater and toxic liquid spills which result in the release of 10 bbls but <math>&lt; 100</math> bbls of liquid in nonsensitive areas, and all discharges of <math>\geq 100</math> bbls when the spill is entirely contained by the facility firewall;</li> <li>B. Equipment failures or other accidents which result in the venting of 50 buy <math>&lt; 500</math> MCF gas in nonsensitive areas;</li> <li>C. Any fire which consumes the volumes of A and B above;</li> </ul>				No oral report required	Same written reporting requirements as for Major Undesirable Events detailed above.

D. Each accident which involves a major or life-threatening injury.					
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**NOTE: See the Facility Response Plan for additional contact information**

**E&P Waste is defined in CRS 34-60-103 (4.5)** "Exploration and production waste" means those wastes that are generated during the drilling of and production from oil and gas wells or during primary field operations.

**COGCC Rule 906** requires E&P spills of any size to be cleaned up as soon as practicable.