SUBCHAPTER B COMMERCIAL RECYCLING

DIVISION 1. GENERAL; DEFINITIONS

§4.201. Purpose. (No change.)

§4.202. Applicability and Exclusions.

(a) The provisions of this subchapter apply to the following categories of commercial recycling:

(1) on-lease commercial recycling of solid oil and gas waste;

(2) off-lease or centralized commercial solid oil and gas waste recycling;

(3) stationary commercial solid oil and gas waste recycling;

(4) off-lease commercial recycling of fluid; and

(5) stationary commercial recycling of fluid.

(b) The provisions of this subchapter do not apply to recycling methods authorized for certain wastes by Subchapter A of this chapter [~~§3.8 of this title (relating to Water Protection); §3.57 of this title (relating to Reclaiming Tank Bottoms, Other Hydrocarbon Wastes, and Other Waste Materials);~~] or §3.98 of this title (relating to Standards for Management of Hazardous Oil and Gas Waste).

(c) The provisions of this subchapter do not apply to non-commercial fluid recycling. Such recycling is subject to the requirements of Subchapter A of this chapter [~~§3.8 of this title~~].

(d) The permitting provisions of this subchapter do not apply to the recycling of fluid received at a commercial disposal well operated pursuant to permit issued under §3.9 of this title (relating to Disposal Wells) or §3.46 of this title (relating to Fluid Injection into Productive Reservoirs).[~~,~~] Such recycling is authorized by this subchapter provided:

(1) the operator of the disposal well treats, or contracts with a person for the treatment of the fluid;

(2) the operator of the disposal well is responsible for all activities, including the recycling, that occurs on the lease;

(3) the operator has obtained the applicable permits for pits or waste management units at the lease;

(4) the operator [~~and~~] has obtained financial security in accordance with §3.78 of this title (relating to Fees and Financial Security Requirements);

(5) the operator provides written notification to the appropriate District Office [~~district office~~] seven days before recycling operations are expected to begin and includes information on how fluids will be controlled and contained during recycling operations; and

(6) the operator provides written notification to the appropriate District Office [~~district office~~] within seven days of concluding recycling operations. [~~Such recycling is authorized by this subchapter.~~]

(e) The provisions of this subchapter are in addition to the permitting requirements of Subchapter A of

this chapter [~~§3.8 of this title~~], which requires a permit for any pit not specifically authorized in Division 3 of Subchapter A of this chapter [~~the rule~~].

(f) The provisions of this subchapter do not authorize discharge of oil and gas waste.

(g) The provisions of this subchapter do not apply to recycling facilities regulated by the Texas Commission on Environmental Quality or its predecessor or successor agencies, another state, or the federal government.

(h) Permits issued pursuant to this subchapter prior to [insert the estimated effective date of rulemaking] shall remain in effect pursuant to the rules in existence at the time the permits were issued and the requirements of the permits themselves, including the requirements for permit renewal. However, the Director may consider the operational, monitoring, and closure requirements on a case-by-case basis.

§4.203. Responsibility for Management of Waste to be Recycled.

(a) Permit required. A person who operates a commercial recycling facility shall obtain a permit from the Commission under this subchapter before engaging in such operation.

(b) Hauling of waste. A waste hauler transporting and delivering oil and gas waste for commercial recycling permitted pursuant to this subchapter shall be permitted by the Commission as an Oil and Gas Waste Hauler pursuant to §4.194 [~~§3.8(f)~~] of this title (relating to Oil and Gas Waste Haulers [~~Water Protection~~]).

(c) Responsibility of generator and carrier. No generator or carrier may knowingly use the services of a commercial recycling facility unless the facility has a permit issued under this subchapter. A person who plans to use the services of a commercial recycling facility has a duty to determine that the commercial recycling facility has all permits required by statute or Commission rule.

§4.204. Definitions.

Unless a word or term is defined differently in this section, the definitions in Subchapter A of this chapter [~~§3.8 of this title (relating to Water Protection)~~], §3.98 of this title (relating to Standards for Management of Hazardous Oil and Gas Waste), and §4.603 of this title (relating to Definitions), shall apply in this subchapter. In addition, the following words and terms when used in this subchapter shall have the following meanings, unless the context clearly indicates otherwise:

[~~(1) 100-year flood plain--An area that is inundated by a 100-year flood, which is a flood that has a one percent or greater chance of occurring in any given year.~~]

(1) [~~(2)~~] Adjoining--Every tract of property surrounding the tract of property upon which the activity sought to be permitted will occur, including those tracts that meet only at a corner point.

(2) Administratively complete--A complete application that the Director has determined meets all the administrative and technical requirements of the subchapter such that a permit shall be issued administratively or, if the application was protested, that the application will be referred to the Hearings

Division.

(3) Berm (or dike)--A manmade barrier surrounding a pit, waste management unit, or facility, that is designed, constructed, and maintained to segregate materials, including waste and storm water runoff, inside and outside of a pit, waste management unit, or facility.

(4) [~~(3)~~] Commercial recycling facility--A facility whose owner or operator receives compensation from others for the storage, handling, treatment, and recycling of oil and gas wastes and the primary business purpose of the facility is to provide these services for compensation, whether from the generator of the waste, another receiver, or the purchaser of the recyclable product produced at the facility. The term includes [~~Includes~~] recycling of solid oil and gas wastes on or off lease. The term does [~~Does~~] not include non-commercial fluid recycling as defined in Subchapter A [~~§3.8~~] of this chapter [~~title~~].

[~~(4) Commission--The Railroad Commission of Texas.~~]

(5) Complete application--An application that contains information addressing each application requirement of the subchapter and all information necessary to initiate the final review by the Director.

[~~(5) Director--The director of the Commission's Oil and Gas Division or the director's delegate.~~]

(6) Drill cuttings--Bits of rock or soil cut from a subsurface formation by a drill bit during the process of drilling an oil or gas well and lifted to the surface by means of the circulation of drilling mud. The term includes any associated sand, silt, drilling fluid, spent completion fluid, workover fluid, debris, water, brine, oil scum, paraffin, or other material cleaned out of the wellbore.

(7) [~~(6)~~] EPA Method 1312, Synthetic Precipitation Leaching Procedure (SPLP)--An analytical method used to evaluate the potential for leaching of metals and/or benzene into surface and subsurface water.

(8) Legitimate commercial product--A product of a type customarily sold to the general public for a specific use and for which there is a demonstrated commercial market.

(9) [~~(7)~~] Legitimate commercial use--Use or reuse of a recyclable product as authorized or defined in a permit issued pursuant to this subchapter:

(A) as an effective substitute for a commercial product or as an ingredient to make a commercial product; or

(B) as a replacement for a product or material that otherwise would have been purchased; and

(C) in a manner that does not constitute disposal.

(10) [~~(8)~~] Louisiana Department of Natural Resources Leachate Test Method--An analytical method designed to simulate water leach effects on treated oil and gas wastes included in "Laboratory Manual for the Analysis of E&P Waste," Louisiana Department of Natural Resources, May 2005.

(11) Off-lease or centralized commercial solid oil and gas waste recycling facility--A commercial recycling facility that is capable of being moved from one location to another, but which is generally in operation in one location for a period of time longer than one year, but less than two years that shall

recycle solid oil and gas waste.

(12) Off-lease commercial fluid recycling facility--A commercial recycling facility that is capable of being moved from one location to another, but which is generally in operation in one location for a period of time longer than one year, but less than two years that shall recycle wellbore fluid produced from an oil or gas well, including produced formation fluid, workover fluid, and completion fluid, including fluids produced from the hydraulic fracturing process.

(13) [~~(9)~~] 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.

