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H-1703-6 – BLM ENVIRONMENTAL COMPLIANCE HANDBOOK (PUBLIC)

1. Explanation of Material Transmitted: The purpose of this Handbook is to assist the BLM in complying with the federal and state environmental regulations specific to BLM assets and activities and those of BLM contractors. This handbook is specifically targeted to Hazardous Material Managers in field offices, who lead the compliance effort for the BLM. The Handbook is divided into five chapters. Only the first chapter, Chapter I Wastewater and Stormwater, is final, the remaining chapters are pending.

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Resources and Planning

## HANDBOOK USER'S GUIDE

The purpose of this Bureau of Land Management (BLM) Handbook (H-1703-6) is to assist us in complying with the federal and state environmental regulations specific to BLM assets and activities and those of our contractors. This handbook is specifically targeted to Hazardous Material Managers in field offices, who lead the compliance effort for the BLM. While uses or users of the public lands under grants, leases, permits, or other authorizing instruments also must comply with federal and state environmental regulations, this guidance is not meant to apply to them. Nor is this guidance to be applied to casual use of the public lands by members of the public. Note further that the terms “BLM lands,” “BLM facilities,” and “BLM operations,” and any variants with or without the “BLM” as used in this Handbook, apply only to BLM and no other users. Select requirements under the following statutes are addressed:

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. ' 9601 et seq;
- Clean Air Act, 42 U.S.C. ' 7401-7671 et seq, as amended;
- Clean Water Act, 33 U.S.C. ' 1251 et seq, as amended;
- Hazardous Materials Transportation Act, 49 U.S.C. ' 1801-1812;
- Oil Pollution Act, 33 U.S.C. ' 2701-2761;
- Hazardous Waste Operations and Emergency Response and Hazard Communication requirements under the Occupational Safety and Health Act, 29 U.S.C. ' 651 et seq;
- Pollution Prevention Act, 42 U.S.C. ' 13101 et seq;
- Resource Conservation and Recovery Act (RCRA), 42 U.S.C. ' 6901 et seq;
- Safe Drinking Water Act, 42 U.S.C. ' 300f - 300j-26;
- Toxic Substances Control Act, 42 U.S.C. ' 2601 et seq; and
- Emergency Planning and Community Right-To-Know Act, 42 U.S.C. ' 1101 et seq;.

The Department and the BLM have committed to compliance with all federal, state, tribal and local environmental regulations as part of their Environmental Management Policy, as stated in the Department of the Interior's May 25, 2011 Sustainability and Environmental Policy . The statutes listed above encompass a comprehensive list of requirements, and the requirements can vary year to year as regulations evolve. In addition to the federal requirements, states, tribal governments, and local governments add an additional layer of complexity to compliance requirements when they have primacy or where they have determined additional protection, above the federal level, is warranted. As a result, this Handbook, while comprehensive, is guidance only and does not provide an exhaustive list of every environmental requirement that may be applicable to the BLM's operations. Instead, this Handbook is tailored to address the environmental compliance questions commonly encountered in the field, primarily in accordance to federal regulations. Specific sections within the chapter's address typical BLM operations and common materials and wastes encountered that are regulated under the statutes addressed.

This Handbook is not intended to replace reference directly to these statutes and regulations. Although we have tried to ensure accuracy to the greatest extent possible, there may be errors in the Handbook's descriptions of provisions of the statutes or regulations cited. The user should be cautious in quoting this Handbook, and is advised to ensure any quoted material is an accurate reflection of the true statutory or regulatory provision. Further, we would appreciate being informed of any errors users may encounter.

The Handbook is divided into five chapters. Only the first chapter, Chapter I Wastewater and Stormwater, is final, the remaining chapters are pending. The first four chapters address BLM's key activities relevant to environmental compliance: Wastewater and Stormwater, Hazardous Materials Storage, Management of Waste, and Transportation of Hazardous Materials and Waste. The chapters begin with a list of commonly encountered acronyms, and a brief checklist that highlights the common regulatory requirements applicable to the BLM under the stated subtopic. However, the checklists are not inclusive of all requirements and should be used in conjunction with detailed information in the Handbook, as well as any applicable statutory or regulatory provisions, to guide compliance. Chapter V is reserved to present the BLM's environmental compliance auditing program, termed the Compliance Assessment – Safety, Health, and the Environment (CASHE) Program. This chapter not only addresses how the BLM's compliance audits are conducted, but also outlines the process used to fund and implement solutions to issues that are identified.

The Checklist at the beginning of each chapter is intended as an overview of the key and fundamental requirements of the regulations that apply specifically to common BLM operations and conditions. The checklist refers to sections within the handbook that provide more detailed explanation of the requirements. These sections, as well as referenced regulations within the sections, should be consulted for a comprehensive evaluation of environmental compliance.

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## CHAPTER I. WASTEWATER AND STORMWATER

### A. Acronyms.

Acronym	Full Text
AFO	Animal Feeding Operation
BMP	Best Management Practices
CGP	Construction General Permit
CWA	Clean Water Act
CAFO	Concentrated Animal Feeding Operation
DMR	Discharge Monitoring Report
ELG	Effluent Limitations Guidelines
EPA	Environmental Protection Agency
LCSS	Large-Capacity Septic Systems
MSGP	Multi-Sector General Permit
MS4	Municipal Separate Storm Sewer System
NMP	Nutrient Management Plan
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
POTW	Publically Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
SWPPP	Stormwater Pollution Prevention Plan
TPH	Total Petroleum Hydrocarbon
UIC	Underground Injection Control
WQA	Water Quality Act

### A. Synopsis

This section is promulgated to ensure BLM (Bureau of Land Management) facilities comply with the National Pollutant Discharge Elimination System (NPDES) and the Underground Injection Control (UIC) Program with regard to discharges of wastewater and stormwater from those facilities.

The section applies to all BLM facilities that discharge stormwater, domestic wastewater, and/or industrial wastewater to drainage ditches/storm sewers or into the subsurface, land apply treated wastewater, or perform exterior renovations that may affect stormwater quality.

#### Implementation Requirements. (Section G)

- Determine if pollutants are discharged via a point source at the BLM Facility

- Determine discharge points of floor and trench drains in shop or warehouse areas
  - Determine discharge points for stormwater
  - Determine discharge points of parking lot and loading ramp drains
  - Determine discharge points of vehicle wash rack drain discharges
- Ensure wash rack discharges to sanitary sewers meet the pretreatment standards of the publicly owned treatment works

### Stormwater Permits

Obtain a stormwater permit if the following conditions are true. (Section J)

- Large air tanker base or single engine air tank base (SEAT) is operated at an airport that has a Multi-Section Group Permit (MSGP), but it does not include BLM tanker operations or the airport does not have a MSGP permit and has not applied for a waiver.
- Construction activity will disturb one or more acres of land
- The facility has been designated a Concentrated Animal Feeding Operation (CAFO) for wild horses and burros.

If a BLM facility has a stormwater permit, complete the following. (Section J)

- Perform inspections and monitoring as required by the permit
- Review permit conditions annually

If a BLM Facility has stormwater that discharges to a regulated Municipal Separate Storm Sewer System (MS4)

- Abide by general stormwater permit rules

If a BLM facility has an Animal Feeding Operation, (Section K)

- Manage manure in accordance with a site-specific Nutrient Management Plan

### Underground Discharge (Injection) of Wastewater and Stormwater

If the BLM facility uses or constructs a septic system (Section H), dry well or other subsurface disposal system where non-hazardous wastewater or stormwater is discharged, determine/complete the following:

- If the system meets the criteria for a Class V UIC well (Section I)
- If any of the Class V wells are large capacity cesspools or if they receive fluids from vehicle maintenance and if so close the well in accordance with EPA regulations

(Section I).

- Inventory and authorize or permit all Class V wells with the EPA or the state regulatory agency, as appropriate
- Enter any new or undocumented system that is a Class V Well in the Facility Asset Management System
- Ensure all existing systems that are a Class V Well are identified as Class V Wells in the Facility Asset Management System.

**B. Wastewater and Stormwater Checklist.**

<b>Water Discharge (Section G, Section H, Section I, Section K)</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>
1. Does the facility discharge wastewater to the waters of the United States?	_____	_____	_____
2. Does the facility have a NPDES permit? (Section G)	_____	_____	_____
a. If yes, are procedures in place to assure compliance with the conditions of the permit?	_____	_____	_____
3. Does the facility discharge industrial wastewater (e.g., vehicle wash rack wastewater) to a POTW? (Section G)	_____	_____	_____
a. If yes, does this discharge require a POTW-issued permit?	_____	_____	_____
b. Are procedures in place to assure compliance with the conditions of this permit?	_____	_____	_____
4. Does the facility discharge sewage to a Septic System? (Section H)	_____	_____	_____
a. If yes, have employees been advised that only domestic wastewater may to the septic system and that paint thinner, vehicle wash water, and other non-domestic wastewater streams may not be discharge to the septic system?	_____	_____	_____

<p>5. Does the facility operate a Large Air Tanker Base or SEAT base (Section K)</p> <p>a. If yes, does the facility manage the stormwater discharge , including aircraft/vehicle/equipment wash water, in accordance with an MSPG permit?</p> <p>b. Has the facility provided a Notice of Intent to the permitting authority, if required?</p> <p>c. Does the facility (or airport) have a comprehensive Stormwater Pollution Prevention Plan, which includes the stormwater discharges from the tanker base with other sources at the airport?</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>6. Does the facility operate a CAFO? (Section K)</p> <p>a. If yes, does the facility have a NPDES permit to manage the stormwater discharge?</p> <p>b. If there is no NPDES permit, does the exemption for a agricultural stormwater discharge apply?</p> <p>c. Has a Nutrient Management Plan been prepared?</p> <p>d. If the manure is being applied to the land, are site-specific nutrient management practices for the application specified and being followed?</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>7. Do personnel perform construction, industrial, or maintenance activities that could result in discharge of contaminated stormwater?</p>	<p>_____</p>	<p>_____</p>	<p>_____</p>
<p>8. Are facility employees prohibited from performing automobile maintenance activities in facility parking lots?</p>	<p>_____</p>	<p>_____</p>	<p>_____</p>
<p>9. Does the facility have any subsurface discharges of wastewaters, sanitary sewage, stormwater, or other nonhazardous waters? (Section I)</p> <p>a. Does the subsurface discharge meet the definition of a Class V Well?</p> <p>b. Has the Class V Well been permitted or inventoried with the applicable regulatory authority?</p> <p>c. If the Class V Well is no longer in use, it is properly closed in accordance with UIC Program regulations?</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>



### **C. Purpose and Scope.**

Due to its potential to carry and spread contamination throughout the environment, the discharge of domestic and industrial wastewater is regulated by the Environmental Protection Agency (EPA) under the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA).

