



# PETROLEUM EXPLORATION & PRODUCTION ACTIVITIES

**ENVIRONMENTAL GUIDELINES, ES-301-4.02**



Activity Description .....	3
Potential Environmental Risks .....	3
Recommended Operating Controls .....	3
General Considerations.....	3
Training Requirements.....	3
Storage and Materials Management .....	3
Planning Requirements.....	3
Critical Tasks.....	4
Emergency Response .....	4
Inspection and Maintenance Requirements.....	4
Expected Records and Outputs.....	4
References .....	5
Contacts .....	5
Guidance Materials.....	5
Training Materials .....	5
Related Environmental Guidelines .....	5
Applicable Regulations.....	5



## **ACTIVITY DESCRIPTION**

### **POTENTIAL ENVIRONMENTAL RISKS**

The following environmental concerns are associated with this activity:

- Disposal of spent spill absorbents
- Air pollution and odors
- Improper or inappropriate disposal of petroleum-contaminated wastes
- Contamination of soils
- Contamination of surface water
- Contamination of groundwater
- Remediation of contaminated media

Potential consequences from performing the activity incorrectly:

- Property damage, personal injury, or long-term damage to the environment
- Regulatory non-compliance, Notices of Violation, and related [financial and non-financial] penalties

### **RECOMMENDED OPERATING CONTROLS**

#### General Considerations

Each operator and/or tenant conducting petroleum exploration and/or production activities is responsible for understanding the applicable regulations and managing their activities accordingly; this Environmental Guideline is meant as guidance only and does not supersede any regulations.

#### Training Requirements

- Spill Prevention, Control, and Countermeasure (SPCC) Plan training may be required for employees engaged in petroleum production and storage activities.
- Employee training programs shall inform personnel at all levels of responsibility who are involved in industrial activities that may impact Storm-water runoff. Training shall address topics such as spill response, good housekeeping, and material management practices. Contractor or temporary personnel shall be informed of plant operation and design features in order to prevent discharges or spills from occurring.

#### Storage and Materials Management

- Maintain an inventory of production, storage, and transmission of crude oil, condensate, and natural gas.
- Implement an SPCC Plan for the site, per Oil Pollution Act (OPA) requirements.

### **PLANNING REQUIREMENTS**

- Review the Colorado Oil and Gas Conservation Commission (COGCC) Rules and Regulations with regard to petroleum exploration and production prior to initiating exploration or production activities.
- Complete the Stormwater Management Plan (SWMP) Survey/Matrix to assist in determining if a SWMP is required.
- This document is available at DIA Environmental Services.



- Conduct environmental review (refer to ES-301-3.02 Planning and Design)
- Prepare and implement an SPCC Plan prior to initiating petroleum storage activities.
- Inventory materials in storage
- For any new well drilling/development, refer to ES-301-3.02 Planning and Design and ES-301-3.01 Construction.

## **CRITICAL TASKS**

- Maintain an inventory of all petroleum storage.
- Site closure must be performed in accordance with the “1000 Series Reclamation Regulations” set forth by Colorado Oil and Gas Conservation Commission (COGCC).

## **EMERGENCY RESPONSE**

- If a spill occurs, refer to Environmental Guideline ES-301-5.02 Spill Response.
- For all reportable spills, call DIA Communications Center immediately at 303-342-4200.
- If a spill/release occurs, follow COGCC Rules and Regulations, specifically Exploration and Production Waste Management (900 Series) and Reclamation Regulations (1100 Series).

## **INSPECTION AND MAINTENANCE REQUIREMENTS**

Inspect production and storage systems regularly and maintain as necessary, per COGCC and SPCC Plan requirements.

## **EXPECTED RECORDS AND OUTPUTS**

### MSDS

- Manufacturers of products are required to supply these documents on demand. MSDSs for all products should be made available to employees engaged in petroleum exploration and/or production and maintained on file by the operator at the facility.

### Inventory throughput and storage inspection reports

- These records are required by the COGCC and must be maintained by the operator on site.

### SPCC Plan and Compliance Records

- The operator must maintain this plan on site (if attended 4 hours per day); otherwise, at the nearest field office.

### Completed SWMP Industrial Activities Survey/Matrix

- Obtain a copy of this document [business.flydenver.com/environmental](http://business.flydenver.com/environmental). Complete and return to ES for evaluation.

### Air Pollutant Emission Notice (APEN) forms (if required) and compliance records

- APEN forms are required by CDPHE if certain production requirements are met. Production thresholds should be evaluated on a per well basis.
- The operator must maintain these forms on site.

### Completed COGCC Forms and Reports (including lab analysis, disposal manifests, inspections, etc.)



- The COGCC requires the operator to maintain these documents on site.

#### Permits and Plans

- Copies of all permits and plans must be submitted to DIA ES for filing.

#### Waste and Wastewater Disposal Compliance Records

- Disposal manifests are required for disposal of fluids from vaults and Exploration & Production (E&P) wastes.
- These records must be maintained on site by the operator.

## REFERENCES

### Contacts

- DEN Communications Center (for spill reporting): 303-342-4200
- DEN Environmental Services (Main Line): 303-342-2730; [DIA.Environmental@flydenver.com](mailto:DIA.Environmental@flydenver.com)
- Neil Maxfield, DEN Revenue Management: 303-342-2574; [Neil.Maxfield@flydenver.com](mailto:Neil.Maxfield@flydenver.com)

### Guidance Materials

- Stormwater Management Plans (SWMP)
- SPCC Plan for DEN Oil and Gas Properties
- Tenant/operator SPCC plans for oil and gas production facilities (e.g. Petro Canada)
- DEN Manager's Bulletins

### Training Materials

- SPCC Plan

### Related Environmental Guidelines

- ES-301-3.01 Planning and Design
- ES-301-3.02 Construction
- ES-301-5.02 Spill Response
- ES-301-4.09 Management of Petroleum Storage Tanks & Containers (SPCC Plan)

### Applicable Regulations

- 40 CFR Part 112 Oil Pollution Prevention Regulations
- Federal water quality permitting regulations (40 CFR 122-124)
- State water quality statutes (CRS 25-8-101 et seq)
- State water quality permitting regulations (5 CCR 1002-61 and -65)
- DIA MS4 Permit, No. COS-000001
- Colorado Oil and Gas Conservation Act Title 34 - Article 60 Rules and Regulations
- Colorado Oil and Gas Conservation Commission Regulations, 2 CCR 404-1
- DEN Rules and Regulations