

**EP-5 Technical Application Sheet for  
On-Lease Commercial Solid Oil and Gas Waste Recycling**

**SUBCHAPTER B**

**DIVISION 2. REQUIREMENTS FOR ON-LEASE COMMERCIAL  
SOLID OIL AND GAS WASTE RECYCLING**

DRAFT

## **SUBCHAPTER B**

### **DIVISION 2. REQUIREMENTS FOR ON-LEASE COMMERCIAL SOLID OIL AND GAS WASTE RECYCLING**

#### **Table of Contents**

##### **Application Requirements**

<b>§4.212 General Permit Application Requirements for On-Lease Commercial Solid Oil and Gas Waste Recycling Facilities .....</b>	<b>4</b>
<b>§4.213. Minimum Engineering and Geologic Information.....</b>	<b>5</b>
<b>§4.214. Minimum Design and Construction Information.....</b>	<b>5</b>
<b>§4.215. Minimum Operating Information.....</b>	<b>5</b>
<b>§4.216. Minimum Monitoring Information.....</b>	<b>6</b>
<b>§4.217. Minimum Closure Information.....</b>	<b>6</b>
<b>§4.219. Minimum Siting Information.....</b>	<b>7</b>

##### **Additional Information That May Be Requested by the Director, Allowed by Rule**

<b>§4.219. Minimum Siting Information.....</b>	<b>10</b>
<b>§4.220. Minimum Permit Provisions for Design and Construction.....</b>	<b>10</b>

## **General Permit Provisions by Rule**

<b>§4.218. General Permit Provisions for On-Lease Commercial Solid Oil and Gas Waste Recycling.....</b>	<b>11</b>
<b>§4.219. Minimum Siting Information.....</b>	<b>11</b>
<b>§4.220. Minimum Permit Provisions for Design and Construction.....</b>	<b>12</b>
<b>§4.221. Minimum Permit Provisions for Operations.....</b>	<b>12</b>
<b>§4.222. Minimum Permit Provisions for Monitoring.....</b>	<b>14</b>
<b>§4.223. Minimum Permit Provisions for Closure.....</b>	<b>15</b>
<b>§4.224. Permit Renewal.....</b>	<b>16</b>

# **EP-5 Technical Application Sheet for On-Lease Commercial Solid Oil and Gas Waste Recycling**

## **SUBCHAPTER B**

### **DIVISION 2 REQUIREMENTS FOR ON-LEASE COMMERCIAL SOLID OIL AND GAS WASTE RECYCLING**

#### **§4.204. Definitions.**

(12) On-lease commercial solid oil and gas waste recycling--Commercial recycling performed on an oil or gas lease or well site using equipment that moves from one location to another, at which all materials and wastes are stored in authorized pits and/or tanks, and restricted in the:

- (A) amount of time, generally less than one year, operations occur at any one location;
- (B) volume and source of the waste that may be processed at any one location;
- (C) the type and characteristics of the waste; and
- (D) size of the area used for recycling.

## **APPLICATION REQUIREMENTS**

#### **§4.212 General Permit Application Requirements for On-Lease Commercial Solid Oil and Gas Waste Recycling Facilities.**

**§4.212 (b)** The permit application contains the applicant's name, organizational report number, physical office address and, if different, mailing address, telephone number, and the name of a contact person.

☐ Yes ☐ No

**§4.212 (d)** The permit application contains the statement that "I certify that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the data and facts stated herein are true, correct, and complete to the best of my knowledge" that is signed and dated by an authorized representative of the applicant.

☐ Yes ☐ No

#### **§4.213. Minimum Engineering and Geologic Information.**

**§4.213 (b)** The permit application contains engineering and geologic work products that are sealed by a professional engineer or geoscientist licensed in Texas as required by the Texas Occupations Code, Chapters 1001 and 1002, respectively.

☐ Yes ☐ No

#### **§4.214. Minimum Design and Construction Information.**

(1) The permit application contains a facility diagram of receiving, processing, and storage areas and all equipment (e.g., pug mill), tanks, silos, and dikes.

