



COGCC OPERATOR GUIDANCE

RULE 907 - CENTRALIZED E&P WASTE MANAGEMENT FACILITIES

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- a. **Applicability.** Operators may establish non-commercial, Centralized E&P Waste Management Facilities for the treatment, disposal, recycling, or beneficial reuse of E&P Waste. This Rule 907 applies only to non-commercial facilities, which means the Operator does not represent itself as providing E&P Waste management services to third parties, except as part of a unitized area or joint operating agreement or in response to an emergency. Centralized E&P Waste Management Facilities may include components such as Land Treatment or Land Application sites, Pits, and recycling equipment.
- b. **Permit Requirements.** Before any Operator commences construction of a Centralized E&P Waste Management Facility, the Operator will file and obtain the Director's approval of an application on a Form 28, Centralized E&P Waste Management Facility Permit, and pay a filing fee established by the Commission (see Appendix III). The Operator will submit a Form 28 application at the same time it submits any permit applications required by the Commission's 300 Series Rules, if any, including an Oil and Gas Development Plan or a Form 2A. In addition, the Form 28 will contain the following:
 - (1) The name, address, phone and email address of the Operator, and a designated contact person.
 - (2) The name, address, phone number, email address, and written authorization of the Surface Owner of the site, if not the Operator.
 - (3) The legal description of the site.
 - (4) A general topographic, geologic, and hydrologic description of the site, including immediately adjacent land uses and a topographic map of a scale no less than 1:24,000 showing the location and the average annual precipitation and evaporation rates at the site.

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- (5) **Centralized E&P Waste Management Facility Siting Requirements.**
- A. A site plan showing drainage patterns and any diversion or containment structures, and facilities such as roads, fencing, tanks, Pits, buildings, and other construction details.
 - B. Scaled drawings of entire sections containing the proposed facility. The field measured distances from the nearer north or south and nearer east or west section lines will be measured at 90 degrees from said section lines to facility boundaries and referenced on the drawing. A survey will be provided including a complete description of established monuments or collateral evidence found and all aliquot corners.
 - C. The facility will be designed to control public access, prevent unauthorized vehicular traffic, provide for site security both during and after operating hours, and prevent illegal dumping of wastes. Appropriate measures will also be implemented to prevent access to the Centralized E&P Waste Management Facility by wildlife or domestic animals.
 - D. Centralized E&P Waste Management Facilities will have a fire lane of at least 10 feet in width around the perimeter of the active treatment areas and within the facility fencing. In addition, a buffer zone of at least 10 feet will be maintained within the perimeter fire lane.
 - E. Surface water diversion structures, including but not limited to berms and ditches, will be constructed to accommodate a 100-year, 24-hour storm event. The facility will be designed and constructed with a run-on control system to prevent flow onto the facility during peak discharge and a run-off control system to contain the water volume from a 25-year, 24-hour storm event.
 - F. Operators will provide evidence that they have complied with any Relevant Local Government land use regulations and facility siting or construction or operation requirements.
 - G. Operators will not construct new Centralized E&P Waste Management Facilities within 2,000 feet of the nearest Building Unit or High Occupancy Building Unit, unless all Building Unit owners and tenants within 2,000 feet consent to a closer location.
- (6) **Waste Profile.** For each type of waste, Operators will estimate the amounts to be received and managed by the facility on a monthly average basis. For each waste type to be treated, Operators will complete a characteristic

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waste profile, which will include analysis of representative waste samples by an accredited laboratory.

- (7) **Facility Design and Engineering.** Facility design and engineering data, incorporating Best Management Practices, including plans and elevations, design basis, calculations, and process description. Facility design, engineering, and as-constructed plans will be reviewed and stamped by a Colorado Professional Engineer (“P.E.”).
- A. Geologic data, including, but not limited to:
 - i. Type and thickness of unconsolidated soils;
 - ii. Type and thickness of consolidated bedrock, if applicable;
 - iii. Local and regional geologic structures; and
 - iv. Any Geologic Hazards that may affect the design and operation of the facility.
 - B. Hydrologic data, including, but not limited to:
 - i. Water wells within 1 mile of the site boundary including, but not limited to, information such as well construction details, total depth, static water level, screened interval(s), yields, and Aquifer name(s).
 - ii. Surface water features within 2 miles;
 - iii. Site location in relation to the Floodplain of nearby surface water features;
 - iv. Depth to Groundwater, including specifically identifying the shallowest unconfined Groundwater and any underlying Groundwater formations;
 - v. Existing quality of the shallowest Groundwater;
 - vi. Hydrologic properties of the shallowest Groundwater at the location including flow direction, flow rate, and potentiometric surface; and
 - vii. An evaluation of the potential for impacts to nearby surface water and Groundwater.
 - C. Engineering data, including, but not limited to:
 - i. Type and quantity of material required for use as a liner, including design components;
 - ii. Location and depth of cut for liners;
 - iii. Design of leak detection system for Pits or other containment systems;
 - iv. Location, dimensions, and grades of all surface water diversion structures;