[~~(10) Oil and gas wastes--For purposes of this subchapter, this term means materials which have been generated in connection with activities associated with the exploration, development, and production of oil or gas or geothermal resources, as that term is defined in §3.8 of this title, and materials which have been generated in connection with activities associated with the solution mining of brine. The term "oil and gas wastes" includes, but is not limited to, saltwater, other mineralized water, sludge, spent drilling fluids, cuttings, waste oil, spent completion fluids, and other liquid, semiliquid, or solid waste material. The term "oil and gas wastes" includes waste generated in connection with activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants unless that waste is a hazardous waste as defined by the administrator of the United States Environmental Protection Agency pursuant to the federal Solid Waste Disposal Act, as amended (42 United States Code §6901 et seq.).~~]

[~~(11) Partially treated waste--Oil and gas waste that has been treated or processed with the intent of being recycled, but which has not been determined to meet the environmental and engineering standards for a recyclable product established by the Commission in this subchapter or in a permit issued pursuant to this subchapter.~~]

[~~(12) Recyclable product--A reusable material that has been created from the treatment and/or processing of oil and gas waste as authorized or permitted by a Commission permit and that meets the environmental and engineering standards established by the permit or authorization for the intended use, and is used as a legitimate commercial product. A recyclable product is not a waste, but may become a waste if it is abandoned or disposed of rather than recycled as authorized by the permit or authorization.~~]

[~~(13) Recycle--To process and/or use or re-use oil and gas wastes as a product for which there is a legitimate commercial use and the actual use of the recyclable product for the purposes authorized in this subchapter or a permit. 'Recycle,' as defined in this subsection, does not include injection pursuant to a permit~~

~~issued under §3.46 of this title (relating to Fluid Injection into Productive Reservoirs).~~]

[~~(14) Off lease or centralized commercial solid oil and gas waste recycling facility--A commercial recycling facility that is capable of being moved from one location to another, but which is generally in operation in one location for a period of time longer than one year, but less than two years that shall recycle solid oil and gas waste.~~]

[~~(15) Off lease commercial fluid recycling facility--A commercial recycling facility that is capable of being moved from one location to another, but which is generally in operation in one location for a period of time longer than one year, but less than two years that shall recycle wellbore fluid produced from an oil or gas well, including produced formation fluid, workover fluid, and completion fluid, including fluids produced from the hydraulic fracturing process.~~]

[~~(16) Solid oil and gas waste--Oil and gas waste that is not typically capable of being injected into a disposal well without the addition of fluids.~~]

(15) [~~(17)~~] Stationary commercial recycling facility--A commercial recycling facility in an immobile, fixed location for a period of greater than two years that recycles solid oil and gas waste or wellbore fluid produced from an oil or gas well, including produced formation fluid, workover fluid, and completion fluid, including fluids produced from the hydraulic fracturing process.

(16) Treatment--The process of reconditioning oil and gas waste to a reusable form.

(17) Treatment of drill cuttings--A manufacturing, mechanical, thermal, or chemical process other than sizing, shaping, diluting, or sorting.

§4.205. Exceptions.

(a) Except for the requirements related to financial security found in §§4.239(b), 4.255(b), 4.271(b), and 4.287(b) of this title; the notice requirements found in §§4.238, 4.254, 4.270, and 4.286 of this title; and the requirements related to sampling and analysis found in §§4.221, 4.222, 4.223, 4.242, 4.243, 4.258, 4.259, 4.274, 4.275, 4.290, and 4.291 of this title, an applicant or permittee may request an exception to the provisions of this subchapter by submitting to the Director [~~director~~] a written request and demonstrating that the requested alternative is at least equivalent in the protection of public health and safety, and the environment, as the provision of this subchapter to which the exception is requested.

(b) Each application for an exception to a rule in this subchapter shall be accompanied by the exception fee and surcharge required by §3.78(b)(4) and (n) of this title (relating to Fees and Financial Security Requirements).

(c) The Director [~~director~~] shall review each written request on a case-by-case basis.

(1) If the Director determines that a request for an exception to a rule in Divisions 5 or 6 of this subchapter (relating to Requirements for Off-Lease Commercial Recycling of Fluid, and Requirements for Stationary Commercial Recycling of Fluid, respectively) is substantially similar to previous exceptions

approved by the Commission, the Director shall approve the requested exception.

(2) If the Director [~~director~~] denies a request for an exception, the applicant or permittee may request a hearing consistent with the hearing provisions of this subchapter relating to hearings requests but shall not [~~may not~~] use the requested alternative until the alternative is approved by the Commission.

§4.206. Administrative Decision on Permit Application.

(a) If the Commission does not receive a protest to an application submitted under this subchapter, the Director [~~director~~] may administratively approve the application if the application otherwise complies with the requirements of this subchapter.

(b) The Director [~~director~~] may administratively deny the application if it does not meet the requirements of this subchapter or other laws, rules, or orders of the Commission. The Director [~~director~~] shall provide the applicant written notice of the basis for administrative denial.

(c) The applicant may request a hearing upon receipt of notice of administrative denial. A request for hearing shall be made to the Director [~~director~~] within 30 days of the date on the notice of administrative denial. If the Director [~~director~~] receives a request for a hearing, the Director [~~director~~] shall refer the matter to the Docket Services Section of the Hearings Division [~~Office of General Counsel~~] for assignment of a hearings examiner who shall conduct the hearing in accordance with Chapter 1 of this title (relating to Practice and Procedure).

§4.207. Protests and Hearings.

(a) If a person who receives notice or other affected person files a proper protest with the Technical Permitting Section [~~Commission~~], the Director [~~director~~] shall give the applicant written notice of the protest and of the applicant's right to either request a hearing on the application or withdraw the application. The applicant shall have 30 days from the date of the Director's [~~director's~~] notice to respond, in writing, by either requesting a hearing or withdrawing the application. In the absence of a timely written response from the applicant, the Director [~~director~~] shall consider the application to have been withdrawn.

(b) Even if there is no protest filed, the Director [~~director~~] may refer an application to a hearing if the Director [~~director~~] determines that a hearing is in the public interest. In determining whether a hearing is in the public interest, the Director [~~director~~] will consider the characteristics and volume of oil and gas waste to be managed [~~stored, handled and treated~~] at the facility; the potential risk posed to surface and subsurface water; and any other factor identified in this subchapter relating to siting, construction, and operation of the facility.

(c) Before a hearing on a permit application for a commercial recycling facility, the Commission shall provide notice of the hearing to all affected persons, and other persons or governmental entities who express, in writing, an interest in the application.

§4.208. General Standards for Permit Issuance.

(a) A permit for a commercial recycling facility issued pursuant to this subchapter shall provide that the facility shall only receive, store, handle, treat, or recycle waste:

(1) under the jurisdiction of the Commission;

(2) that is not a hazardous waste as defined by the administrator of the Environmental Protection Agency pursuant to the federal Solid Waste Disposal Act, as amended (42 United States Code, §6901, et seq.); and

(3) that is not oil and gas naturally occurring radioactive (NORM) waste as defined in §4.603 of this title (relating to Definitions).

(b) A permit issued pursuant to this subchapter may be issued only if the Director [~~director~~] or the Commission determines that:

(1) the storage, handling, treatment, and/or recycling of oil and gas wastes and other substances and materials will not result in the waste of oil, gas, or geothermal resources, the pollution of surface or subsurface water, a threat to public health and safety; and

(2) the recyclable product can meet engineering and environmental standards the Commission establishes in the permit or in this subchapter for its intended use.

(c) All chemical laboratory analyses shall be performed using appropriate Environmental Protection Agency methods or standard methods by an independent National Environmental Laboratory Accreditation Program certified laboratory neither owned nor operated by the permittee. Any sample collected for chemical laboratory analysis shall be collected and preserved in a manner appropriate for that analytical method as specified in 40 Code of Federal Regulations (CFR) Part 136. All geotechnical testing shall be performed by a laboratory certified to conduct geotechnical testing according to the standards specified by the ASTM International (ASTM) and certified by a professional engineer licensed in Texas.

§4.209. Permit Renewal.

Permits issued pursuant to this subchapter may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~].

§4.210. Modification, Suspension, and Termination. (No change.)

§4.211. Penalties.