Whether wastewater flows into a sewer, septic system, or is directly discharged into a body of receiving water, it is subject to some level of regulation depending on a number of factors. The CWA prohibits the discharge of pollutants from point sources to navigable waters without a permit issued in accordance with the NPDES Program.

Contamination of ground water is regulated under the SDWA and UIC Program. The UIC regulations address injection wells, including siting, construction, operation and monitoring, and closure. These requirements are designed to prevent contaminants from moving into the ground water, the source of nearly 50% of the nations' drinking water. There are UIC requirements for several classes of wells designed to protect groundwater.

This section provides BLM employees guidance to ensure compliance with the provisions of the NPDES and UIC Programs. The section applies to all BLM facilities that discharge wastewater or storm water directly to the waters of the United States, a POTW, a septic system, or injection well. It also applies to all BLM facilities that discharge collected precipitation to a stormwater drainage system.

### **D. Definitions.**

#### **1. Animal Feeding Operations (AFOs).**

AFOs are agricultural operations where animals are kept and raised in confined spaces. AFOs generally congregate animals, feed, manure, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures.

An AFO is a facility where the following conditions are met:

- Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

#### **2. Closure.**

Closure refers to eliminating an underground discharge. This can be the physical closure of an injection well (e.g., by removing the well or plugging the well with

cement or by re-routing the fluid into a holding tank or into a sewer) or the re-configuration of an injection well in such a way that certain fluids can no longer enter the well. An example is filling floor drains in a shop with cement so they no longer discharge to the subsurface (e.g., septic system or dry well), but sanitary waste from bathrooms and sinks are still able to enter the septic system.

### 3. Concentrated Animal Feeding Operation (CAFO).

An animal operation must meet the definition of an AFO before it can be considered a CAFO. To be defined as a CAFO, an AFO must meet the regulatory definition [40 CFR 122.23(b)(4) or 40 CFR 122.23(b)(6)] of a large or medium CAFO or must be designated as a CAFO by the permitting authority [40 CFR 122.23(c)].

A large CAFO confines at least 500 horses or burros.

A medium CAFO confines 150 to 499 horses or burros and either one of the following:

- Has a manmade ditch or pipe that carries manure or wastewater to surface water; or
- The animals come into contact with surface water that passes through the area where they are confined.

A small CAFO confines fewer than 150 horses and has been designated as a CAFO by the permitting authority as a significant contributor of pollutants.

### 4. Domestic / Sanitary Wastewater.

Domestic wastewater or sanitary waste consists of wastewater discharged from residences and from commercial, institutional, and similar facilities. Domestic wastewater can be treated via an onsite septic system or a POTW.

### 5. Industrial Wastewater.

Industrial wastewater results from water use in industrial/manufacturing operations.

### 6. Municipal Separate Storm Sewer System (MS4).

Roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that meet the following requirements:

- Owned or operated by a state, city, town, county, association, or other public body (created to or pursuant to state law) including special districts under state law

such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under the CWA that discharges into waters of the United States;

- Designed or used for collecting or conveying stormwater;
- Is not a combined sewer; and
- Is not part of a POTW.

#### 7. Pit Toilet.

A pit toilet is a dry toilet system that collects human excrement in a large container and ranges from a simple slit trench to more elaborate systems with ventilation. The sides and/or base of the pit are unlined allowing wastewater to infiltrate the subsurface. The waste pit, in some cases, will be large enough to reduce the contained waste products by the ongoing process of decomposition allowing the pit to be more or less permanent. Other designs require pits to be emptied or the pit covered with soil and the associated structure moved or rebuilt over a new pit.

#### 8. Point Source.

Any discernible confined and discrete conveyance including, but not limited to, a pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater. [40 CFR 122.2, 40 CFR 401.11(d)]

#### 9. Pretreatment Program.

In addition to addressing direct discharges to waters of the United States, the CWA also established a regulatory program to address indirect discharges of industrial wastewater to publicly owned treatment works through the National Pretreatment Program. This program is a component of the NPDES Program. The program is intended to control pollutants from industrial users that would otherwise pass through or interfere with POTW treatment processes or that would contaminate sewage sludge.

The National Pretreatment Program requires industrial and commercial dischargers, called industrial users, to obtain permits or apply other control mechanisms to discharge wastewater to the publicly owned treatment works. Such a permit may specify the effluent quality that necessitates an industrial user pretreat or otherwise control pollutants in its wastewater before discharging (e.g., install an oil/water separator and grit trap at a vehicle washrack).

#### 10. Pollutants.

Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, except those regulated under the Atomic Energy Act of 1954, as amended [42 USC. 2011 et. seq.], heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.  
[40 CFR 401.11(f)]

#### 11. Publicly Owned Treatment Works (POTW).

A POTW is any device or system used to treat (including recycling and reclamation) municipal sewage or liquid industrial wastes that is owned by a state or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment. A POTW is issued its own discharge permit to which it must comply. [40 CFR 122.2]

Publicly owned treatment works collect wastewater from homes, commercial buildings, and industrial facilities and transport it via a series of pipes, known as a collection system, to the treatment plant. Here, the POTW removes harmful organisms and other contaminants from the sewage so it can be discharged safely into the receiving water. Generally, publicly owned treatment works are designed to treat domestic sewage only.

#### 12. Sanitary Waste.

Sanitary waste is defined by EPA as liquid or solid waste originating solely from humans and human activities. This category includes waste collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage-serving dishes, glasses, and utensils are cleaned [40 CFR 144.3].

#### 13. Septic System.

A septic system is used for the subsurface discharge of human sanitary waste or effluent from dwellings, businesses, community centers, or other places where people congregate. They include a septic tank and a subsurface fluid distribution system (e.g., leach field).

#### 14. Underground Injection Wells.

The UIC Program defines an injection well as a well or injection well that is a bored, drilled, or driven shaft, or a dug hole, whose depth is greater than its largest surface dimension; an improved sinkhole; or a subsurface fluid distribution system used to

discharge fluids underground [40 CFR 144.3]. The UIC Program defines six classes of injection wells based on function, construction, and operating features.

#### 15. Waters of the United States.

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

All interstate waters, including interstate wetlands, and all other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce. This includes the following waters.

- Water that are or could be used by interstate or foreign travelers for recreational or other purposes
- Waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce or that are used or could be used for industrial purposes by industries in interstate commerce
- All impoundments of waters otherwise defined as waters of the United States under this definition
- Tributaries of waters identified in this definition
- The territorial sea
- Wetlands adjacent to waters

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

There have been several judicial rulings that further clarify this definition. They are not included in this definition. The term navigable waters is also commonly used in related regulations and environmental lexicon.

### **E. Regulatory Requirements.**

#### 1. Federal Laws and Regulations.

The CWA of 1972 was amended in 1977 and 1982, and again by the Water Quality Act (WQA) in 1987 and 1989. The NPDES Program was created in the 1977 amendments. The CWA prohibits the discharge of pollutants from any point source to navigable waters except as allowed under an NPDES permit.

The program gives the EPA the authority to regulate discharges into navigable water by setting limits on effluent that can be introduced into a body of water from an

operating and permitted facility.

The UIC Program is authorized by the SDWA, PL 93-523 and Amendments to protect ground water. The UIC Program also implements portions of the Resource Conservation and Recovery Act (RCRA) that address the underground disposal of hazardous wastes. The regulations implementing these laws are published in 40 CFR 144 through 40 CFR 146 and 40 CFR 148.

## 2. State / Local Programs.

The EPA authorizes many states to manage their own NPDES and UIC Programs. Program primacy status for BLM states are listed in Appendix 1 and Appendix 2 and are current as of January 2014.

### **F. Point Source Discharges.**

Under the NPDES Program, any point source that discharges pollutants to the waters of the United States is required to obtain a permit for that discharge. Permits granted under the program provide the following two levels of control: technology-based limits (based on the ability of dischargers in the same industrial category to treat wastewater) and water quality-based limits (used if the technology-based limits are not sufficient to protect a body of water). Understanding the meaning of the terms point source, pollutant, and waters of the United States is the key to the program. See Section D, Definitions.

Examples of point source discharges from BLM facilities, that may need to be permitted under the NPDES or UIC Programs, include the following:

- Treated wastewater effluent
- Roof drains
- Drains from secondary containment areas
- Sump pump effluent
- Storm and parking lot drainage systems
- Drains from retardant loading areas
- Drains from horse and burro corrals
- Drains from shops or warehouses

While discharges of sewage, industrial wastes, and other pollutants to a POTW (also referred to as indirect or nonpoint discharges) are excluded from regulation by the EPA and most states, these discharges are typically regulated by the POTW under a local pretreatment ordinance. Because POTWs are regulated by EPA or the state, a local pretreatment ordinance provides an increased level of protection for wastewater treatment processes operated by the POTW. Depending on the type of process the POTW employs, permission or a permit may be required to discharge industrial wastewater (e.g., vehicle wash water) into the sanitary sewer. Prior to discharge, POTWs may request a sample of typical discharges or an

inventory of material that might be inadvertently discharged into its collection system.

1. NPDES Discharge Permits for BLM Facilities.

Most BLM facilities do not require permits under the NPDES Program because they do not discharge directly to waters of the United States, but instead discharge to a POTW or directly to an onsite treatment unit (i.e., septic tank).