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- v. Location and dimensions of all surface water containment structures; and
 - vi. Location of all proposed facility structures and access roads.
- (8) **Operating Plan.** An operating plan, incorporating Best Management Practices, including, but not limited to:
- A. A detailed description of the method of treatment, loading rates, and application of nutrients and soil amendments;
 - B. Dust and moisture control;
 - C. Sampling;
 - D. Inspection and maintenance;
 - E. Emergency response;
 - F. Recordkeeping;
 - G. Site security;
 - H. Hours of operation;
 - I. Stormwater management plan;
 - J. Noise, visual impacts, and odor mitigation; and
 - K. Final disposition of waste. If the Operator intends to beneficially reuse treated waste, the Operator will describe the reuse and method of product quality assurance.
- (9) **Groundwater Monitoring.**
- A. **Water Wells.** Operators will collect water samples from water wells known to the Operator or registered with the Colorado State Engineer, following all protocols established by Rule 615, except that the Operator will collect water samples from known water wells within 1 mile of the proposed Centralized E&P Waste Management Facility. An Operator may request an exception from the requirements of this Rule 907.b.(9).A by submitting a Form 4 pursuant to Rule 615.c.
 - B. **Site-Specific Monitoring Wells.**
 - i. As a condition of approval, the Director may require the Operator to install site-specific monitoring wells to ensure compliance with the concentration levels in Table 915-1 and WQCC Regulation 41, as incorporated by reference in Rule 901.b, by establishing Points of Compliance.
 - ii. All monitoring well construction must be completed pursuant to the State Engineer's Water Well Construction and Permitting Rules, as incorporated by reference in Rule 901.b.

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- iii. Where monitoring is required, the direction of flow, Groundwater gradient, and quality of water will be established by the installation of a minimum of 3 monitor wells, including an up-gradient well and 2 down-gradient wells that will serve as Points of Compliance, or other methods authorized by the Director.
 - iv. The Operator will propose for prior Director approval monitoring schedules, reporting schedules, and appropriate analyte lists.
- (10) **Surface Water Monitoring.** Where applicable, the Director will require baseline and periodic surface water monitoring to ensure compliance with WQCC surface water standards and classifications, including narrative standards. Operators will use reasonable good faith efforts to obtain access to such surface water for the purpose of collecting water samples. If access cannot be obtained, then the Operator will notify the Director of the surface water for which access was not obtained and sampling of such surface water by the Operator will not be required.
- (11) **Contingency Plan.** A contingency plan that describes the emergency response operations for the facility, 24-hour contact information for the person who has authority to initiate emergency response actions, contact information of local emergency response authorities, and an outline of responsibilities under any joint operating agreement regarding maintenance, operations, closure, and monitoring of the facility.

c. Permit Review.

- (1) Within 90 days of the submission for a Form 28, the Director will issue a determination about whether the Form 28 application is complete.
- (2) The Director may approve the Centralized E&P Waste Management Facility permit if it protects and minimizes adverse impacts to public health, safety, welfare, the environment, and wildlife resources. The Director may require any conditions of approval that are determined to be necessary and reasonable to protect public health, safety, welfare, the environment, and wildlife resources, or to the extent necessary to ensure compliance with the concentration levels in Table 915-1, or WQCC Regulation 41 Groundwater standards and classifications, as incorporated by reference in Rule 901.b.
- (3) The Director may deny a Centralized E&P Waste Management Facility permit if it does not adequately protect and minimize impacts to public health, safety, welfare, the environment, and wildlife resources.

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- d. **Financial Assurance.** The Operator of a Centralized E&P Waste Management Facility will submit for the Director's approval such Financial Assurance as required by Rule 704 prior to the Director issuing the operating permit.
- e. **Facility Modifications.** Throughout the life of the facility, the Operator will submit proposed modifications to the facility design, operating plan, permit data, or permit conditions to the Director for prior approval through a Form 4.
- f. **Permit Expiration.** The Form 28 will expire 3 years after approval if the Operator has not commenced construction of the permitted facility.
- g. **Annual Permit Review.** To ensure compliance with permit conditions and the Commission's Rules, the facility permit will be subject to an annual review by the Director. To facilitate this review, the Operator will submit an annual report summarizing operations, including the types and volumes of waste handled at the facility. The Director may require additional information.
- h. **Closure.**
 - (1) **Preliminary Closure Plan.** A general preliminary plan for closure will be submitted with the Form 28. The preliminary closure plan will include, but not be limited to:
 - A. A general plan for closure and Reclamation of the entire facility, including a description of the activities required to decommission and remove all equipment, close and reclaim Pits, dispose of or treat residual waste, collect samples as needed to verify compliance with soil and Groundwater standards, implement post-closure monitoring, and complete other Remediation, as required.
 - B. An estimate of the cost to close and reclaim the entire facility and to conduct post-closure monitoring. Cost estimates will be subject to review by the Director to verify that the financial assurance provided pursuant to Rules 907.d and 704 is appropriate.
 - (2) **Final Closure Plan.** The Operator will submit a detailed Form 27 at least 60 days prior to closure for approval or denial by the Director. The workplan will include, but not be limited to, a description of the activities required to decommission and remove all equipment, close and reclaim Pits, dispose of or treat residual waste, collect samples as needed to verify compliance with soil and Groundwater standards, implement post-closure monitoring, and complete other Remediation, as required.