Violations of this subchapter or a permit issued pursuant to this subchapter may subject a person to penalties and remedies specified in the Texas Natural Resources Code, Title 3, and any other statutes or rules administered by the Commission, including §4.107 of this title (relating to Penalties).

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

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

(a) An application for a permit for on-lease solid oil and gas waste commercial recycling shall be filed with the Technical Permitting Section, and on the same day the [~~Commission's headquarters office in Austin. The~~] applicant shall mail or deliver a copy of the application to the Commission District Office for the county in which the facility is to be located [~~on the same day the original application is mailed or delivered to the Commission's headquarters office in Austin~~]. A permit application shall be considered filed with the Commission on the date a complete application [~~it~~] is received by the Technical Permitting Section [~~Commission's headquarters office in Austin~~].

(b) The permit application shall contain the applicant's name; organizational report number; physical office address and, if different, mailing address; telephone number; [~~and facsimile transmission (fax) number;~~] and the name of a contact person.

(c) The permit application shall contain information addressing each applicable application requirement of this division and all information necessary to initiate the final review by the Director [~~director~~]. The Director [~~director~~] shall neither administratively approve an application nor refer an application to hearing unless the Director [~~director~~] has determined that the application is administratively complete. If the Director [~~director~~] determines that an application is incomplete, the Director [~~director~~] shall notify the applicant in writing and shall describe the specific information required to complete the application. An applicant may make no more than two supplemental filings to complete an application. After the second supplemental submission, if the application is complete, the Director shall either approve or deny the application. If the application is still incomplete after the second supplemental submission, the Director shall administratively deny the application. The Director shall notify the applicant in writing of the administrative decision and, in the case of an administrative denial, the applicant's right to request a hearing on the application as it stands at the time of administrative denial.

(d) The permit application shall contain [~~an original signature in ink, the date of signing, and~~] the following certification signed and dated by an authorized representative of the applicant: "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."

§4.213. Minimum Engineering and Geologic Information.

(a) The Director [~~director~~] may require a permit applicant for on-lease commercial solid oil and gas waste recycling to provide the Commission with engineering[~~,~~] or other information which the Director [~~director~~] deems necessary to show that issuance of the permit will not result in the waste of oil, gas, or

geothermal resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(b) Engineering work products prepared by the applicant shall be sealed by a professional [~~registered~~] engineer licensed in Texas as required by the Texas Occupations Code, Chapter 1001.

§4.214. Minimum Design and Construction Information.

A permit application for on-lease commercial solid oil and gas waste recycling shall include:

(1) a facility diagram [~~the typical layout and design~~] of receiving, processing, and storage areas and all equipment (e.g., pug mill), tanks, silos, and dikes.

(2) 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;

(3) 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; and

(4) a plan to control and manage storm water runoff and to retain wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect storm water during a 25-year, 24-hour [~~maximum~~] rainfall event, and all calculations made to determine the required capacity and design.

§4.215. Minimum Operating Information. (No change.)

§4.216. Minimum Monitoring Information. (No change.)

§4.217. Minimum Closure Information. (No change.)

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

(a) A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall specify the Commission districts within which recycling is authorized, shall be valid [~~issued~~] for a term of not more than five years, and shall authorize operations at any one lease for no more than one year. Permits issued pursuant to this division may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~]. Any request for transfer of the [~~this~~] permit shall [~~should~~] be filed with the Technical Permitting Section [~~Oil and Gas Division in Austin~~] at least 60 days before the permittee requests [~~wishes~~] the transfer to take place.

(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 appropriate Commission District Office [~~district office~~] 72 hours before operations

commence on each lease.

§4.219. Minimum Permit Provisions for Siting.

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

(b) On-lease commercial solid oil and gas waste recycling permitted pursuant to this division [~~and after the effective date of this division~~] shall not be located:

(1) within a 100-year flood plain, in a streambed, or in a sensitive area as defined by §3.91 of this title (relating to Cleanup of Soil Contaminated by a Crude Oil Spill); or

(2) within 150 feet of surface water or public, domestic, or irrigation water wells.

(c) Factors that the Commission will consider in assessing potential risk from on-lease commercial solid oil and gas waste recycling include:

(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, sensitive areas as defined by §3.91 of this title; and

(3) any other factors the Commission deems reasonably necessary in determining whether or not issuance of the permit will pose an unreasonable risk.

(d) All siting requirements in this section for 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.

(a) A permit issued pursuant to this division for on-lease commercial solid oil and gas waste recycling shall contain any requirement that the Director [~~director~~] or the Commission determines to be reasonably necessary to ensure that:

(1) 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 prevent pollution of surface and subsurface water;

(2) the pollution of 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 storm water runoff, to the land surface at and adjacent to the facility or to

surface and subsurface water;

(B) requiring that the permittee control and remediate spills; and

(C) requiring that the permittee make regular inspections of the facility; and

(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.

(b) All storage cells at the site shall be:

(1) located above the top of the seasonal high water table;

(2) designed to prevent storm water [~~stormwater~~] runoff from entering the area; and

(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.

(c) A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division shall require that the permittee notify the appropriate Commission District Office [~~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 appropriate District Office [~~district office~~].

§4.221. Minimum Permit Provisions for Operations.

(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.

(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 [~~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 [~~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 [~~Oil and Gas Division in Austin~~] and the appropriate District Office shall [~~must~~] 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 [~~may~~] not exceed 15 percent.

(C) A written report of the trial run shall be submitted to the Technical Permitting Section [~~Oil and Gas Division in Austin~~] and the appropriate District Office [~~district office~~] within 60 days of receipt of the analyses required in this section. The following information shall [~~must~~] be included:

(i) a summary of the trial run and description of the process;

(ii) [~~(i)~~] the actual volume of waste material processed;

(iii) [~~(ii)~~] the volume and type of stabilization material used;

(iv) [~~(iii)~~] the type of waste and description of the waste material [~~copies of all lab analyses required by this section~~]; and

(v) [~~(iv)~~] copies of all chemical and geotechnical laboratory analytical reports and chain of custody sheets for the samples specified in [~~the results of the analysis required under~~] subparagraph (B) of this paragraph.

(D) The final processed material shall [~~must~~] meet the limitations of this section.

(4) The Director [~~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 [~~director~~] approves the trial run report.

(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 [~~Commission~~] 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.

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

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

(f) Processed material meeting or exceeding the engineering [~~process control~~] 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.

(a) A permit for on-lease commercial solid oil and gas waste recycling issued pursuant to this division

shall include monitoring requirements the Director [~~director~~] or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director [~~director~~] or the Commission and included in the permit.

(b) Consistent with the requirements of §4.208 of this title (relating to General Standards for Permit Issuance), the Director [~~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.

(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.

(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:

Figure: 16 TAC §4.222(d) (No change.)

(e) Recordkeeping and reporting requirements.

(1) Recordkeeping requirements.

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

(B) These records shall [~~must~~] 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 [~~subchapter~~] 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. An application for renewal of an existing permit issued pursuant to this division [~~or §3.8 of this title (relating to Water Protection)~~] shall be submitted in writing a minimum of 60 days before the expiration date of the permit and shall include the permittee's permit number. 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.

DIVISION 3. REQUIREMENTS FOR OFF-LEASE OR CENTRALIZED COMMERCIAL SOLID OIL AND GAS WASTE RECYCLING.

§4.230 General Permit Application Requirements for Off-Lease or Centralized Commercial Solid Oil and Gas Waste Recycling.

(a) An application for a permit for off-lease or centralized commercial solid oil and gas waste recycling shall be filed with the Technical Permitting Section, and on the same day the [~~Commission's headquarters office in Austin. The~~] applicant shall mail or deliver a copy of the application to the Commission District Office for the county in which the facility is to be located [~~on the same day the original application is mailed or delivered to the Commission's headquarters office in Austin~~]. A permit application shall be considered filed with the Commission on the date a complete application [~~it~~] is received by the Technical Permitting Section [~~Commission's headquarters office in Austin~~].