If a facility plans to discharge wastewater or stormwater or has a treatment system that is designed to treat and ultimately discharge directly to waters of the United States, the BLM State HAZMAT Program Lead must be contacted to determine if an NPDES permit is required. If so, the BLM must apply for the NPDES permit prior to the discharge.

a. *NPDES Permits.*

A permit is typically a license for a facility (the permittee) to discharge a specified amount of a pollutant into receiving water under certain conditions. The two basic types of NPDES permits issued are individual and general permits.

b. *Individual Permit.*

An individual permit is a permit specifically tailored to an individual facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that facility based on the information provided in the application (e.g., type of activity, nature of discharge, receiving water quality). The authority issues the permit to the facility for a specific time period (not to exceed 5 years) with a requirement that the facility reapply prior to the expiration date.

c. *General Permit.*

A general permit covers multiple facilities within a specific category. The regulations allow general permits to address point source categories that have common elements. Examples include the following:

- (1) Stormwater point sources;
- (2) Facilities that have the same or substantially similar types of operations (airports);
- (3) Facilities that discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
- (4) Facilities that require the same effluent limits, operating conditions, or standards for sewage sludge use or disposal; and
- (5) Facilities that require the same or similar monitoring.

BLM facilities may be part of a general permit that is granted to the owner / lessee of a multi-agency facility (e.g., vehicle washrack at an interagency fire station where the

USDA Forest Service is the lessee and permittee) or an airport where BLM operates a retardant base. If a general permit is granted to the owner / primary operator where a BLM facility is located, the conditions of the permit are binding to BLM. BLM operations and storage will also be subject to the permittee's Stormwater Pollution Prevention Plan (SWPPP).

It is common that the permittee has not included the BLM operation in its permit application, Notice of Intent (NOI), or SWPPP. If the BLM's operations and facility were not included in the permit and/or the SWPPP required by the permit proactive actions that the BLM must be take include:

- contacting the owner requesting to be formally made a co-permittee or party to the permit and its SWPPP;
- determining what permit and SWPPP requirements apply and implementing them; and
- applying for coverage under a separate MSGP.

The State HAZMAT Program Lead can provide assistance in understanding the permitting requirements.

## 2. Major Components of an NPDES Permit.

Every permit has the following basic sections, but the content of each section will vary depending on whether the permit is issued to a municipal or industrial facility and whether the permit will be issued to an individual facility or to multiple dischargers (i.e., a general permit).

### a. *Cover Page.*

Typically has the name and location of the permittee, a statement authorizing the discharge, and the specific locations for where a discharge is authorized.

### b. *Effluent Limits.*

The primary mechanism for controlling discharges of pollutants to *receiving* waters. Permit writers spend the majority of their time deriving appropriate effluent limits based on applicable technology-based and water quality-based standards.

### c. *Monitoring and Reporting Requirements.*

Used to characterize waste streams and receiving waters, evaluate wastewater treatment efficiency, and determine compliance with permit conditions.

### d. *Special Conditions.*

Conditions developed to supplement effluent limit guidelines. Examples include Best



Management Practices (BMPs), additional monitoring activities, ambient stream surveys, and toxicity reduction evaluations.

e. *Standard Conditions.*

Pre-established conditions that apply to all NPDES permits and delineate the legal, administrative, and procedural requirements of the permit.

f. *Discharge Monitoring Report (DMR).*

A blank form to use as a template for submitting monitoring results to the agency issuing the facility permit.

3. Overview of the Permitting Process.

While the limits and conditions in an individual NPDES permit are unique to the permittee, the process used to develop the limits and conditions and then issue the permit generally follows a common set of steps. The order of these steps may vary depending on whether the permit is an individual or general permit.

a. *Individual Permits.*

As specified in [40 CFR 124], the major steps for a permit writer to develop and issue an individual NPDES permit are the following:

- (1) Receive application from permittee.
- (2) Review application for completeness and accuracy.
- (3) Request additional information as necessary.
- (4) Develop technology-based effluent limits using application data and other sources.
- (5) Develop water quality-based effluent limits using application data and other sources.
- (6) Compare water quality-based effluent limits with technology-based effluent limits and choose the more stringent of the two.
- (7) Develop monitoring requirements for each pollutant.
- (8) Develop special and standard conditions.
- (9) Consider variances and other applicable regulations.
- (10) Prepared fact sheet, summarizing the principal facts and the significant factual legal, methodological, and policy questions considered in preparing the draft permit including public notice of the draft permit and other supporting documentation.
- (11) Complete the review and issuance process.
- (12) Issue the final permit.
- (13) Ensure permit requirements are implemented.

b. *General Permits.*

The process for developing and issuing general NPDES permits is similar to the process for individual permits; however, there are certain differences in the order of events. The permitting authority first identifies the need for a general permit by collecting data demonstrating that a group or category of dischargers has similarities that warrant a general permit. In deciding whether to develop a general permit, permitting authorities consider the following:

- (1) Are there a large number of facilities to be covered?
- (2) Do the facilities have similar production processes or activities?
- (3) Do the facilities generate similar pollutants?
- (4) Do only a small percentage of the facilities have the potential for violations of water quality standards?

The remaining steps of the permit process are the same as for individual permits. The permitting authority develops the draft permit and fact sheet, issues a public notice, addresses public comments, documents the issues for the administrative record and issues the final permit. After the general permit has been issued, facilities that wish to be covered under the general permit generally submit a NOI to the permitting authority. The permitting authority may then either request additional information through an official Request for Additional Information letter, notify the facility that it is covered by the general permit, or require the facility to apply for an individual permit.

c. *Permitting Authority.*

EPA is authorized under the CWA to directly implement the NPDES Program. The EPA, however, may authorize states, territories, or tribes to implement all or parts of the national program. As a result, most of the states, have applied for authorization to implement the base program (i.e., issue individual NPDES permits for industrial and municipal sources) and additional parts of the national program including:

- Permitting Federal facilities;
- Administering the National Pretreatment Program; and/or
- Administering the Sewage Sludge/Biosolids Program.

A table of the state NPDES Program status is in Appendix 1 and a table of Class V UIC primacy is in Appendix 2.

4. POTW Permits for BLM Facilities.

a. *Industrial Wastewater Treatment/Pretreatment Permits.*

For certain industrial processes, the EPA requires the wastewater resulting from the

process to be pretreated prior to discharge to a POTW. If a BLM facility uses any of the processes regulated by the EPA as listed in [40 CFR Chapter I, Subchapter N (400-471)], the facility will be required to pretreat its wastewater and monitor the effluent to ensure it meets the effluent limitations for the regulated point source category.

b. *Pretreatment Permits / Standards for BLM Facilities.*

The most common pretreatment standard imposed on BLM facilities is for washracks that discharge to the local POTW. If the building is leased, it is often the building owner's responsibility to install proper pretreatment and obtain the proper permit from the POTW.

Often the permit is obtained during building construction and may simply be comprised of a letter of acknowledgement from the POTW in which it grants permission if the facility adheres to specific conditions (e.g., installation of a grit trap and oil/water separator of a certain size).

As an operator, the facility staff must be cognizant of where all drains discharge. A hazardous material spill or fire retardant discharging to the POTW could negatively impact the treatment process used by the POTW, could pass through it untreated, or otherwise cause a problem for the POTW adhering to the conditions required by its NPDES permit.

### **G. Septic Systems**

Many BLM facilities utilize onsite septic systems to treat the sewage (domestic waste, sanitary waste) generated onsite. These systems are designed to biologically treat sewage using an underground concrete settling tank and a leach field. The tank separates solids from liquids and allows the solids to biologically degrade into water soluble products that then flow by gravity into the leach field. From there, the liquid wastes seep into the ground for further biological degradation and filtration.

To assist facilities that use septic systems, the EPA has produced the manual *Decentralized Onsite Wastewater Treatment Systems* that is available at the following web address: <http://water.epa.gov/infrastructure/septic/>

#### **1. Domestic Wastewater.**

Domestic wastewater or sanitary waste consists of wastewater discharged from residences and from commercial, institutional, and similar facilities.

Sanitary waste is defined by EPA as liquid or solid waste originating solely from humans and human activities. This category includes waste collected from toilets; showers; wash

basins; sinks used to clean domestic areas; sinks used to prepare food; clothes washing; and sinks or washing machines where food and beverage-serving dishes, glasses, and utensils are cleaned [40 CFR 144.3].

Septic systems normally require an approval from a local health agency prior to construction. This approval is based on both the engineering design of the system and the ability of the soil to handle the predicted flow of treated water from the system. To determine the porosity of the soil, a percolation test is typically required in areas where the soils have high clay content that would reduce or prevent water flow.

Septic systems that only receive domestic wastewater and have the capacity to serve 20 or more persons per day are considered large-capacity septic systems. These systems are regulated as Class V wells under the UIC Program, see Section I. Single-family residential septic systems and non-residential septic systems used only to dispose sanitary waste and do not have sufficient capacity to 20 persons a day are not regulated by the UIC Program.

## 2. Industrial Wastewater.

EPA defines industrial wastewater as industrial process wastewater, equipment and facility wash water (e.g., cleaning paint brushes with paint thinner), industrial site drainage, air scrubber wastewater, water softener regeneration brine, and fluids from facilities such as machine shops, laundromats, meat processing plants, and car washes.

EPA considers the discharge of everything except domestic wastewater into a subsurface disposal system to be an industrial discharge. Underground injection of industrial water is regulated under the UIC Program.

Constructing any system, well, or septic, to accept an industrial wastewater discharge requires a permit. The discharge of industrial wastewater to a septic system and is prohibited until the system has been permitted by rule or a permit has been issued. Through its audit program, the BLM has identified many prohibited industrial discharges to septic systems. BLM has actively worked to reroute these discharges to the POTW or cease the discharging operation all together.

Examples of noncompliant industrial discharges to septic systems include those on the following list. Discharges of this type to any drain should pose a red flag to the facility for further investigation.