☐ Yes ☐ No

(2) The permit application contains a description of the type and thickness of liners (e.g., fiberglass, steel concrete), if any, for all tanks, silos, pits, and storage areas/cells.

☐ Yes ☐ No

(3) The permit application contains a map view and two perpendicular cross-sectional views of typical pits and/or storage areas/cells to be constructed, showing the bottom, sides, and dikes, showing the dimensions of each.

☐ Yes ☐ No

(4) The permit application contains a plan to control and manage stormwater runoff and to retain wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect, at a minimum, stormwater during a 25-year, 24-hour rainfall event, and all calculations made to determine the required capacity and design.

☐ Yes ☐ No

#### **§4.215. Minimum Operating Information.**

(1) The permit application contains a list of Commission districts for which the applicant seeks authority for on-lease commercial solid oil and gas waste recycling.

☐ Yes ☐ No

(2) The permit application contains the estimated maximum volume of untreated oil and gas waste and partially treated oil and gas waste to be stored.

☐ Yes ☐ No

(3) The permit application contains the estimated maximum volume and time that the recyclable product will be stored.

☐ Yes ☐ No

(4) The permit application contains a general description of the recycling process to be employed; a flow diagram showing the process and identifying all equipment and chemicals or additives (e.g., asphalt emulsion, quicklime, Portland cement, fly ash, etc.) to be used in the process; and the Material Safety Data Sheets for any chemical or additive.

☐ Yes ☐ No

(5) The permit application contains a description of all inert material (e.g., brick, rock, gravel, caliche) to be stored and used as an aggregate in the treatment process.

☐ Yes ☐ No

(6) The permit application contains a description of any testing to be performed to demonstrate that the proposed processing will result in a recyclable product that meets the engineering and environmental standards for the proposed use.

☐ Yes ☐ No

#### **§4.216. Minimum Monitoring Information.**

(1) The permit application contains a sampling plan for the partially treated waste to ensure compliance with permit conditions.

☐ Yes ☐ No

(2) The permit application contains a plan and schedule for conducting periodic inspections, including plans to inspect equipment, processing, and storage areas.

☐ Yes ☐ No

#### **§4.217. Minimum Closure Information.**

(1) The detailed closure plan addresses how the applicant will remove waste, partially treated waste, and/or recyclable product from the site.

☐ Yes ☐ No

(2) The detailed closure plan addresses how the applicant will close all storage areas/cells.

☐ Yes ☐ No

(3) The detailed closure plan addresses how the applicant will remove dikes.

☐ Yes ☐ No

(4) The detailed closure plan addresses how the applicant will contour and reseed disturbed areas.

☐ Yes ☐ No

#### **§4.219. Minimum Siting Information.**

**§4.219 (b)** The permit application locates the on-lease commercial solid oil and gas waste recycling:

(1) Outside a 100-year flood plain.

☐ Yes ☐ No

(2) Outside sensitive areas as defined by §4.110, (84), that are characteristic features of sensitive features are the presence of shallow groundwater or pathways for communication with deeper groundwater; proximity to surface water, including lakes, rivers, streams, dry or flowing creeks, irrigation canals, water wells, stock tanks, and wetlands; proximity to natural wildlife refuges or parks; or proximity to commercial or residential areas.

☐ Yes ☐ No

(3) Beyond 300 feet from surface water, domestic supply wells, or irrigation water wells;

☐ Yes ☐ No

(4) Beyond 500 feet from any public water system wells or intakes;

☐ Yes ☐ No

(5) When observable groundwater is within 100 feet of the ground surface, has the applicant provided a pit design, including a geosynthetic clay liner (GCL), tested using fluids likely to be encountered in the facility operations, and the test results demonstrating a hydraulic conductivity of  $1.0 \times 10^{-7}$  cm/sec or less for the GCL.

☐ Yes ☐ No

(6) Beyond 1,000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial permitting.