(b) The permit application shall contain the applicant's name; organizational report number; physical office address and, if different, mailing address; facility address; telephone number; [~~and facsimile transmission (fax) number;~~] and the name of a contact person.

(c) The permit application shall contain information addressing each applicable application requirement

of this division and all information necessary to initiate the final review by the Director [~~director~~]. The Director [~~director~~] shall neither administratively approve an application nor refer an application to hearing unless the Director [~~director~~] has determined that the application is administratively complete. If the Director [~~director~~] determines that an application is incomplete, the Director [~~director~~] shall notify the applicant in writing and shall describe the specific information required to complete the application. An applicant may make no more than two supplemental filings to complete an application. After the second supplemental submission, if the application is complete, the Director shall either approve or deny the application. If the application is still incomplete after the second supplemental submission, the Director shall administratively deny the application. The Director shall notify the applicant in writing of the administrative decision and, in the case of an administrative denial, the applicant's right to request a hearing on the application as it stands at the time of administrative denial.

(d) The permit application shall contain [~~an original signature in ink, the date of signing, and~~] the following certification signed and dated by an authorized representative of the applicant: "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."

§4.231 Minimum Engineering and Geologic Information.

(a) The Director [~~director~~] may require a permit applicant for off-lease or centralized commercial solid oil and gas waste recycling to provide the Commission with engineering, geological, or other information which the Director [~~director~~] deems necessary to show that issuance of the permit will not result in the waste of oil, gas, or geothermal resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(b) Engineering and geologic work products prepared by the applicant shall be sealed by a professional [~~registered~~] engineer or geologist, respectively, licensed in Texas as required by the Texas Occupations Code, Chapters 1001 and 1002.

§4.232 Minimum Siting Information.

A permit application for off-lease or centralized commercial solid oil and gas waste recycling shall include:

(1) a description of the proposed facility site and surrounding area;

(2) the name, physical address and, if different, mailing address; and telephone number[~~; and facsimile transmission (fax) 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;

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

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

information;

(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;

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

(7) a complete, original 7 1/2 minute United States Geological Survey topographic quadrangle map clearly indicating the outline of the proposed facility; the location of any pipelines that underlay the facility but are not included on the topographic map; and the location of the 100-year flood plain and the source of the flood plain information.

§4.233 Minimum Real Property Information. (No change.)

§4.234 Minimum Design and Construction Information.

(a) A permit application for an off-lease or centralized commercial solid oil and gas waste recycling facility shall include the layout and design of the facility by including a plat drawn to scale with north arrow to top of the map showing the location and information on the design and size of all receiving, processing, and storage areas and all equipment (e.g., pug mill), tanks, silos, monitor wells, dikes, fences, and access roads.

(b) A permit application for an off-lease or centralized commercial solid oil and gas waste recycling facility also shall include:

(1) 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;

(2) for storage areas where tanks and/or liners are not used, credible engineering and/or geologic information demonstrating that tanks or liners are not necessary for the protection of surface and subsurface water;

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

(4) a plan to control and manage storm water runoff and to retain incoming wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect storm water from the facility during a 25-year, 24-hour [~~maximum~~] rainfall event, and all calculations made to determine the required capacity and design; and

(5) if the application is for a stationary commercial recycling facility, a plan for the installation of monitoring wells at the facility.

§4.235 Minimum Operating Information. (No change.)

§4.236 Minimum Monitoring Information. (No change.)

§4.237 Minimum Closure Information. (No change.)

§4.238 Notice.

(a) A permit applicant for off-lease or centralized commercial solid oil and gas waste recycling shall give personal notice and file proof of such notice in accordance with the following requirements.

(1) The applicant shall mail or deliver notice to the following persons on or after the date the application is filed with the Technical Permitting Section [~~Commission's headquarters office in Austin~~]:

(A) the surface owner or owners of the tract upon which the commercial recycling facility will be located;

(B) the city clerk or other appropriate official, if the tract upon which the facility will be located lies within the corporate limits of an incorporated city, town, or village;

(C) the surface owners of tracts adjoining the tract on which the proposed facility will be located, unless the boundary with the adjoining tract is a distance of 1/2-mile or greater from the fence line or edge of the facility as shown on the plat required under §4.233(b) of this title (relating to Minimum Real Property Information); and

(D) any affected person or class of persons that the Director [~~director~~] determines should receive notice of a particular application.

(2) Personal notice of the permit application shall consist of:

(A) a copy of the application;

(B) a statement of the date the applicant filed the application with the Commission;

(C) a statement that any [~~a~~] protest to the application must [~~should~~] be filed with the Commission within 15 days of the last date of published notice, a statement identifying the publication in which published notice will appear, and the procedure for making a protest of the application to the Commission;

(D) a description of the location of the site for which the application was made, including the county in which the site is to be located, the name of the original survey and abstract number, and the direction and distance from the nearest municipality;

(E) the name of the owner or owners of the property on which the facility is to be located;

(F) the name of the applicant;

(G) the type of fluid or waste to be handled at the facility; and

(H) the recycling method proposed and the proposed end-use of the recycled material.

(3) The applicant shall submit to the Commission proof that personal notice has been given as required. Proof of notice shall consist of a copy of each notification letter sent, along with a statement signed by

the applicant that includes the names and addresses of each person to whom the notice was sent, and the date that each was notified of the application.

(b) If the Director [~~director~~] finds that a person to whom the applicant was required to give notice of an application has not received such notice, then the Director [~~director~~] shall not take action on the application until the applicant has made reasonable efforts to give such person notice of the application and an opportunity to file a protest to the application with the Commission.

§4.239 General Permit Provisions.

(a) A permit for an off-lease or centralized commercial solid oil and gas waste recycling facility issued pursuant to this division shall be valid [~~issued~~] for a term of not more than two years. Permits issued pursuant to this division may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~].

(b) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility issued pursuant to this division shall require that, prior to operating, the facility comply with the financial security requirements of Texas Natural Resources Code, §91.109, relating to Financial Security for Persons Involved in Activities Other than Operation of Wells, as implemented by §3.78 of this title (relating to Fees and Financial Security Requirements).

(c) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility shall include a condition requiring that the permittee notify the surface owner of the tract upon which recycling will take place and the appropriate Commission District Office [~~district office~~] before recycling operations commence.

§4.240 Minimum Permit Provisions for Siting.

(a) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility may be issued only if the Director [~~director~~] or the Commission determines that the facility is to be located in an area where there is no unreasonable risk of pollution or threat to public health or safety.

(b) An off-lease centralized commercial solid oil and gas waste recycling facility permitted pursuant to this division [~~and after the effective date of this division~~] shall not be located within a 100-year flood plain.

(c) Factors that the Commission will consider in assessing potential risk from an off-lease centralized commercial solid oil and gas waste recycling facility include:

(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) surface water;

(3) depth to and quality of the shallowest groundwater;

(4) distance to the nearest property line or public road;

(5) proximity to coastal natural resources, sensitive areas as defined by §3.91 of this title (relating to Cleanup of Soil Contaminated by a Crude Oil Spill), or water supplies, and/or public, domestic, or irrigation water wells; and

(6) any other factors the Commission deems reasonably necessary in determining whether or not issuance of the permit will pose an unreasonable risk.

(d) All siting requirements in this section for an off-lease centralized commercial solid oil and gas waste recycling facility refer to conditions at the time the facility is constructed.

§4.241 Minimum Permit Provisions for Design and Construction.

(a) A permit issued pursuant to this division for an off-lease centralized commercial solid oil and gas waste recycling facility shall contain any requirement that the Director [~~director~~] or the Commission determines to be reasonably necessary to ensure that:

(1) 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 prevent pollution of surface and subsurface water;

(2) the pollution of 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 storm water runoff, from the facility to the land surface at and adjacent to the facility or to surface and subsurface water;

(B) requiring that the permittee control spills at the facility; and

(C) requiring that the permittee make regular inspections of the facility; and

(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 from the facility.