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Purpose of Rule

Rule 907 defines the types of operations and locations that are required to be permitted as a Centralized E&P Waste Management (“CE&PWM”) Facility by the Colorado Oil and Gas Conservation Commission (“COGCC”). The Rule also outlines the requirements for submission of the Form 28, Centralized E&P Waste Management Facility Permit (Form 28).

Additional information can be found in the following COGCC Guidance documents:

304.c.(11) - Waste Management Plan

615 - Groundwater Baseline Sampling and Monitoring

905.a.(3) - E&P Waste Management Plans for Reuse & Recycling

911.a.(4) - Facility Closure

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Applicability

The Commission moved the prior Rule 908, governing CE&PWM Facilities, to Rule 907. No substantial changes were made to Rule 907.a, which describes the type of Facilities that are required to be permitted by the COGCC. Operators may establish non-commercial CE&PWM Facilities for the treatment, disposal, recycling, or beneficial reuse of Exploration and Production Waste (“E&P Waste”). These Facilities may include Land Treatment or Land Application sites, Pits, and recycling equipment.

Permit Requirements

The Operator will submit and obtain approval of a Form 2A, Oil and Gas Location Assessment (Form 2A), for all newly constructed CE&PWM Facilities. This requirement is not retroactive, but does apply for any significant modifications to existing Facilities.

General Information: The Operator is required to provide their name, address, phone number, and email address, as well as the name of a designated contact person. If the Surface Owner is not the Operator, written authorization and the name, address, phone number, and email address of the Surface Owner will be provided. The legal, topographic, geologic, and hydrologic descriptions of the site will be included in the Form 28 application. A topographic map, showing the site, and annual precipitation/evaporation data of the region is also required.

Siting requirements for CE&PWM Facilities: A plan view depiction illustrating any/all proposed equipment, buildings, roads, fencing, etc. will be provided with the Form 28 application along with the following:

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- Drainage patterns and any stormwater diversion/containment structures;
- A scaled drawing of the section containing the proposed Facility, as well as a survey with any established monuments;
- Documentation of compliance with Local Government land use and construction/operation requirements.

Note: CE&PWM Facilities will not be permitted within 2000 of the nearest Building Unit or High Occupancy Building Unit without the consent of all of the Building Unit owners within that setback distance.

Fencing Requirements: Access to the facility must be controlled at all times to prevent unauthorized vehicular traffic, public and wildlife access, and unauthorized dumping. Measures to implement this requirement must be explained in detail and represented on Facility construction plans.

The perimeter fencing will encompass the required fire lane and buffer zone.

Stormwater Requirements: Surface water diversion structures must be able to accommodate a 100-year 24-hour storm event. Run on control systems will prevent flow during peak discharge and run off diversion structures will contain stormwater from a 25-year 24-hour storm event.

Waste Profile: For each type of waste to be treated at the Facility, a characteristic waste profile will be provided by the Operator, which will include:

- Analysis by an accredited laboratory for each waste stream;
- The anticipated volume of waste(s) to be treated will be estimated on a monthly average basis.

Operator should review Guidance 304.c.(11) for additional details on Waste Management Plans and Waste Profiling.

Facility Design and Engineering: Facility design, engineering, and as-constructed plans will be reviewed and stamped by a Colorado Professional Engineer (“P.E.”). Exclusions from the entirety of the P.E. review and subsequent approval may be deemed appropriate in certain cases.

A thorough review of geologic data will include the type and thickness of unconsolidated soil at the site, as well as the type and thickness of consolidated bedrock, if applicable. Local and regional geologic structures and any geologic hazards that may affect the design and/or operation of the Facility will be addressed.

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Hydrologic data submitted by the Operator will include information regarding domestic water wells within one mile of the site boundary, surface water features within two miles, and the relation of the site to the floodplain of nearby surface water features. The depth to Groundwater and baseline Groundwater quality will be determined. Flow rate, direction, and potentiometric surface of the most shallow Groundwater zone will also be defined. The Operator will provide an assessment of the potential for impacts to surface water and Groundwater.