☐ Yes ☐ No

(7) Beyond 500 feet from a wetland.

☐ Yes ☐ No

**§4.219 (c)** The permit application for an on-lease commercial solid oil and gas waste recycling contains the following:

(1) A description of the proposed facility site and surrounding area.

☐ Yes ☐ No

(2) The name, physical address and, if different, mailing address, and telephone number of every owner of the tract on which the facility is to be located. If any owner is not an individual, the applicant shall include the name of a contact person for that owner.

☐ Yes ☐ No

(3) The depth to the shallowest subsurface water and the direction of groundwater flow at the proposed site, and the source of this information.

☐ Yes ☐ No

(4) The average annual precipitation and evaporation at the proposed site and the source of this information;

☐ Yes ☐ No

(5) The identification of the soil and subsoil by typical name and description of the approximate proportion of grain sizes, texture, consistency, moisture condition, and other pertinent characteristics, and the source of this information.

☐ Yes ☐ No

(6) A copy of a county highway map with a scale and north arrow showing the location of the proposed facility.

☐ Yes ☐ No

(7) A United States Geological Survey (USGS) topographic map or an equivalent topographic map, depicted on a scale of not less than one inch equals 2,000 feet.

☐ Yes ☐ No



(7 continued):The USGS topographic map, or an equivalent topographic map, shall show the following:

(A) A scale and north arrow showing the tract size in square feet or acres, the section/survey lines, and the survey name and abstract number.

☐ Yes ☐ No

(B) A clear outline of the proposed facility's boundaries.

☐ Yes ☐ No

(C) The location of any pipelines within 500 feet of the facility.

☐ Yes ☐ No

(D) The distance from the facility's outermost perimeter boundary to public and private water wells, residences, schools, churches, and hospitals that are within 500 feet of the boundary.

☐ Yes ☐ No

(E) For disposal only, the location of all residential and commercial buildings within a one-mile radius of the facility boundary.

☐ Yes ☐ No

(F) All water wells within a one-mile radius of the facility boundary.

☐ Yes ☐ No

(G) The location of the 100-year flood plain and the source of the flood plain information.

☐ Yes ☐ No

(H) Surface water bodies within the map area.

☐ Yes ☐ No

(I) The location of any major and minor aquifers within the map area.

☐ Yes ☐ No

(J) The boundaries of any prohibited areas defined under §4.153 of this title (relating to Commercial Disposal Pits).

☐ Yes ☐ No

## **ADDITIONAL INFORMATION THAT MAY BE REQUESTED BY THE DIRECTOR THAT IS ALLOWED BY RULE**

### **§4.219. Minimum Siting Information.**

**§4.219 (c)(7)(K)** any other information requested by the Director reasonably related to the prevention of pollution.

**§4.219 (a)** a permit for on-lease commercial solid oil and gas waste recycling may be issued only if the Director or the Commission determines that the operations will pose no unreasonable risk of pollution or threat to public health or safety.

**§4.219 (d)** the Commission will consider assessing potential risk from on-lease commercial solid oil and gas waste recycling including:

- (1) the volume and characteristics of the oil and gas waste, partially treated waste and recyclable product to be stored, handled, treated and recycled at the facility.
- (2) Proximity to coastal natural resources or sensitive areas as defined by §4.110 of this title
- (3) Any other factors the Commission deems reasonably necessary in determining whether or not the issuance of the permit will pose an unreasonable risk.

### **§4.220. Minimum Permit Provisions for Design and Construction.**

**§4.220 (a)** a permit issued for an on-lease commercial solid oil and gas waste recycling shall contain any requirements that the Director or the Commission determines to be reasonably necessary to ensure that:

- (1) where the design and construction of storage areas, containment dikes, and processing areas minimize contact of oil and gas waste and partially recycled waste with the ground surface, and to prevent pollution of surface and subsurface water.
- (2) The pollution of the surface and subsurface water from spills, leachate, and/or discharges from the facility is prevented by:

(A) prohibiting the unauthorized discharge of oil and gas waste and other substances or materials, including contaminated stormwater runoff, to the land surface at and adjacent to the facility or to surface and subsurface water.