(b) A permit issued for a stationary commercial recycling facility pursuant to this division shall require that the permittee:

(1) install monitoring wells in accordance with 16 Texas Administrative Code, Part 4, Chapter 76, relating to Water Well Drillers and Water Well Pump Installers; and

(2) submit to the Technical Permitting Section [~~Commission's office in Austin~~] a soil boring log and other information for each well.

(c) The soil boring log and other information required in subsection (b) of this section shall:

(1) describe the soils using the Unified Soils Classification System (equivalent to ASTM D 2487 and 2488);

(2) identify the method of drilling, total depth, and the top of the first encountered water or saturated soils;

(3) include a well completion diagram for each monitoring well;

(4) include a survey elevation for each wellhead reference point; and

(5) include a potentiometric map showing static water levels and the direction of groundwater flow.

(d) The Commission or the Director [~~director~~] may waive any or all of the requirements in subsections (b) and (c) of this section if the permittee demonstrates that an on-site boring to a minimum depth of 100 feet recovers no water during a 24-hour test.

(e) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility issued pursuant to this division shall require that the permittee notify the Commission District Office [~~district office~~] for the county in which the facility is located 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 only after the facility has been inspected by the Commission to ensure that construction of all elements of the facility is consistent with the representations in the application and the requirements of the permit.

(f) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility issued pursuant to this division that requires the installation of monitoring wells shall require that the permittee comply with subsections (b) and (c) of this section prior to commencing recycling operations.

§4.242 Minimum Permit Provisions for Operations.

(a) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 are received at the facility, including requirements that the permittee test incoming oil and gas waste and keep records of amounts and sources of incoming wastes; and

(2) the processing operation and resulting recyclable product meet the environmental and engineering standards established in the permit.

(b) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 [~~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 [~~director~~] for review a report of the results of the trial run prior to commencing operations.

(3) The Director [~~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.

(4) The permittee shall not use the recyclable product until the Director [~~director~~] approves the trial run report.

(c) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 facility, that the Commission determines to be reasonably necessary to ensure that the permittee does not speculatively 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.

§4.243 Minimum Permit Provisions for Monitoring.

(a) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility issued pursuant to this division shall include monitoring requirements the Director [~~director~~] or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director [~~director~~] or the Commission and included in the permit.

(b) Consistent with the requirements of §4.208 of this title (relating to General Standards for Permit Issuance), the Director [~~director~~] or the Commission shall establish and include in the permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 to be accepted at the commercial recycling facility; and

(2) the intended use for the recyclable product.

(c) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 division or in a permit issued by the Commission.

(d) A permit for an off-lease centralized commercial solid oil and gas waste recycling facility 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 yards composite for the following minimum parameters and meet the following limits:

Figure: 16 TAC §4.243(d) (No change.)

§4.244 Minimum Permit Provisions for Closure. (No change.)

§4.245 Permit Renewal.

Before the expiration of a permit issued pursuant to this division, the permittee may submit an application to renew the permit. An application for renewal of an existing permit issued pursuant to this division [~~or §3.8 of this title (relating to Water Protection)~~] shall be submitted in writing a minimum of 60 days before the expiration date of the permit and shall include the permittee's permit number. The application shall comply with the requirements of §4.230 of this title (relating to General Permit Application Requirements for Off-Lease or Centralized Commercial Solid Oil and Gas Waste Recycling), and the notice requirements of §4.238 of this title (relating to Notice). The Director [~~director~~] may require the applicant to comply with any of the requirements of §§4.231 - 4.237 of this title (relating to Minimum Engineering and Geologic Information; Minimum Siting Information; Minimum Real Property Information; Minimum Design and Construction Information; Minimum Operating Information; Minimum Monitoring Information; and Minimum Closure Information), depending on any changes made or planned to the construction, operation, monitoring, and/or closure of the facility.

DIVISION 4. REQUIREMENTS FOR STATIONARY COMMERCIAL SOLID OIL AND GAS WASTE RECYCLING FACILITIES.

§4.246 General Permit Application Requirements for a Stationary Commercial Solid Oil and Gas Waste Recycling Facility

(a) An application for a permit for a stationary commercial solid oil and gas waste recycling facility shall be filed with the Technical Permitting Section, and on the same day the [~~Commission's headquarters office in Austin. The~~] applicant shall mail or deliver a copy of the application to the Commission District Office for the county in which the facility is to be located [~~on the same day the original application is mailed or delivered to the Commission's headquarters office in Austin~~]. A permit application shall be considered filed with the Commission on the date a complete application [~~it~~] is received by the Technical Permitting Section [~~Commission's headquarters office in Austin~~].

(b) The permit application shall contain the applicant's name; organizational report number; physical office address and, if different, mailing address; facility address; telephone number; [~~and facsimile transmission (fax) number;~~] and the name of a contact person. A permit for a stationary commercial recycling facility also shall contain the facility address.

(c) The permit application shall contain information addressing each applicable application requirement of this division and all information necessary to initiate the final review by the Director [~~director~~]. The Director [~~director~~] shall neither administratively approve an application nor refer an application to hearing unless the Director [~~director~~] has determined that the application is administratively complete. If the Director [~~director~~]

determines that an application is incomplete, the Director [~~director~~] shall notify the applicant in writing and shall describe the specific information required to complete the application. An applicant may make no more than two supplemental filings to complete an application. After the second supplemental submission, if the application is complete, the Director shall either approve or deny the application. If the application is still incomplete after the second supplemental submission, the Director shall administratively deny the application. The Director shall notify the applicant in writing of the administrative decision and, in the case of an administrative denial, the applicant's right to request a hearing on the application as it stands at the time of administrative denial.

(d) The permit application shall contain [~~an original signature in ink, the date of signing, and~~] the following certification signed and dated by an authorized representative of the applicant: "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."

§4.247 Minimum Engineering and Geologic Information.

(a) The Director [~~director~~] may require a permit applicant for a stationary commercial solid oil and gas waste recycling facility to provide [~~the Commission with~~] engineering, geological, or other information which the Director [~~director~~] deems necessary to show that issuance of the permit will not result in the waste of oil, gas, or geothermal resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(b) Engineering and geologic work products prepared by the applicant shall be sealed by a professional [~~registered~~] engineer or geologist, respectively, licensed in Texas as required by the Texas Occupations Code, Chapters 1001 and 1002.

§4.248 Minimum Siting Information.

A permit application for a stationary commercial solid oil and gas waste recycling facility shall include:

(1) a description of the proposed facility site and surrounding area;

(2) the name, physical address and, if different, mailing address; and telephone number[~~; and facsimile transmission (fax) 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;

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

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

(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;

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

(7) a complete, original 7 1/2 minute United States Geological Survey topographic quadrangle map clearly indicating the outline of the proposed facility; the location of any pipelines that underlay the facility but are not included on the topographic map; and the location of the 100-year flood plain and the source of the flood plain information.

§4.249 Minimum Real Property Information. (No change.)

§4.250 Minimum Design and Construction Information.

(a) A permit application for a stationary commercial solid oil and gas waste recycling facility shall include the layout and design of the facility by including a plat drawn to scale with north arrow to top of the map showing the location and information on the design and size of all receiving, processing, and storage areas and all equipment (e.g., pug mill), tanks, silos, monitor wells, dikes, fences, and access roads.

(b) A permit application for a stationary commercial solid oil and gas waste recycling facility also shall include:

(1) 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;

(2) for storage areas where tanks and/or liners are not used, credible engineering and/or geologic information demonstrating that tanks or liners are not necessary for the protection of surface and subsurface water;

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

(4) a plan to control and manage storm water runoff and to retain incoming wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect storm water from the facility during a 25-year, 24-hour [~~maximum~~] rainfall event, and all calculations made to determine the required capacity and design; and

(5) a plan for the installation of monitoring wells at the facility.

§4.251 Minimum Operating Information.