- Vehicle wash water used with soap or not
- Ice and snow melt from vehicles
- Accidental hazardous material releases, such as a spill into a warehouse or shop drain
- Floor wash down water
- Parking lot stormwater
- Stormwater discharging from exposed stored hazardous material

### 3. Pit Toilets.

A pit toilet is a dry toilet system that is used to dispose human excreta. Pit toilets range in size and complexity from a hand dug hole in the ground to more elaborate systems with ventilation. A pit toilet meets EPA's definition of a cesspool as a shallow well with an open bottom and/or perforated sides that receives only sanitary waste.

The EPA considers any nonresidential cesspool used solely for sanitary waste with the capacity to serve 20 or more people per day (e.g., a rest stop) as a large-capacity cesspool. Large-capacity cesspools were to have been closed by April 5, 2005.

State regulations do not necessarily conform with EPA's interpretation of the potential for pit toilets to be large-capacity cesspools. California, for instance, has exempted pit toilets of all sizes and uses from the definition of a cesspool and the UIC Program. Other states define a specific, daily flow rate which is needed to reach the large-capacity threshold for Class V wells. The flow rate thresholds tactically exclude pit toilets from the "large-capacity" category because pit toilets are dry systems where daily flow rates are typically minimal. BLM offices must be knowledgeable of and comply with the regulations promulgated by the agency with primacy in the state where the pit toilet is located. However, it is the BLM's practice to replace pit toilets with vault toilets where practical, even if not required by the regulatory agency, to ensure maximum possible groundwater protection.

BLM Field Office Officials should monitor pit toilets within their jurisdictional boundaries to ensure that they are not used by more than 20 people per day. If use does exceed this limit, the toilet must be closed. Replacement by a vault toilet is recommended for all areas where the use even approaches the limit, to ensure compliance.

## **H. Underground Injection Control Program.**

Regulating waste fluid disposal via underground injection wells (including shallow disposal systems such as dry wells and certain septic systems) is intended to protect ground water used as drinking water. Appendix 2 lists the states in which the BLM has facilities that have primacy for the Underground Injection Control (UIC) Program.

UIC regulations are one of the few sets of regulations emphasizing pollution prevention. The Safe Drinking Water Act requires EPA to administer the UIC Program using a non-endangerment standard. EPA does not have to wait until ground water is impacted before regulating an injection well. In addition, EPA has been known to aggressively enforce the UIC regulations, particularly in regions of the country that obtain drinking water from a sole-source aquifer.

There are six classes of underground injection wells that are regulated. The classes are based on similarity in the fluids injected, activities, construction, injection depth, design, and operating techniques. This categorization ensures that wells with common design and operating techniques are required to meet appropriate performance criteria for protecting [underground sources of drinking water](#) (USDWs).

Classes	Use
<a href="#">Class I</a>	Inject hazardous wastes, industrial non-hazardous liquids, or municipal wastewater beneath the lowermost USDW
<a href="#">Class II</a>	Inject brines and other fluids associated with oil and gas production, and hydrocarbons for storage.
<a href="#">Class III</a>	Inject fluids associated with solution mining of minerals beneath the lowermost USDW.
<a href="#">Class IV</a>	Inject hazardous or radioactive wastes into or above USDWs. These wells are banned unless authorized under a federal or state ground water remediation project.
<a href="#">Class V</a>	All injection wells not included in Classes I-IV. In general, Class V wells inject non-hazardous fluids into or above USDWs and are typically shallow, on-site disposal systems. However, there are some deep Class V wells that inject below USDWs.
<a href="#">Class VI</a>	Inject Carbon Dioxide (CO <sub>2</sub> ) for long term storage, also known as Geologic Sequestration of CO <sub>2</sub>

Of the six types of UIC wells regulated under the program, the BLM operates only Class V wells. However, the other classes of wells, especially Class II wells, exist on BLM-managed land and are operated by authorized users. Site-specific conditions could dictate the need for BLM to assume operation of a Class I, II, III, IV or VI well; the State HazMat Program Lead should be contacted for further guidance in these situations.

Most Class V wells are shallow disposal systems that depend on gravity to drain fluids directly in the ground. There are over 20 Class V well subtypes that fall into the Class V category and these wells are used to inject a variety of non-hazardous fluids underground. BLM typically operates Class V Wells that are unsophisticated shallow disposal systems that include storm water drainage wells, food process disposal wells, dewatering wells, and septic systems with leach fields. However, the Class V well category also includes more complex wells that are typically deeper and often used at commercial or industrial facilities.

EPA's UIC regulations [40 CFR 144.82] titled "What must I do to protect underground sources of drinking water?"

- prohibits owners or operators of any type of Class V well from allowing movement of fluid to underground sources of drinking water that might cause endangerment.
- requires compliance with other Federal UIC requirements in [40 CFR 144 through 40 CFR 147]; and with any other state or EPA Regional Office UIC Program measures;

- requires proper well closure when it is no longer used; and
- requires basic information about the well, as described in [40 CFR 144.83], to be submitted as part of a facility's UIC well inventory.

1. Identifying Class V Underground Injection Control Wells.

Although called “wells”, most disposal systems that meet the criteria of Class V wells are not what would typically be considered a well. Instead, the most common types of Class V wells are septic systems or merely holes in the ground where wastewater or stormwater is discharged. Of the more than 20 subtypes of “wells” regulated as Class V, those most commonly operated at BLM are the following:

a. *Large-Capacity Septic Systems (LCSS).*

A septic system is an on-site method of treating and disposing of sanitary wastewater typically consisting of a buried tank that removes suspended solids from raw wastewater, an effluent distribution system and a soil absorption area (e.g., leach field) where effluent undergoes additional treatment and attenuation through the processes of adsorption, dispersion, and biodegradation. A BLM septic system is considered an LCSS if it receives solely sanitary waste either from **multiple dwellings** (e.g., fire crew quarters) or from a *non-residential establishment* and the system has the capacity to *serve 20 or more persons per day*. **Sanitary waste** is liquid or solid waste originating solely from humans and human activities. This category includes waste collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage-serving dishes, glasses, and utensils are cleaned (40 CFR 144.3).

b. *Stormwater Drainage Wells.*

Stormwater drainage wells manage surface water runoff (rainwater or snow melt) by placing it below the ground surface. They are typically shallow disposal systems designed to infiltrate storm water runoff below the ground surface. There are a variety of designs and may be referred to by other names such as dry wells and infiltration galleries. It is important to note that a Class V well by definition is any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension or a subsurface fluid distribution system (an infiltration system with piping to enhance infiltration capabilities).

c. *Industrial Waste Disposal Wells.*

Industrial waste disposal wells are used to inject non-hazardous wastewater, which could include, but is not only sanitary waste. These wells are frequently configured as gravity-fed dry wells, as septic fields that discharge just below the land surface, or small cesspools. Injected fluids may include wastewater from animal maintenance

activities, fish cleaning stations, equipment or facility washwater, or greywater wells that are installed at some campgrounds.

**The Following Class V Wells are Banned and May Not be Used at Any BLM Facility:**

d. *Large-Capacity Cesspools.*

Most cesspools consist of a concrete cylinder with an open bottom or perforated sides, but can also be hand dug open pits. Large-capacity cesspools include non-residential cesspools that have the capacity to serve 20 or more persons per day (e.g., campground rest areas) if they receive solely sanitary waste. Pit toilets that serve more than 20 people a day, would be classified as large-capacity cesspools in those states where this criteria is solely used to define large capacity systems.

e. *Motor Vehicle Disposal Wells.*

A motor vehicle waste disposal well is any shallow disposal system that receives fluids from vehicle repair or maintenance activities. Typical motor vehicle waste disposal wells are floor drains or sinks in service bays that connect to a septic system or drywell. However, *any* underground system that receives motor vehicle waste is considered to be a motor vehicle waste disposal well. For example, cesspools, dry well, and septic systems are considered motor vehicle waste disposal wells if they receive motor vehicle waste.

The ban on motor vehicle disposal wells is for systems installed after April 5, 2000 or in groundwater protection areas or other sensitive areas. However, it is the BLM policy to close all wells of this subtype.

2. Authorization by Rule or Permitting.

Owners/operators of Class V wells are required to complete basic inventory information about the injection well and submit the information to EPA or the authorized state regulatory agency. If the regulator does not respond or ask for more information within 90 days, the Class V well is considered authorized by rule.

Required inventory information includes facility name and location; name and address of legal contact; ownership of facility; nature and type of injection wells; and operating status of injection wells. All BLM facilities must maintain an inventory of their Class V Wells and document submission of the inventory information to their State regulatory agency or EPA.

In most cases, an individual permit is not required unless the facility is specifically directed to obtain a permit by the permitting authority. Motor vehicle disposal wells installed before 2000 must be permitted if not closed. Because of the extensive



requirements to permit and maintain this type of Class V well, it is the BLM policy to close them.

### 3. Central Inventory of Class V Wells.

Department policy requires all bureau's to maintain a central inventory of the Class V Wells they operate or have closed. BLM uses the Facility Asset Management System (FAMS) to maintain a comprehensive bureau-wide inventory its Class V Wells. There is an attribute associated in FAMS with all asset types that could be a Class V Wells (septic systems, storm drainage systems, RV Dump sites, Fish Cleaning Stations, etc). This attribute must be checked YES (Class V Well) or NO (not a Class V Well) in order to complete the entry for these assets. If an asset is identified as a Class V Well at a facility and the specific system type in FAMS for that asset does not have the Class V well attribute associated with it in FAMS, Field Offices should contact their State HazMat lead for resolution. All Class V Wells, regardless of the type of system, must be designated as such in FAMS.

It should be noted that as of May 2015, all known, existing BLM Class V wells had been identified. However, because designating pit toilets or septic systems as large-capacity is dependent on useage, systems existing as of May 2015 and not defined as Class V wells, could meet the criteria if conditions change, i.e. useage increases. Therefore, Field Office Managers and field office HazMat POCs must be aware of uses of their systems and evolving public use or office renovations, especially for those systems at or near the threshold. If conditions change that result in septic systems reaching the threshold for large-capacity inventory information must be sent to the respective UIC Program Director upon discovery. If pit toilet usage increases to meet the criteria for large-capacity, these toilets must immediately be decommissioned (i.e. locked) to prevent further use.