(B) requiring that the operator control and remediate spills.

(C) requiring that the operator make regular inspections of the facility.

(3) the design and construction of the facility allows for monitoring for, and detection of, any migration of oil and gas waste or other substance or material.

## **GENERAL PERMIT PROVISIONS, BY RULE**

### **§4.218. General Permit Provisions for On-Lease Commercial Solid Oil and Gas Waste Recycling.**

**§4.218 (a)** a permit for on-lease commercial solid oil and gas waste recycling will specify the Commission districts where recycling is authorized, will be valid for a term of not more than five years, and shall authorize operations at any one lease for no more than one year.

An On-Lease Commercial Solid Oil and Gas Waste Recycling permit may be renewed and are not transferable to another operator without the written approval of the Director.

Any request for transfer of the permit shall be filed with the Technical Permitting Section on a Commission prescribed form at least 60 days before the permittee requests the transfer to take place.

**§4.218 (b)** a permit for on-lease commercial solid oil and gas waste recycling shall include a condition requiring that the permittee obtain written permission from the surface owner of the lease upon which recycling will take place and notify the Commission District Office 72 hours before operations commence on each lease.

### **§4.219. Minimum Siting Information.**

**§4.219 (e)** all siting requirements for an on-lease commercial solid oil and gas waste recycling refer to conditions at the time the equipment and tanks used in the recycling are placed.

#### **§4.220. Minimum Permit Provisions for Design and Construction.**

**§4.220 (b)** All storage cells at the site will be:

- (1) located above the top of the seasonal high water table.
- (2) designed to prevent stormwater runoff from entering the area.
- (3) surrounded by berms with a minimum width at base of three times the height and the berms constructed such that the height, slope, and construction material are structurally sound and do not allow seepage.

**§4.220 (c)** a permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall require that the operator notify the Commission District Office prior to commencement of construction, including construction of any dikes, and again upon completion of construction, and that the permittee may commence operations under the permit 72 hours after notice to the District Office.

#### **§4.221. Minimum Permit Provisions for Operations.**

**§4.221 (a)** A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall contain requirements the Commission determines to be reasonably necessary to ensure that:

- (1) only wastes and other materials authorized by the permit generated on-lease, including requirements that the permittee test incoming oil and gas waste and keep records of amounts of wastes; and
- (2) the processing operation and resulting recyclable product meet the environmental and engineering standards established in the permit.

**§4.221 (b)** A permit for on-lease commercial solid oil and gas waste recycling issued under this division may require the permittee to perform a trial run in accordance with the following procedure:

- (1) The permittee shall notify the Commission District Office for the county in which the facility is located prior to commencement of the trial run.

(2) The permittee shall sample and analyze the partially treated waste that results from the trial run and submit to the Director for review a report of the results of the trial run prior to commencing operations.

(3) The permittee shall demonstrate the ability to successfully process a 1,000 cubic yard batch of solid oil and gas waste.

(A) The Technical Permitting Section and the District Office shall be notified in writing at least 72 hours before waste processing begins.

(B) Samples of the partially treated waste shall be collected from every 200 cubic yards of an 800 cubic yard batch and analyzed for wetting and drying durability by ASTM D 559-96, modified to provide that samples are compacted and molded from finished partially treated waste. The total weight loss after 12 cycles shall not exceed 15 percent.

(C) A written report of the trial run shall be submitted to the Technical Permitting Section and the District Office within 60 days of receipt of the analyses required in this section. The following information shall be included:

- (i) a summary of the trial run and description of the process;
- (ii) the actual volume of waste material processed;
- (iii) the volume and type of stabilization material used;
- (iv) the type of waste and description of the waste material; and
- (v) copies of all chemical and geotechnical laboratory analytical reports and chain of custody sheets for the samples specified in subparagraph (B) of this paragraph.

(D) The final processed material shall meet the limitations of this section.