A permit application for a stationary commercial solid oil and gas waste recycling facility shall include the following operating information:

(1) the estimated maximum volume of untreated oil and gas waste and partially treated oil and gas waste to be stored at the facility;

(2) the estimated maximum volume and time that the recyclable product will be stored at the

facility;

(3) a plan to control unauthorized access to the facility;

(4) a detailed waste acceptance plan that:

(A) identifies anticipated volumes and specific types of wastes (e.g., oil-based drilling fluid and cuttings, crude oil-contaminated soils, production tank bottoms, etc.) to be accepted at the facility for treatment and recycling; and

(B) provides for testing of wastes to be processed to ensure that only oil and gas waste authorized by this division or the permit will be received at the facility;

(5) plans for keeping records of the source and volume of wastes accepted for recycling in accordance with the permit, including maintenance of records of the source of waste received by well number, API number, lease or facility name, lease number and/or gas identification number, county, and Commission district;

(6) 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 (SDS) for any chemical or additive;

(7) a description of all inert material (e.g., brick, rock, gravel, caliche) to be stored at the facility and used as aggregate in the treatment process;

(8) 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; and

(9) an estimate of the duration of operation of the proposed facility.

§4.252 Minimum Monitoring Information. (No change.)

§4.253 Minimum Closure Information. (No change.)

§4.254 Notice.

(a) A permit applicant for a stationary commercial solid oil and gas waste recycling facility shall publish notice and file proof of publication in accordance with the following requirements.

(1) A permit applicant shall publish notice of the application in a newspaper of general circulation in the county in which the proposed facility will be located at least once each week for two consecutive weeks with the first publication occurring not earlier than the date the application is filed with the Commission and not later than the 30th day after the date on which the application is filed with the Commission.

(2) The published notice shall:

(A) be entitled, "Notice of Application for Commercial Solid Oil and Gas Waste Recycling Facility";

(B) provide the date the applicant filed the application with the Commission for the permit;

(C) identify the name of the applicant;

(D) state the physical address of the proposed facility and its location in relation to the nearest municipality or community;

(E) identify the owner or owners of the property upon which the proposed facility will be located;

(F) state that affected persons may protest the application by filing a protest with the Railroad Commission within 15 days of the last date of publication; and

(G) provide the address to which protests may be mailed. If the Commission implements an electronic means for filing protests, then the location to instructions for electronic submittal shall be included.

(3) The applicant shall submit to the Commission proof that the applicant published notice as required by this section. Proof of publication of the notice shall consist of a sworn affidavit from the newspaper publisher that states the dates on which the notice was published and the county or counties in which the newspaper is of general circulation, and to which are attached the tear sheets of the published notices.

(b) A permit applicant for a stationary commercial solid oil and gas waste recycling facility shall give personal notice and file proof of such notice in accordance with the following requirements.

(1) The applicant shall mail or deliver notice to the following persons on or after the date the application is filed with the Technical Permitting Section [~~Commission's headquarters office in Austin~~]:

(A) the surface owner or owners of the tract upon which the commercial recycling facility will be located;

(B) the city clerk or other appropriate official, if the tract upon which the facility will be located lies within the corporate limits of an incorporated city, town, or village;

(C) the surface owners of tracts adjoining the tract on which proposed facility will be located, unless the boundary with the adjoining tract is a distance of 1/2-mile or greater from the fenceline or edge of the facility as shown on the plat required under §4.249(b) of this title (relating to Minimum Real Property Information); and

(D) any affected person or class of persons that the Director [~~director~~] determines should receive notice of a particular application.

(2) Personal notice of the permit application shall consist of:

(A) a copy of the application;

(B) a statement of the date the applicant filed the application with the Commission;

(C) a statement that any [~~a~~] protest to the application must [~~should~~] be filed with the Commission within 15 days of the last date of published notice, a statement identifying the publication in which published notice will appear, and the procedure for making a protest of the application to the Commission;

(D) a description of the location of the site for which the application was made,

including the county in which the site is to be located, the name of the original survey and abstract number, and the direction and distance from the nearest municipality;

(E) the name of the owner or owners of the property on which the facility is to be located;

(F) the name of the applicant;

(G) the type of fluid or waste to be handled at the facility; and

(H) the recycling method proposed and the proposed end-use of the recycled material.

(3) The applicant shall submit to the Commission proof that personal notice has been given as required. Proof of notice shall consist of a copy of each notification letter sent, along with a statement signed by the applicant that includes the names and addresses of each person to whom the notice was sent, and the date that each was notified of the application.

(c) If the Director [~~director~~] has reason to believe that a person to whom the applicant was required to give notice of an application has not received such notice, then the Director [~~director~~] shall not take action on the application until the applicant has made reasonable efforts to give such person notice of the application and an opportunity to file a protest to the application with the Commission.

§4.255 General Permit Provisions.

(a) A permit for a stationary commercial solid oil and gas waste recycling facility issued pursuant to this division shall be issued for a term of not more than five years. Permits issued pursuant to this division may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~].

(b) A permit for a stationary commercial solid oil and gas waste recycling facility issued pursuant to this division shall require that, prior to operating, a stationary commercial solid oil and gas waste recycling facility comply with the financial security requirements of Texas Natural Resources Code, §91.109, relating to Financial Security for Persons Involved in Activities Other than Operation of Wells, as implemented by §3.78 of this title (relating to Fees and Financial Security Requirements).

(c) A permit for a stationary commercial solid oil and gas waste recycling facility shall include a condition requiring that the permittee notify the surface owner of the tract upon which recycling will take place and the appropriate Commission District Office [~~district office~~] before recycling operations commence on each tract.

§4.256 Minimum Permit Provisions for Siting.

(a) A permit for a stationary commercial solid oil and gas waste recycling facility may be issued only if the Director [~~director~~] or the Commission determines that the facility is to be located in an area where there is no unreasonable risk of pollution or threat to public health or safety.

(b) A stationary commercial solid oil and gas waste recycling facility permitted pursuant to this division

[~~and after the effective date of this division~~] shall not be located:

(1) within a 100-year flood plain, in a streambed, or in a sensitive area as defined by §3.91 of this title (relating to Cleanup of Soil Contaminated by a Crude Oil Spill); or

(2) within 150 feet of surface water or public, domestic, or irrigation water wells.

(c) Factors that the Commission will consider in assessing potential risk from a stationary commercial solid oil and gas waste recycling facility include:

(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) depth to and quality of the shallowest groundwater;

(3) distance to the nearest property line or public road;

(4) proximity to coastal natural resources, sensitive areas as defined by §3.91 of this title, or surface water and/or public, domestic, or irrigation water wells; and

(5) any other factors the Commission deems reasonably necessary in determining whether or not issuance of the permit will pose an unreasonable risk.

(d) All siting requirements in this section for a stationary commercial solid oil and gas waste recycling facility refer to conditions at the time the facility is constructed.

§4.257 Minimum Permit Provisions for Design and Construction.

(a) A permit issued pursuant to this division for a stationary commercial solid oil and gas waste recycling facility shall contain any requirement that the Director [~~director~~] or the Commission determines to be reasonably necessary to ensure that:

(1) 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 prevent pollution of surface and subsurface water;

(2) the pollution of 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 storm water runoff, from the facility to the land surface at and adjacent to the facility or to surface and subsurface water;

(B) requiring that the permittee control and remediate spills at the facility; and

(C) requiring that the permittee make regular inspections of the facility; and

(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 from the facility.

(b) A permit issued for a stationary commercial solid oil and gas waste recycling facility pursuant to this

division shall require that the permittee:

(1) install monitoring wells in accordance with 16 Texas Administrative Code, Part 4, Chapter 76, relating to Water Well Drillers and Water Well Pump Installers; and

(2) submit to the Technical Permitting Section [~~Commission's office in Austin~~] a soil boring log and other information for each well.

(c) The soil boring log and other information required in subsection (b) of this section shall:

(1) describe the soils using the Unified Soils Classification System (equivalent to ASTM D 2487 and 2488);

(2) identify the method of drilling, total depth, and the top of the first encountered water or saturated soils;

(3) include a well completion diagram for each monitoring well;

(4) include a survey elevation for each wellhead reference point; and

(5) include a potentiometric map showing static water levels and the direction of groundwater flow.