### 4. Operation of Class V Wells.

Class V wells must be operated in a way that does not endanger drinking water. Maintenance issues for septic systems or storm drains that are authorized as Class V Wells must be addressed promptly and will be prioritized for funding.

In addition to periodic internal inspections to ensure proper maintenance, Class V Wells should be identified to auditors during compliance audits to allow for third party verification of their proper operation.

Specific maintenance protocols may be required by the permitting authority. Field Offices must comply with any protocols specified in their permit and maintain documentation of that compliance.

## 5. Injection Well Closure Requirements.

EPA's closure requirements state that a well must be closed in a manner that complies with the prohibition of fluid movement. [40 CFR 144.82(b)]

EPA closure requirements include the following procedures:

- Contacting the permitting authority at least 30 days before closing the well to identify what information must be provided and any specific requirements. A pre-closure notification form, inventory form, or letter stating the intent to close the well may be required.
- Permanently plugging or otherwise closing the well as approved by the permitting authority.
- Disposal or management of any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well in accordance with all applicable Federal, State, and local regulations and requirements.
- Completing any additional requirements dictated by the permitting authority.

### **I. Stormwater.**

Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces and does not percolate into the ground. Stormwater systems are normally uncontrolled drainage systems designed to remove rain or melted snow off. As the runoff flows over impervious surfaces (e.g., paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment, or other pollutants that could adversely affect water quality if the runoff is discharged untreated. Stormwater discharges that are classified as point sources may require an NPDES permit. This permitting mechanism is designed to prevent stormwater runoff contaminated with pollutants from entering the waters of the United States.

The NPDES stormwater program regulates stormwater discharges from three potential sources.

- **Municipal Stormwater Systems (MS4s):** Operators of large, medium, and regulated small MS4s may be required to obtain authorization to discharge stormwater. Note that the Phase II Final Rule for MS4s requires nationwide coverage of all operators of small MS4s that are located within the boundaries of a Bureau of the Census-defined "urbanized area" (UA) based on the latest decennial Census. Therefore, it is unlikely that any BLM facility would be regulated as an MS4 is unlikely.
- **Construction Activities:** Operators of construction sites that disturb one acre or larger (including smaller sites that are part of a larger common plan of development) may be required to obtain an NPDES construction stormwater permit. Facility owners of construction sites must meet the requirements of EPA's or authorized State Construction General Permit (CGP).

- **Industrial Activities:** Industrial sectors may require authorization under an NPDES industrial stormwater permit for stormwater discharges. Owners/operators of locations where industrial activities such as airport operations must meet the requirements of EPA's or authorized State Multi-Sector General Permit (MSGP).

The CWA directed the EPA to develop a phased approach for regulating stormwater discharges under the NPDES Program. Phase I of the stormwater program addresses permits for discharges from medium and large MS4s and certain categories of industrial activity, including construction activity disturbing greater than 5 acres. Phase II expanded the stormwater program to include small MS4s and construction activity disturbing one to five acres.

States with primacy are authorized to implement stormwater NPDES permitting programs. Appendix 1 indicates NPDES primacy and is current as of January 2014.

Stormwater drainage wells used to remove stormwater and urban runoff from surfaces such as roadways, roofs, and paved surfaces to prevent flooding are considered Class V injection wells by the EPA. They need to be inventoried with the EPA and maintained in accordance with Section I of this handbook.

#### 1. Stormwater NPDES Permit General Conditions Applicable to All Permits.

All storm water NPDES permits, including Multi-Section Group Permits (MSGP) for discharges from airports/tanker bases, large CAFOs (wild horse and burro facilities with 500 or more horses), and construction sites that are one acre or larger, have numerous standard conditions that the BLM must follow. Those standard conditions are reiterated in 40 CFR 122.41. The standard conditions of most significance to the BLM (aka permittee) are described below with BLM-specific examples provided in italics:

- **Duty to Comply** 40 CFR part 122.41(a): The permittee must comply with all conditions of the permit. Noncompliance is a violation of the CWA and is grounds for enforcement action, changes to or termination of the permit, or denial of a permit renewal application.
- **Duty to Reapply** 40 CFR part 122.41(b): A permittee wishing to continue permitted activities after the permit expiration date must reapply for and obtain a new permit.
- **Need to Halt or Reduce Activity not a Defense** 40 CFR part 122.41(c): The permittee may not use as a defense in an enforcement action the reasoning that halting or reducing the permitted activity is the only way to maintain compliance.
- **Duty to Mitigate** 40 CFR part 122.41(d): The permittee is required to take all reasonable steps to prevent any discharge or manure use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment.

- **Proper Operation and Maintenance** 40 CFR part 122.41(e): The permittee must properly operate and maintain all equipment and treatment systems used for compliance with the terms of the permit. *For example, evaporation ponds must be periodically cleaned to remove sludge and trash to ensure they can retain the volume of storm water from a 24-hour/25-year storm event.*
- **Duty to Provide Information** 40 CFR part 122.41(h): The permittee must furnish, within a reasonable time, any information needed to determine compliance with the permit. The permittee also must furnish, on request, copies of records that must be kept as required by the permit.
- **Inspection and Entry** 40 CFR part 122.41(i): The permittee must allow entry into the premises where the regulated activity or records are present. The inspector must have access to and be able to make copies of any required records; inspect facilities, practices, operations, and equipment; and sample or monitor at reasonable times.
- **Monitoring and Records** 40 CFR part 122.41(j): Samples must be representative of the monitored activity. The permittee must retain records for 3 years. Monitoring records must identify the sampling dates and personnel, the sample location and time, and the analytical techniques used and corresponding results.
- **Signatory Requirement** 40 CFR part 122.41(k): The permittee must sign and certify applications, reports, or information submitted to the EPA in accordance with the requirements in 40 CFR § 122.22. Knowingly making false statements, representations, or certifications is punishable by fines or imprisonment.
- **Planned Changes** 40 CFR part 122.41(l)(1): Notice must be given to the EPA or State regulatory agency as soon as possible of planned physical alterations or additions to the facility (or both) that could meet the criteria for determining whether the facility is a new source under 40 CFR part 122.29(b); result in changes in the nature or quantity of pollutants discharged; or significantly changes manure disposal practices. *For example, a county airport has a storm water MSGP and the BLM approaches the airport authority regarding siting a Large Air Tanker Base or Single Engine Air Tanker Base at the airport. The airport's MSGP did not address tanker base activities and the washing of associated aircraft. Therefore, the airport authority would have to notify the EPA or State regulatory agency of the planned change (i.e., addition of a tanker base) to the airport and its permit. Alternatively, if the airport does not want to include the tanker base in its permit the BLM must submit a Notice of Intent with the EPA or State regulatory agency to have its own storm water MSGP.*
- **Twenty-Four Hour Noncompliance Reporting** 40 CFR 22.41(l)(6): The permittee must orally report any noncompliance that might endanger human health or the environment within 24 hours after becoming aware of the circumstances. Within 5 days of becoming aware of the circumstances, the permittee must provide a written submission including a description of the noncompliance and its cause; the period of noncompliance, including

exact dates and times; the anticipated time the noncompliance is expected to continue (if not already corrected); and steps taken to reduce, eliminate, or prevent reoccurrence unless the EPA Director waives the requirement. In addition, 24-hour reporting is required for an unanticipated bypass exceeding effluent limits; an upset exceeding effluent limits; or a violation of a maximum daily effluent limitation for pollutants listed in the permit for 24-hour reporting. *For example, if an evaporation pond at a wild horse and burro facility overflows this is considered noncompliance with permit conditions, The noncompliance must be reported to the EPA or State regulatory agency within 24-hours.*

- **Other Noncompliance** 40 CFR 122.41(l)(7): The permittee must report all instances of noncompliance not reported under other specific reporting requirements at the time monitoring reports are submitted. *For example, if manure was not sampled to determine its nutrient content prior to land application or it is applied to a different area than specified in the permit. .*
- **Other Information** 40 CFR 122.41(l)(8): If the permittee becomes aware that it failed to submit any relevant facts in its application, or submitted incorrect information in its application or other reports, it must promptly resubmit such facts or information.
- **Bypass** 40 CFR 122.41(m): The intentional diversion of waste streams from any portion of a treatment facility (i.e., evaporation/retention pond at a wild horse and burro facility or tanker base) or “bypass” is prohibited, with one exception. If the bypass does not cause the effluent to exceed permitted limits and is essential to ensure efficient operation, the bypass is not considered noncompliance, and notification or 24-hour reporting is not required. The Director of the states NPDES program may take enforcement action against a permittee for a bypass, unless the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; there was no feasible alternative; and the proper notification was submitted. *For example an evaporation pond at an air tanker base may be bypassed during the winter when the base is not in operation.*
- **Upset** 40 CFR 122.41(n): An upset is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limits because of factors beyond the permittee’s control. An upset can be used as an affirmative defense in actions brought against the permittee for noncompliance. An upset is not considered noncompliance unlike exceedances of effluent limits caused by operational error, improperly designed or inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation. The permittee (who has the burden of proof to demonstrate that an upset has occurred) must have operational logs or other evidence that shows:
  - When the upset occurred and its causes.
  - The facility was being operated properly.
  - Proper notification was made.
  - Remedial measures were taken.

## 2. Stormwater NPDES Permits for Construction Activities.

Construction site operators engaged in clearing, grading, and excavating activities that disturb 1 acre or more, including sites less than 1 acre in a larger common plan of development or sale, are required to obtain coverage under an NPDES permit for prior to discharging stormwater.

Construction activities (including other land-disturbing activities) that disturb more than 5 acres are regulated by NPDES stormwater program Phase I requirements. Activities that disturb 1 to 5 acres are regulated under Phase II requirements. The Phase II requirements also include smaller sites that are part of a larger common plan of development or sale. Sites less than 1 acre, if determined by local authorities to pose a significant risk to local watersheds, can also be required to obtain an NPDES permit.