Engineering data for the proposed site will include, at a minimum, the type and quantity of material used as a liner, the depth and location of cut for the liner(s), and the specifications for the leak detection system(s). The location, dimensions, and grade of all surface water diversion and/or containment structures, as well as the location of any proposed facilities, structures, and roads will be depicted on plan view drawings.

Operating Plan: An operating plan for the Facility, incorporating Best Management Practices (“BMPs”), will include the proposed treatment plan, loading rates, and any application of nutrients and/or amendments. Other aspects of the operating plan that will be addressed include dust and moisture control, sampling, inspection and maintenance, emergency response, record keeping, site security, operating hours, noise and odor mitigation, and final disposition of waste treated at the Facility. A stormwater management plan will be incorporated into the operating plan.

Groundwater Monitoring: The Operator will collect water samples from all known domestic water wells within one mile of the proposed Facility. Analysis will be consistent with Rule 615. Obtaining a baseline Groundwater sample is necessary to monitor for any future changes in Groundwater quality. Reasonable good faith efforts must be employed by the Operator to obtain access to water wells. If access is denied, sampling of that feature will not be required by the Director. If no pre-existing water wells are available, the Commission may require the operator to install on site monitoring wells and obtain baseline data prior to site approval.

Site specific monitoring wells may be required by the Director to ensure compliance with Table 915-1 and WQCC Regulation 41. Monitoring wells will be completed pursuant to the State Engineer’s Water Well Construction and Permitting Rules. Where monitoring is required, the direction of flow, Groundwater gradient, and quality of water will be established by the installation of a minimum of three monitoring wells. One well will be located up gradient and two wells will be installed down gradient. The Operator will propose monitoring and reporting schedules along with an appropriate analyte list for consideration by the Director. The Commission will issue guidance about

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the specific limited circumstances where site-specific monitoring may be required as part of the Facility design process and prior to permit approval.

Surface Water Monitoring: Baseline and periodic surface water sampling will be required by COGCC staff, where applicable, to ensure compliance with Water Quality Control Commission (“WQCC”) standards and classifications. Reasonable good faith efforts must be employed by the Operator to obtain access to surface water features for the purpose of sampling. If access is denied, sampling of that feature will not be required by the Director.

Contingency Plan: A contingency plan detailing emergency response procedures and 24-hour contact information for the person who is authorized to initiate such a response will be provided with the Form 28 application. If the 24-hour contact information changes the Operator will submit a Form 4 with the updated contact information. The contingency plan will include a description of the distribution of responsibilities under any joint operating agreement.

Permit Review

The Director may approve the Form 28 application if sufficient evidence is provided to ensure compliance with the mission of the COGCC. Conditions of Approval (“COAs”) may be required by the Director to minimize adverse impacts and reasonably protect public health, safety, welfare, the environment, and wildlife resources.

The Director may deny a Form 28 application if it does not adequately protect and/or minimize impacts to public health, safety, welfare, the environment, and wildlife resources.

Financial Assurance

Prior to the Director issuing a CE&PWM permit, the Operator will submit financial assurance in an amount equal to the estimated cost necessary to ensure the proper Reclamation, closure, and abandonment of such Facility as set forth in Rule 907.d, or in an amount voluntarily agreed to with the Director, or in an amount to be determined by order of the Commission. This will be established on a site by site basis.

Facility Modifications

The Operator will notify the COGCC of any proposed modifications to the Facility design, operating plan, permit data, or permit conditions via Form 4.

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Permit Expiration

If the Operator has not commenced construction of the approved Facility within three years of the Director's approval, the CE&PWM permit will expire.

Annual Permit Review

The Operator will submit an annual report summarizing operations which includes types and volumes of waste handled at the Facility. The Director will conduct an annual review to ensure compliance with the permit conditions.

Closure

A preliminary closure plan will be submitted by the Operator with the Form 28 application.

Preliminary Closure Plan: This closure plan will include a general plan for closure and Reclamation of the entire Facility pursuant to the 1000 Series Rules. Activities to decommission and remove all equipment, close, and reclaim Pits pursuant to COGCC Rule 911, dispose of or treat residual waste, collection of samples, and post closure monitoring plans will be described. The Operator should review COGCC Guidance 911.a.(4) for additional information on Facility Closure requirements.

The Operator will provide a cost estimate for their closure plan. Cost estimates will be subject to review by the Director.

Final Closure Plan: At least sixty days prior to closure of the Facility, the Operator will submit a Form 27, Site Investigation and Remediation Workplan (Form 27). The workplan will include a description of all activities required to decommission and remove all equipment, close and reclaim Pits, dispose of or treat residual waste, collect samples, implement post-closure monitoring, and complete other Remediation, as required.

Document Change Log

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March 18, 2021	Document Finalized