(d) The Commission or the Director [~~director~~] may waive any or all of the requirements in subsections (b) and (c) of this section if the permittee demonstrates that an on-site boring to a minimum depth of 100 feet recovers no water during a 24-hour test.

(e) A permit for a stationary commercial solid oil and gas waste recycling facility issued pursuant to this division shall require that the permittee notify the Commission District Office [~~district office~~] for the county in which the facility is located 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 only after the facility has been inspected by the Commission to ensure that construction of all elements of the facility is consistent with the representations in the application and the requirements of the permit.

(f) A permit for a stationary commercial solid oil and gas waste recycling facility issued pursuant to this division that requires the installation of monitoring wells shall require that the permittee comply with subsections (b) and (c) of this section prior to commencing recycling operations.

§4.258 Minimum Permit Provisions for Operations.

(a) A permit for a stationary commercial solid oil and gas waste recycling facility 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 are received at the facility, including requirements that the permittee test incoming oil and gas waste and keep records of amounts and sources of incoming wastes; and

(2) the processing operation and resulting recyclable product meet the environmental and

engineering standards established in the permit.

(b) A permit for a stationary commercial solid oil and gas waste recycling facility 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 appropriate District Office [~~district office~~] for the county in which the facility is located prior to commencement of the trial run.

(2) The permittee shall demonstrate the ability to successfully process a 1,000 [~~one thousand~~] cubic yard batch of solid oil and gas waste.

(A) The Technical Permitting Section [~~Oil and Gas Division in Austin~~] and the appropriate District Office shall [~~district office must~~] be notified in writing at least 72 hours before waste processing begins.

(B) Samples of the partially treated waste shall [~~must~~] be collected and analyzed as required by §4.243 of this title (relating to Minimum Permit Provisions for Monitoring).

(C) Samples 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 may not exceed 15 percent.

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

(4) The Director [~~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 [~~director~~] approves the trial run report.

(6) A written report of the trial run shall be submitted to the Technical Permitting Section [~~Oil and Gas Division in Austin~~] and the appropriate District Office [~~district office~~] within 60 days of receipt of the analyses required in §4.243 of this title. The following information shall [~~must~~] be included:

(A) the actual volume of waste material processed;

(B) the volume of stabilization material used;

(C) copies of all lab analyses required by §4.243 of this title; and

(D) the results of the analysis required under paragraph (2)(C) of this subsection.

(7) The final recyclable material shall [~~must~~] meet the limitations of §4.243 of this title.

(c) A permit for a stationary commercial solid oil and gas waste recycling facility 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 facility, that the Commission determines to be reasonably necessary to ensure that the permittee does not speculatively 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.

§4.259 Minimum Permit Provisions for Monitoring.

(a) A permit for a stationary commercial solid oil and gas waste recycling facility issued pursuant to this division shall include monitoring requirements the Director [~~director~~] or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director [~~director~~] or the Commission and included in the permit.

(b) Consistent with the requirements of §4.208 of this title (relating to General Standards for Permit Issuance), the Director [~~director~~] or the Commission shall establish and include in the permit for a stationary commercial solid oil and gas waste recycling facility 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 to be accepted at the commercial recycling facility; and

(2) the intended use for the recyclable product.

(c) A permit for a stationary commercial solid oil and gas waste recycling facility 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 division or in a permit issued by the Commission.

(d) A permit for a stationary commercial solid oil and gas waste recycling facility 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 tons of partially treated waste be collected and analyzed for every 800 ton composite for the following minimum parameters and meet the following limits: Figure: 16 TAC §4.259(d) (No change.)

(e) Groundwater monitor wells.

(1) Groundwater monitor wells, if required, shall [~~must~~] be monitored for the following

parameters after installation and quarterly thereafter:

(A) static water level;

(B) benzene;

(C) total petroleum hydrocarbons (TPH);

(D) total dissolved solids (TDS);

(E) chlorides;

(F) bromides;

(G) sulfates;

(H) nitrates;

(I) carbonates;

(J) calcium;

(K) magnesium;

(L) sodium; and

(M) potassium.

(2) Copies of the sampling and analytical results shall be filed semi-annually with the Technical Permitting Section [~~Oil and Gas Division~~] and the appropriate District Office [~~district office~~].

§4.260 Minimum Permit Provisions for Closure. (No change.)

§4.261 Permit Renewal.

Before the expiration of a permit issued pursuant to this division, the permittee may submit an application to renew the permit. An application for renewal of an existing permit issued pursuant to this division [~~or §3.8 of this title (relating to Water Protection)~~] shall be submitted in writing a minimum of 60 days before the expiration date of the permit and shall include the permittee's permit number. The application shall comply with the requirements of §4.246 of this title (relating to General Permit Application Requirements for a Stationary Commercial Solid Oil and Gas Waste Recycling Facility), and the notice requirements of §4.254 of this title (relating to Notice). The Director [~~director~~] may require the applicant to comply with any of the requirements of §§4.247 - 4.253 of this title (relating to Minimum Engineering and Geologic Information; Minimum Siting Information; Minimum Real Property Information; Minimum Design and Construction Information; Minimum Operating Information; Minimum Monitoring Information; and Minimum Closure Information), depending on any changes made or planned to the construction, operation, monitoring, and/or closure of the facility.

DIVISION 5. REQUIREMENTS FOR OFF-LEASE COMMERCIAL RECYCLING OF FLUID.

§4.262 General Permit Application Requirements for Off-Lease Commercial Recycling of Fluid

(a) An application for a permit for off-lease commercial recycling of fluid shall be filed with the Technical Permitting Section, and on the same day the [~~Commission's headquarters office in Austin. The~~] applicant shall mail or deliver a copy of the application to the Commission District Office for the county in which the facility is to be located [~~on the same day the original application is mailed or delivered to the Commission's headquarters office in Austin~~]. A permit application shall be considered filed with the Commission on the date a complete application [~~it~~] is received by the Technical Permitting Section [~~Commission's headquarters office in Austin~~].

(b) The permit application shall contain the applicant's name; organizational report number; physical office address and, if different, mailing address; facility address; telephone number; [~~and facsimile transmission (fax) number;~~] and the name of a contact person. A permit for a stationary commercial recycling facility also shall contain the facility address.

(c) The permit application shall contain information addressing each applicable application requirement of this division and all information necessary to initiate the final review by the Director [~~director~~]. The Director [~~director~~] shall determine that the application is administratively complete prior to administratively approving an application or referring an application to hearing. If the Director [~~director~~] determines that an application is incomplete, the Director [~~director~~] shall notify the applicant in writing and shall describe the specific information required to complete the application.

(1) An applicant may make no more than two supplemental filings to complete an application.

(2) After the second supplemental submission, if the application is complete, the Director shall act on the application. The Director’s action on the application shall be:

(A) approval if the application meets the requirements of this division and the application has not been protested;

(B) referral to the Hearings Division if the application meets the requirements of this division and the application has been protested; or

(C) denial if the application does not meet the requirements of this division.

(3) If after the second supplemental submission the application is still incomplete, the Director shall administratively deny the application.

(4) The Director shall notify the applicant in writing of the administrative decision and, in the case of an administrative denial, the applicant's right to request a hearing on the application as it stands at the time of administrative denial.

(d) The Director shall approve or deny a complete application for a permit issued under this division that does not include a request for an exception to the requirements of this division not later than the 90th day after the date the complete application was received by the Commission, unless a protest is filed with the

Commission, in which case the Commission may extend the amount of time to approve or deny the application in order to allow for a public hearing on the application pursuant to Chapter 1 of this title (relating to Practice and Procedure). If the Director does not approve or deny the application before that date, the permit application is considered approved, and the applicant may operate under the terms specified in the application for a period of one year.

(e) [~~(d)~~] The permit application shall contain [~~an original signature in ink, the date of signing, and~~] the following certification signed and dated by an authorized representative of the applicant: "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."