Operators of regulated construction sites are required to obtain permit coverage from an authorized State, or from EPA under the Construction General Permit (CGP), if the state is not authorized to issue NPDES permits. Most states have been authorized to implement the NPDES stormwater program. The CGP or state permit outlines a set of provisions construction operators must follow to comply with the requirements of the NPDES stormwater regulations. Operators of regulated construction sites are required to develop and implement SWPPP under the CGP. State regulations typically require similar sediment- and erosion-control plans.

The EPA's CGP and MSGP apply only in areas where EPA is the permitting authority. EPA's MSGP applies in areas of the country where EPA remains the NPDES permitting authority and has made the permit available for coverage, which includes federal facilities in New Mexico, Colorado, and Washington. All other BLM facilities with tanker bases or construction activity that will disturb one or more acres of land are to apply to their State regulatory agency for a MSGP permit. The following hyperlink identifies what each State regulates/permits related to Construction General Permits and Multi-Sector Group Permits (MSGP) activities:

<http://water.epa.gov/polwaste/npdes/stormwater/Authorization-Status-for-EPAs-Stormwater-Construction-and-Industrial-Programs.cfm>

## 3. Stormwater NPDES Permits for Industrial Activities

A facility must obtain permit coverage for industrial activities if the activity falls under 1 of the 10 industrial storm water categories and it discharges to an MS4, directly to waters of the United States, or it is one of the 30 industrial sectors listed in the MSGP (e.g., air transportation). The BLM does not own facilities that are in the 10 industrial categories or 30 industrial sectors. However, the BLM does operate and/or contracts for the operation of Large Air Tanker Bases (LATB) and Single Engine Air Tank (SEAT) Bases at airports that are regulated and must have a MSGP and Storm Water Pollution Prevention Plan (SWPPP).

The NPDES Stormwater MSGP provides facility-specific requirements for many types of industrial facilities within one overall permit; the MSGP is one large permit divided into numerous separate sectors. Airports are identified as Sector S, Air Transportation in the MSGP. It is under Sector S that most BLM stormwater permits are required due to tanker base operations (e.g., washing of air tankers, loading of retardant) at many airports throughout the western U.S. Other BLM operations that require NPDES permits are wild horse and burro facilities and vehicle washracks that discharge to waters of the U.S. These are discussed further in Section K.

Stormwater permits specify the steps that facility operators must take prior to being eligible for permit coverage, including submitting an NOI, installing stormwater control measures to minimize pollutants in stormwater runoff, and developing a SWPPP.

Stormwater discharges from industrial facilities with no exposure to industrial activities or materials are conditionally excluded from the stormwater permitting program as clarified in Phase II of the stormwater program. To qualify for the no exposure exclusion, the industrial operator must complete a no exposure certification form and submit this to EPA once every 5 years.

Answers to frequently asked questions related to the regulations of storm water from industrial activities may be viewed using the following hyperlink:

<http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-FAQs.cfm>

#### 4. Stormwater Pollution Prevention Plans.

A requirement under all MSGPs is the development and implementation of a SWPPP. The SWPPP provides a written assessment of potential stormwater pollution sources (e.g., drums of fuel and lubricants stored outside) and the control measures that will be implemented to minimize the discharge of pollutants in runoff from the site. A SWPPP is a site-specific, written document that accomplishes the following:

- Identifies potential sources of stormwater pollution.
- Describes measures and controls to reduce pollutants in stormwater discharges, including controlling the volume of stormwater runoff (e.g., taking steps to allow stormwater to infiltrate into the soil).
- Identifies any other procedures the operator will implement to comply with the terms and conditions of the permit.

Documenting potential pollutant sources at a facility includes the following:

- A map of the facility indicating the drainage areas of the site and the industrial activities that occur in each drainage area.
- An inventory of materials that could be exposed to stormwater.
- A description of the likely sources of pollutants from the site and a prediction of the pollutants likely to be present in the stormwater.

- The history of spills and leaks of toxic and hazardous materials over the past 3 years.

Documenting measures and controls that will be implemented to prevent or minimize pollution of stormwater include but are not limited to the following:

- Good housekeeping measures intended to minimize the exposure of industrial areas and fuel storage areas to stormwater.
- Preventive maintenance of stormwater controls (e.g., oil water separators) and other facility equipment.
- Spill prevention and response procedures.
- Inspecting or testing of outfalls to ensure that there are no illicit discharges.
- Employee training on pollution prevention measure and controls, and record keeping.

The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the SWPPP kept on-site. The MSGP also requires collecting visual, analytical, and/or compliance monitoring data to determine the effectiveness of implemented BMPs.

## **J. BLM Facility Permits and Plans.**

Historically, the three most common discharges from BLM facilities that require NPDES permits and SWPP plans include: Tanker bases and wild horse and burro facilities, and vehicle washracks. However, the majority of vehicle washracks that discharged to stormwater have either been closed or connected to POTWs. Therefore, only tanker bases and wild horse and burro facilities are discussed in detail in this section.

### **1. Stormwater MSGP Permits for Tanker Bases.**

Airports nationwide are required to obtain a MSGP for their stormwater runoff discharges. In states where the state manages the NPDES Program, BLM tanker bases discharges may be covered under the respective airport's stormwater NPDES permit. However, it is important for the airport authority to be informed of the discharge so that BLM's air tanker operations are included in the MSGP. If the BLM tanker base activities are not be included in the airport MSGP, the airport does not have a MSGP, or the BLM tanker base is in the states of New Mexico, Colorado, or Washington, the BLM must obtain its own MSGP.

Contaminants of concern commonly associated with air tanker bases include, but are not limited to, the following:

- Ammonia, and phosphates in the fire retardant [Note: sodium ferrocyanide was a consistent in fire retardant a corrosion inhibitor, but was engineered out of the product in 2004.];
- Total petroleum hydrocarbons from oil and fuel that leak on the ramp; and



- Any aromatic hydrocarbons, phosphates, or other compounds in solvents and detergents used to wash the aircraft.
- a. Potential Pollution Sources at Air Tanker Bases.

During the operating season, the potential pollution sources from tanker bases include:

- Retardant mixing and loading: BLM or retardant contractors are required to clean up all spills caused by mixing and loading and to wash spills off the ramp.
- Aircraft servicing, parking, and fueling: When planes are parked on a ramp, oil can drip from the aircraft engines and fuel spills can occur during fueling.

- b. Air Transportation MSGP Requirements.

In addition to complying with the general MSGP requirements including preparation of a SWPPP, airports and BLM tanker bases must also adhere to the MSGP Sector S, Air Transportation requirements. Several of the Sector S requirements are specific to deicing practices, and are not applicable to BLM. The requirements that are applicable to a tanker bases are as follows:

- i. Aircraft, ground vehicle and equipment maintenance areas: Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.
- ii. Aircraft, Ground Vehicle and Equipment Cleaning Areas: Clearly demarcate cleaning areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater runoff from cleaning areas.
- iii. Aircraft, Ground Vehicle and Equipment Storage Areas: Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Consider the following control measures, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and installing perimeter drains, dikes or berms around storage areas.
- iv. Material Storage Areas: Maintain the containers of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., USED OIL, CONTAMINATED JET A, etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures (or

- their equivalents): storing materials indoors; storing waste materials in a centralized location; storing containers in covered secondary containment shelters, and installing berms/dikes around storage areas.
- v. Airport Fuel System and Fueling Areas: Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater runoff in treatment/evaporation ponds.
  - vi. Source Reduction: Minimize, and where feasible eliminate, the use of hazardous materials.
  - vii. Runoff Management: This requirement is specific to deicing operations that are not typically applicable to BLM retardant bases.

c. *Items that Must be Addressed in an Airport/Tanker Base SWPPP.*

In addition to complying with the general MSGP requirements, the SWPPP that covers a Tanker Base must include:

- i. Drainage Area Site Map: Document the following areas of the tanker bases and indicate whether activities occurring there may be exposed to precipitation/surface runoff: fueling stations; aircraft, ground vehicle, and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles, and equipment awaiting maintenance.
- ii. Potential Pollutant Sources: Describe the potential for retardant loading and air tanker, ramp, and equipment cleaning operations to contribute stormwater pollutants.
- iii. Vehicle and Equipment Wash Water Requirements: Attach a copy of the NPDES permit or MSGP issued for vehicle/equipment wash water or, if a permit has not been issued, a copy of the pending application. If wash water discharges to the sanitary sewer describe the facility control measures for implementing all non-stormwater discharge permit conditions or pretreatment requirements in the SWPPP. If wash water is handled in another manner (e.g., hauled offsite, retained onsite in an evaporation pond), describe the disposal method and attach all pertinent documentation/information (e.g., pond construction including liner specification, etc.) in the SWPPP.
- iv. Documentation of Control Measures Used for Management of Runoff: Documents the control measures used for collecting or containing contaminated water from washing of aircraft, vehicles, equipment, and/or ramp.

d. *Actions BLM Can Take for Coverage of the Tanker Base under the Airport's MSGP.*

It is possible that an airport in with the BLM operates a LATB or SEAT Base has not

included the BLM operation in its permit application, Notice of Intent (NOI), or SWPPP. If the BLM's operations and facility were not included in the permit and/or the SWPPP required by the MSGP, but can be included in accordance to the state NPDES Program, suggested actions include:

- contacting the airport requesting to be formally made a copermittee or party to the permit and its SWPPP;
- coordinating with the airport authority to ensure they formally notify the appropriate regulatory agency of the planned change (i.e., inclusion of tanker base activities such as aircraft washing) at the airport as required by 40 CFR 122.41(l)(1) and requesting incorporation of the BLM/retardant contractor activities in the MSGP permit issued to the airport;
- determining what permit and SWPPP requirements apply to tanker base operations and implementing them;
- including language in the Memorandum of Understanding with the airport authority that they will include the BLM and tanker base contractor in all inspections and monitoring required by MSGP and will notify the BLM of any issues or MSGP nonconformance that must be addressed;
- including language in the tanker base contract that the contractor is to comply with all provisions in the MSGP and with all audit findings associated with contractor operations; and

e. *Actions for Permitting Independently of the Airport*

If an Airport with a BLM tanker base has not filed an NOI for MSGP coverage; has let its permit expire; has not requested a waiver from MSGP coverage; is in New Mexico, Colorado or Washington, where EPA manages the NPDES program; or is in a State that has adopted EPA's requirements that an individual MSGP is necessary, the BLM must take independent action to ensure compliance of its stormwater discharge.