(4) The Director shall approve the trial run if the report demonstrates that the recyclable product meets or exceeds the environmental and engineering standards established in the permit.

(5) The permittee shall not use the recyclable product until the Director approves the trial run report.

**§4.221 (c)** A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall include any requirements, including limits on the volumes of oil and gas waste, partially treated waste, and recyclable product stored at the site, that the Technical Permitting Section determines to be reasonably necessary to ensure that the permittee does not accumulate oil and gas waste, partially treated waste, and/or recyclable product at the facility without actually processing the oil and gas waste and putting the recyclable product to legitimate commercial use.

**§4.221 (d)** Excess stormwater collected within a bermed area shall be removed and disposed of in an authorized manner.

**§4.221 (e)** Appropriate measures shall be taken to control dust at all times.

**§4.221 (f)** Processed material meeting or exceeding the engineering parameters listed in §4.222(d) of this title (relating to Minimum Permit Provisions for Monitoring) is suitable for use on lease roads, drilling pads, tank batteries, compressor station pads, and county roads.

**§4.222. Minimum Permit Provisions for Monitoring.**

**§4.222 (a)** A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall include monitoring requirements the Director or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director or the Commission and included in the permit.

**§4.222 (b)** Consistent with the requirements of §4.208 of this title (relating to General Standards for Permit Issuance), the Director or the Commission shall establish and include in the permit, for on-lease commercial solid oil and gas waste recycling, the parameters for which the partially treated waste is to be tested, and the limitations on those parameters based on:

- (1) the type of oil and gas waste; and
- (2) the intended use for the recyclable product.

**§4.222 (c)** A permit for on-lease commercial solid oil and gas waste recycling may require laboratory testing. A permit that requires laboratory testing shall require that the permittee use an independent third party laboratory to analyze a minimum standard volume of

partially treated waste for parameters established in this subchapter or in a permit issued by the Commission.

**§4.222 (d)** A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division from which the recycled product will be used as road base or other similar uses shall include a requirement that a minimum of one sample from each 200 cubic yards of partially treated waste be collected and analyzed for every 800 cubic yard composite for the following minimum parameters and meet the following limits:

**§4.222 (e)** Recordkeeping and reporting requirements.

(1) Recordkeeping requirements.

(A) Records shall be kept of all waste treated for a period of three years from the date of treatment.

(B) These records shall include the following:

- (i) name of the generator;
- (ii) source of the waste (lease number or gas I.D. number and well number, or API number);
- (iii) date the waste was treated at the drill site;
- (iv) volume of the waste treated at the drill site;
- (v) name of the carrier;
- (vi) identification of the receiving site including the lease number or gas I.D. number and well number, API number, or county road number;
- (vii) documentation that the landowner of the receiving location has been notified of the use of the recyclable product on the landowner's property if used on private land; and
- (viii) documentation indicating the approximate location where recyclable product is used including a topographic map showing the location of the area.

(2) Reporting requirements. The permittee shall provide the Commission, on a quarterly basis, a copy of the records required in this section.

**§4.223. Minimum Permit Provisions for Closure.**

A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall include closure standards and any requirement reasonably

necessary to ensure that the permittee can meet the standards. The Commission shall determine the closure standards for a particular facility based on the type of materials stored, handled and treated. A permit may include requirements for removal of all waste, partially treated waste, and recyclable product; removal of dikes, storage, liners, and equipment; recontouring of the land; collection and analyzing of soil and groundwater samples; and post-closure monitoring.

**§4.224. Permit Renewal.**

Before the expiration of a permit issued pursuant to this division, the permittee may submit an application to renew the permit on a Commission prescribed form. An application for renewal of an existing permit issued pursuant to this division shall be submitted in writing a minimum of 60 days before the expiration date of the permit and shall include the operator's permit number and facility identification number assigned by the Technical Permitting Section. The application for renewal shall include details of proposed changes or shall state that there are no changes proposed that would require amendment of the permit other than the expiration date.