EPA has clarified in prior application updates that all parties meeting the definition of "operator" at airports, including tenants who perform industrial activities, must obtain stormwater permit coverage. EPA discontinued usage of "co-permittee" in the 2008 permit due to confusion about its meaning, but retained both the requirement for NOI submittal by individual operators, pursuant to 40 CFR 122.28(b)(2)(i), as well as the responsibilities of individual operators.

In 2015, EPA added Part 8.S.3 Multiple Operators at Air Transportation Facilities, to enumerate the responsibilities and options for operators, at an Airport. . These requirements include:

- All operators must individually file an NOI.
- A single comprehensive SWPPP must be developed for all stormwater discharges associated with industrial activity at the airport.

- The comprehensive SWPPP should be developed collaboratively by the airport authority and tenants, but when an airport operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP.
- The SWPPP must clearly identify all operators' individual contributions and compliance responsibilities.
- All operators must sign and certify the SWPPP.
- The MSGP's requirements can be complied with by the airport authority for itself; or the airport authority on behalf of its tenants; or tenants for themselves.
- Communication procedures between operators must be included in the SWPPP to ensure permit compliance.

The following hyperlink identifies what each State regulates/permits related to Multi-Sector Group Permits (MSGP) activities:

<http://water.epa.gov/polwaste/npdes/stormwater/Authorization-Status-for-EPAs-Stormwater-Construction-and-Industrial-Programs.cfm>

## 2. Stormwater NPDES Permits and MSGPs for Concentrated Animal Feeding Operations (CAFO) – Wild Horse and Burro Facilities.

The BLM protects, manages, and controls wild horses and burros under the authority of the Wild Free-Roaming Horses and Burros Act of 1971. Wild horse and burro facilities meet the definition of an Animal Feeding Operation (AFO), and in some instances are recognized by the EPA or authorized States as CAFOs.

AFOs are agricultural operations where animals are kept and raised in confined situations. AFOs generally congregate animals, feed, manure, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures.

Wild horse and burro facilities that meet the regulatory definition of a CAFO, or that are designated as CAFOs by the permitting authority, and that discharge or propose to discharge are considered point sources and are required to be permitted under the NPDES permitting program. In order to obtain authorization under an NPDES permit, the CAFO owner or operator must either apply for an individual NPDES permit or submit a notice of intent (NOI) for coverage under an NPDES general permit. [40 CFR 122.23(d)(1)]

Manure and wastewater from wild horse and burro facilities have the potential to contribute pollutants such as nitrogen and phosphorus, organic matter, sediments, pathogens, heavy metals, hormones, antibiotics, and ammonia to the environment. Animal waste and wastewater can enter water bodies from spills or breaks of waste storage structures (due to accidents or excessive rain), and non-agricultural application of manure to cropland.

Permittees are required to prepare and submit a Nutrient Management Plan (NMP) with its permit applications or NOI. Also, depending on permit conditions and state requirements, soil testing and nutrient analysis may be required. This is to ensure that land application of the nutrients (e.g., applying manure) is done in accordance with appropriate land application rates. Nutrient content information is necessary to ensure that application of the manure does not cause crop damage or contamination of surface or ground water. Manure must be applied to the soil at a rate that allows the nutrients to be taken up by the crop.

Under 40 CFR 122.42(e)(1)(vii), all permitted CAFOs must establish and document their field-specific application rates for manure in a Nutrient Management Plan. The site-specific land application rates must be established as enforceable terms in the facility's NPDES permit or MSGP following either the linear approach described in 40 CFR part 122.42(e)(5)(i), or the narrative rate approach described in 40 CFR 122.42(e)(5)(ii).

CAFOs also must use up to date soil and manure tests to determine the appropriate manure land application rate and they must document their use of all these practices in a recordkeeping system. CAFOs that develop and implement a NMP, with associated records, will be exempt from being considered an illegal point source discharge under the CWA if runoff occurs during a precipitation event. CAFOs that do not have a nutrient management plan nor keep up-to-date records of their proper use of the plan could be liable for fines and penalties.

CAFOs that have an NPDES permit or MSGP will qualify for the agricultural stormwater exemption by following their NMP. Non-NPDES or non-MSGP permitted CAFOs must also develop and implement a NMP and keep the appropriate records to qualify for the agricultural stormwater exemption.

a. *Types of CAFOs.*

There are three types of CAFOs: 1) Large; 2) Medium; and 3) Small.

**Large CAFO:** A wild horse and burro facility is a Large CAFO if it confines 500 or more horses/burros for 45 days or more in a 12-month period and discharges to waters of the U.S. The definition of a Large CAFO is based solely on the number of animals confined. The 45-days do not have to be consecutive days.

**Medium CAFO:** A wild horse and burro facility is a Medium CAFO if it confines 150 to 499 horses/burros for 45 days or more (the 45 days do not have to be consecutive) in 12-month period and either:

- Has a man-made ditch, flushing system, or other similar man-made device that carries pollutants into waters of the U.S; or
- The animals come into contact with surface water that passes through the area where they are confined.. [40 CFR 122.23(b)(6)(ii)(A), (B)]

**Small CAFO:** A wild horse and burro facility is a Small CAFO if it confines 1 to 149 horses/burros for 45 days or more in a 12-month period and has been designated as a CAFO by the permitting authority as a significant contributor of pollutants. The 45-days do not have to be consecutive days.

The term man-made device means a conveyance constructed or caused by humans that transports wastes (manure, litter, or process wastewater) to waters of the U.S. Man-made devices include, for example, pipes, ditches, and channels. If human action was involved in creating the conveyance, it is man-made even if natural materials were used to form it. A man-made channel or ditch that was not created specifically to carry animal wastes, but nonetheless does so is considered a man-made device. To be defined as a Medium CAFO, there must be an actual discharge of pollutants to waters of the U.S. However, it is not necessary for the man-made device to extend the entire distance to waters of the U.S. It is sufficient that the wastes being discharged flow through the man-made device. For example, a culvert could simply facilitate the flow of wastewater from one side of a road to another (and subsequently into a water of the U.S.) and is a man-made device for the purposes of this provision.

An AFO may also be “designated” as a CAFO requiring an individual NPDES permit or a MSGP if the EPA or delegated State must determine that the AFO is a significant contributor of pollutants to waters of the U.S. [40 CFR 122.23(c)]. If an operation is “designated” by the EPA or authorized State as a CAFO, it must seek coverage under an NPDES permit and, among other things, develop and implement an NMP.

b. *Nutrient Management Plan Requirements*

In accordance with the CAFO regulations, a CAFO of any size covered by an individual NPDES permit or a MSGP must include a requirement to prepare and implement a Nutrient Management Plan (NMP). AFOs and unpermitted CAFOs are not required by regulation to develop and implement an NMP. However, for precipitation related discharges from an AFO’s or unpermitted CAFO’s land application area to qualify as agricultural stormwater that is exempt from CAFO permit requirements, the manure must be applied in accordance with a NMP. Therefore, the BLM strongly recommends that all wild horse and burro facilities develop and implement the nutrient management practices, regardless of size and permit status.

A NMP is the AFO equivalent of a SWPPP. A NMP must address, at a minimum, Best Management Practices (BMPs) that meet the requirements specified in 40 CFR part 122.42(e)(1). These BMPs include, but are not limited to the following:

- Ensuring adequate storage of manure, including procedures to ensure proper O&M of the storage facility.
- Managing mortalities to ensure that they are not disposed of within manure, storm water, or process wastewater storage or treatment system that is not

- specifically designed to treat animal mortalities.
- Ensuring that clean water is diverted, as appropriate, from the production area.
- Preventing direct contact of confined animals with waters of the U.S.
- Ensuring that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
- Identifying appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, that control runoff of pollutants to waters of the U.S.
- Identifying protocols for appropriate testing of manure, litter, process wastewater, and soil.
- Establishing protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater.
- Identifying specific records that will be maintained to document the implementation and management of the minimum elements described above.

All permits issued to CAFOs that land apply manure (as opposed to placing it in a landfill) contain terms and conditions that, when implemented, ensure that all precipitation-related discharges from land application are composed entirely of agricultural stormwater that is exempt from the CAFO regulations. For CAFOs, the agricultural stormwater exemption applies only to discharges from land application areas where the manure is applied in accordance with a Nutrient Management Plan (NMP). The NMP describes practices that ensure the manure is applied at a rate which the landscape may beneficially use the nutrients. Furthermore, discharges occurring during dry weather can never be discharges of agricultural stormwater. A dry weather discharge could be wind-blown manure and is disposed into an arroyo or drainage ditch which discharges into waters of the U.S.

For unpermitted Large CAFOs, a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO shall be considered an agricultural stormwater discharge exempt from CAFO regulation only where the manure, litter, or process wastewater has been land applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in 40 CFR 122.42(e)(1)(vi) through (ix).

Criteria for site-specific nutrient management practices for land application are specified in 40 CFR parts 122.42(e)(1)(vi)-(ix). For permitted CAFOs, the permit must set forth the, “site-specific nutrient management practices” that will be implemented for each requirement of 40 CFR 122.42(e)(1)(vi)-(ix).

c. *Transfer of Manure to Others.*

If a CAFO with an NPDES permit pays for removal/utilization of its manure via land application, the contract for this service must include a requirement that the manure is applied at a rate that minimizes nitrogen and phosphorus transport from the field to waters of the U.S. and in a manner in compliance with the technical standards for nutrient management established by the EPA or appropriate State permitting authority for CAFOs. In addition, a copy of the most recent manure analysis providing nitrogen and phosphorus content must be referenced and attached to the contract.

If a CAFO with an NPDES permit sells or gives away manure the facility must comply with the following conditions (amounts less than 10 tons per year to a single recipient need not be documented):

1. Maintain records showing the date and amount of manure, litter, and/or process wastewater that leaves the permitted operation;
2. Record the name and address of the recipient;
3. Provide the recipient(s) with representative information on the nutrient content of the manure, litter, and/or process wastewater; and
4. Keep the records on-site, for a period of five (5) years, and submit them to the EPA or authorized State upon request.

d. *Agricultural Stormwater Exemption.*

Section 502(14) of the CWA excludes agricultural stormwater discharges from the definition of a point source. Therefore agricultural stormwater discharges are not subject to the CAFO regulations. The CAFO regulations establish when a discharge from a land application area under the control of a CAFO is considered to be exempt agricultural stormwater, as opposed to a point source discharge from the CAFO.

CAFOs that do not have an NPDES permit and CAFOs that have either a MSGP or individual permit must both properly manage the application of manure or wastewater to land they control. As a result, under the CAFO rule **all** CAFOs (with or without an NPDES permit or MSGP) that land apply manure or wastewater to land they control must do so in accordance with a nutrient management plan (NMP) prepared and implemented in accordance with EPA or authorized State requirements that ensures nutrients are applied in accordance with “appropriate” agronomic and conservation practices in order to qualify for the agricultural stormwater exemption in the event a discharge from their property reaches waters of the U.S.

A precipitation-related discharge from a CAFO’s land application areas is considered agricultural stormwater **only** when the manure was applied in accordance with site-specific nutrient management practices that “ensure appropriate agricultural utilization of the nutrients” in the manure to be applied [40 CFR 122.23(e)].



Therefore, runoff from a manure stockpile or from manure that is not applied in accordance with site-specific nutrient management practices would **not** be considered agricultural stormwater exempt from CAFO regulation.

The following is quoted directly from 40 CFR 122.23(e): “Land application discharges from a CAFO are subject to NPDES requirements. The discharge of manure, litter or process wastewater to waters of the United States from a CAFO as a result of the application of that manure, litter or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to NPDES permit requirements, except where it is an agricultural storm water discharge as provided in 33 U.S.C. 1362(14). For purposes of this paragraph, where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in § 122.42(e)(1)(vi)-(ix), a precipitation-related discharge of manure, litter or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.”

e. *Permitted Large CAFOs.*

In addition to the requirements described above, BLM wild horse and burro facilities permitted as Large CAFOs are also subject to the requirements of 40 CFR 412.4, 40 CFR 412.13, and 40 CFR 412, Subpart A to qualify for the agricultural stormwater exemption [40 CFR 122.23(e)(1), 122.42(e)(1)].

A general description of the practices a permitted Large CAFO must implement, as required by 40 CFR 412.4, is provided below:

- Develop and implement a field-specific NMP that fully incorporates the other requirements of 40 CFR part 412.4 concerning land application.
- Land apply manure at application rates that minimize nitrogen and phosphorus transport from the field to waters of the U.S. in compliance with the technical standards for nutrient management established by the permitting authority.
- Analyze manure at least once a year for nitrogen and phosphorus content, and analyze soil at least once every 5 years for phosphorus content. The results of the analyses are to be used in determining application rates for manure, litter, and other process wastewater.
- Periodically inspect equipment used for land application of manure for leaks (before each application is recommended to ensure the manure is delivered at the proper rate of application).
- Implement a minimum setback for manure application of 100 feet from surface waters and conduits to surface waters; or substitute with a 35-foot vegetated buffer, or other alternatives where the CAFO demonstrates equivalent pollutant reductions.
- Complete on-site records documenting implementation of all required best management practices (BMPs) and any additional records specified by the

permitting authority (for additional information, see Section 4.2).

Many states have unique requirements for developing an NMP. The EPA's CAFO regulations establish the minimum requirements for permitted CAFOs. States may require more stringent requirements, and in many instances states have established additional requirements to address land application. For example, many states require more frequent soil analysis than is required by 40 CFR 412.4(c)(3). In recognition of that, 40 CFR part 412.4(c)(2) requires application rates for land application of manure, litter, and process wastewater to be in compliance with technical standards for nutrient management established by the EPA or authorized State.

f. *Permitted Medium and Small CAFOs*

For precipitation-related discharges from the land application area of a Medium or Small CAFO to qualify for the agricultural stormwater exemption, the owner or operator of the CAFO must implement an NMP that includes the practices and protocols specified in 40 CFR 122.42(e)(1)(vii)-(ix).

Effluent limitations for Medium and Small CAFOs are based on the best professional judgment (BPJ) of the permit writer. A permit writer could find that it is appropriate to develop BPJ effluent limitations that are the same as, or similar to, the effluent limitations established in the Effluent Limitation Guidelines (ELG) for Large CAFOs. Thus, a Medium or Small CAFO might be required to develop protocols for land application in accordance with the state technical standards for nutrient management and comply with the requirement for a 100-foot setback or a 35-foot vegetated buffer between land application areas and any downgradient surface waters or conduits to surface waters. Because the practices for ensuring appropriate agricultural utilization of the nutrients in land-applied manure at Large CAFOs do not differ significantly the permit for Medium and Small CAFOs will likely be very similar to the requirements established in that state's technical standards for land application sites at all permitted CAFOs.

## **K. Incorporated References.**

The following list of references is incorporated as a whole or in part into this section. These references can provide additional explanation or guidance for the implementation of this section.

5. EPA Regulations

"Water Permitting 101," <http://www.epa.gov/npdes/pubs/101pape.pdf>

40 CFR 122 - EPA administered permit programs: the national pollutant discharge elimination system

40 CFR 124 - procedures for decision making

- 40 CFR Subchapter N - “Effluent Guidelines and Standards”
  - 40 CFR 144 – Underground Injection Control Program
  - 40 CFR 145 – state UIC Program requirements
  - 40 CFR 146 – Underground Injection Control Program: criteria and standards
  - 40 CFR 147 - state, tribal, and EPA-administered Underground Injection Control Programs
  - 40 CFR 148 - hazardous waste injection restrictions
  - 40 CFR subchapter N (400-471) – effluent guidelines and standards
  - 40 CFR 412 - concentrated animal feeding operations point source category
  - 40 CFR 503 - standards for the use or disposal of sewage sludge
6. US Codes and Regulations
- 42 USC. 2011 et. Seq - congressional declaration of policy

**CHAPTER II. HAZARDOUS MATERIAL STORAGE**

*RESERVED*

**CHAPTER III. MANAGEMENT OF WASTE**

*RESERVED*

**CHAPTER IV. TRANSPORTATION OF HAZARDOUS MATERIALS AND WASTE**

*RESERVED*

**CHAPTER V. COMPLIANCE AUDITING**

*RESERVED*

**APPENDIX 1 - STATE NPDES PROGRAM STATUS**

	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program	Approved Biosolids (Sludge) Program
<b>Alaska*</b>	✓	✓	✓	✓	
<b>Arizona</b>	✓	✓	✓	✓	✓
<b>California</b>	✓	✓	✓	✓	
<b>Colorado</b>	✓			✓	
<b>Idaho</b>					
<b>Mississippi</b>	✓	✓	✓	✓	
<b>Montana</b>	✓	✓		✓	
<b>Nebraska</b>	✓	✓	✓	✓	
<b>Nevada</b>	✓	✓		✓	
<b>New Mexico</b>					
<b>North Dakota</b>	✓	✓	✓	✓	
<b>Oklahoma**</b>	✓	✓	✓	✓	✓
<b>Oregon</b>	✓	✓	✓	✓	
<b>South Dakota</b>	✓	✓	✓	✓	✓
<b>Texas***</b>	✓	✓	✓	✓	✓
<b>Utah</b>	✓	✓	✓	✓	✓
<b>Virginia</b>	✓	✓	✓	✓	
<b>Washington</b>	✓		✓	✓	
<b>West Virginia</b>	✓	✓	✓	✓	
<b>Wisconsin</b>	✓	✓	✓	✓	✓
<b>Wyoming</b>	✓	✓		✓	

**Alaska\*** The Alaska Department of Environmental Conservation (DEC) began a phased 3 year program to assume the NPDES permitting authority on 10/31/2008. As of 9/30/12, DEC is responsible for all facilities in Alaska except for the following: outer continental shelf facilities, 301(h) facilities (~11), tribal facilities (~4), 1 federal facility, and oil and gas facilities. On Oct 31, 2012, DEC will assume authority for oil and gas facilities.

**Oklahoma\*\*** This is a partial program. It has not been authorized to issue permits for activities associated with oil and gas exploration, drilling, operations, and pipelines, and for CAFOs and certain other discharges from agriculture. EPA is the permitting authority for those facilities since it is not in Oklahoma DEQ's jurisdiction. All parts of the program within jurisdiction of Oklahoma DEQ are authorized.

**Texas\*\*\*** This is a partial program. It has not been authorized to issue permits for activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline. EPA is the permitting authority for those facilities since it is not in Texas Commission on Environmental Quality's jurisdiction. All parts of the program within jurisdiction of the Texas Commission on Environmental Quality are authorized.



**APPENDIX 2 - UNDERGROUND INJECTION CONTROL PROGRAM PRIMACY**

State	State Program	EPA Program
<b>Alaska</b>	✓ (Class II only)	✓
<b>Arizona</b>		✓
<b>California</b>	✓ (Class II only)	✓
<b>Colorado</b>	✓ (Class II only)	✓
<b>Florida</b>	✓ (Class II only)	✓
<b>Idaho</b>	✓	
<b>Mississippi</b>		✓
<b>Montana</b>	✓ (Class II only)	✓
<b>Nebraska</b>	✓	
<b>Nevada</b>	✓	
<b>New Mexico</b>	✓	
<b>North Dakota</b>	✓	
<b>Oregon</b>	✓	
<b>South Dakota</b>	✓ (Class II and V)	
<b>Texas</b>	✓	
<b>Utah</b>	✓	
<b>Virginia</b>		✓
<b>Washington</b>	✓	
<b>West Virginia</b>	✓	
<b>Wisconsin</b>	✓	
<b>Wyoming</b>	✓	