§4.263 Minimum Engineering and Geologic Information

(a) A [~~The director may require a~~] permit applicant for off-lease commercial recycling of fluid shall include [~~to provide the Commission with~~] engineering, geological, or other information [~~which the director deems~~] necessary to:

(1) describe the subsurface geology underlying the facility to a depth of at least 100 feet, including the identification of the soil and subsoil by typical name and description of the approximate proportion of grain sizes, texture, consistency, moisture condition, permeability, and other pertinent characteristics;

(2) describe the subsurface hydrogeology underlying the facility to a depth of at least 100 feet, including an assessment of the presence and characteristics of permeable and impermeable strata; and

(3) evaluate the geology, hydrogeology, and proposed engineering design to show that issuance of the permit will not result in the waste of oil, gas, or geothermal resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(b) Information for engineering and geological site characterization may be obtained from available information or from a site investigation including installation of soil borings, soil and groundwater sampling, and soil and groundwater analysis. Site-specific investigation information is considered more reliable and, therefore, will have a greater effect on the permit determination.

(c) If an operator intends to establish and later rely on actual background concentrations of contaminants in environmental media, then the operator shall collect site-specific soil and groundwater samples for analysis and include these findings with the application.

(d) [~~(b)~~] Engineering and geologic work products prepared by the applicant shall be sealed by a professional [~~registered~~] engineer or geologist, respectively, licensed in Texas as required by the Texas Occupations Code, Chapters 1001 and 1002.

§4.264 Minimum Siting Information

(a) A pit permitted under this division shall not be located:

(1) where there has been observable groundwater within 100 feet of the ground surface unless the pit design includes a geosynthetic clay liner (GCL);

(2) within a sensitive area as defined by §4.204 of this title (relating to Definitions);

(3) within 300 feet of surface water, domestic supply wells, or irrigation water wells;

(4) within 500 feet of any public water system wells or intakes;

(5) within 1,000 feet of a permanent residence, school, hospital, institution or church in existence at the time of the initial permitting;

(6) within 500 feet of a wetland; or

(7) within a 100-year floodplain.

(b) A permit application for off-lease commercial recycling of fluid shall include:

(1) a description of the proposed facility site and surrounding area;

(2) the name, physical address and, if different, mailing address; and telephone number[~~; and facsimile transmission (fax) 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;

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

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

(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;

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

(7) a complete, original 7 1/2 minute United States Geological Survey topographic quadrangle map clearly indicating the outline of the proposed facility; the location of any pipelines that underlay the facility but are not included on the topographic map; and the location of the 100-year flood plain and the source of the flood plain information.

§4.265 Minimum Real Property Information (No change.)

§4.266 Minimum Design and Construction Information

(a) A pit permitted under this division shall be designed, built, and maintained as follows.

(1) The pit shall contain the material placed in the pit and prevent releases, overflow, or failure.

(2) The maximum depth from the natural surface elevation shall not exceed 22 feet.

(3) The foundation and interior slopes shall consist of a firm, unyielding base, smooth and free of rocks, debris, sharp edges, or irregularities to prevent the liner's rupture or tear. All interior and exterior surfaces of the pit shall be smooth drum rolled.

(4) The pit sides and berms shall have interior and exterior grades no steeper than three horizontal feet to one vertical foot. The top of the berm shall be wide enough to provide adequate room for inspection, maintenance, and any other structural or construction requirements.

(A) Fill for berms shall be placed and compacted in continuous lifts with a maximum loose lift thickness of 10 inches, compacted to eight inches.

(B) Berm fill shall be compacted to at least 95% of maximum dry density determined by the Standard Proctor (ASTM D698) and at moisture content within +2% to -2% of optimum moisture content as determined by a standard proctor soil test on samples from the source area. One nuclear density test shall be conducted for each 2,500 cubic yards, and the applicant shall provide compaction testing results upon completion.

(5) Both primary and secondary liners in a pit shall be geomembrane liners composed of ASTM GRI-13 compliant materials and be impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts, and acidic and alkaline solutions. Each pit shall incorporate, at a minimum, a liner system as follows:

(A) The primary liner shall be a minimum 60-mil high density polyethylene (HDPE).

(B) A leak detection system shall be placed between the primary and secondary geomembrane liners that shall consist of 200-mil biplanar geonet or geo-composite equivalent. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the secondary geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. The leak detection system shall be designed with the capability of removing a minimum of 1,000 gallons of leachate per acre per day or an alternative action leakage rate shall be calculated.

(C) The secondary liner shall be at a minimum 40-mil HDPE. If the depth to groundwater is less than 100 feet below the ground surface, the secondary liner shall include a geosynthetic clay liner.

(D) A geotextile (felt) liner shall be placed under the secondary liner and in contact with the prepared ground surface.

(6) The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench that is at least 24 inches deep.

(7) Field seams in geosynthetic material shall be performed in accordance with the manufacturer's instructions and include the following considerations:

(A) Field seams in geosynthetic material shall be minimized and oriented perpendicular

to the slope of the berm, not parallel.

(B) Prior to field seaming, the operator shall overlap liners four to six inches. The operator shall minimize the number of field seams and corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe.

(C) Qualified personnel shall perform field seam welding and testing. Documented quality assurance/quality control testing reports shall be maintained for the life of the liner.

(8) At a point of discharge into or suction from the pit, the operator shall ensure that the liner is protected from excessive hydrostatic force or mechanical damage.

(9) All piping and equipment that is in contact with the liner shall be secured to prevent liner wear and damage.

(10) There shall be no penetrations of the liner system.

(11) The pit shall be designed to prevent run-on of surface water. The pit shall be surrounded by a berm, ditch, or other diversion to prevent run-on of surface water.

(12) The pit shall be designed to operate with a minimum two feet of freeboard that includes the precipitation expected from a 25-year, 24-hour rainfall event.

(b) Tanks and treatment equipment shall be located within a secondary containment system.

(c) [~~(a)~~] A permit application for off-lease commercial recycling of fluid shall include the layout and design of the facility by including a plat drawn to scale with north arrow to top of the map showing the location and information on the design and size of all receiving, processing, and storage areas and all equipment, tanks, silos, monitor wells, dikes, fences, and access roads.

(d) [~~(b)~~] A permit application for off-lease commercial recycling of fluid also shall include:

(1) 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;

(2) for storage areas where tanks and/or liners are not used, credible engineering and/or geologic information demonstrating that tanks or liners are not necessary for the protection of surface and subsurface water;

(3) a map view and two perpendicular cross-sectional views of pits and/or storage areas/cells to be constructed, showing the bottom, sides, and dikes, showing the dimensions of each; [~~and~~]

(4) a plan to control and manage storm water runoff and to retain incoming wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect storm water from the facility during a 25-year, 24-hour [~~maximum~~] rainfall event, and all calculations made to determine the required capacity and design; and

(5) a plan for the installation of monitoring wells at the facility.

§4.267 Minimum Operating Information

A permit application for off-lease commercial recycling of fluid shall include the following operating information:

(1) the estimated maximum volume of untreated oil and gas waste and partially treated oil and gas waste to be stored at the facility;

(2) the estimated maximum volume and time that the recyclable product will be stored at the facility;

(3) a plan to control unauthorized access to the facility;

(4) a detailed waste acceptance plan that:

(A) identifies anticipated volumes and specific types of oil and gas wastes (e.g., hydraulic fracturing flowback fluid and/or produced water) to be accepted at the facility for treatment and recycling; and

(B) provides for testing of wastes to be processed to ensure that only oil and gas waste authorized by this division or the permit will be received at the facility;

(5) plans for keeping records of the source and volume of wastes accepted for recycling in accordance with the permit, including maintenance of records of the source of waste received by well number, API number, lease or facility name, lease number and/or gas identification number, county, and Commission district;

(6) a general description of the recycling process to be employed; a flow diagram showing the process and identifying all equipment and chemicals or additives to be used in the process; and the [~~Material~~] Safety Data Sheets (SDS) for any chemical or additive;

(7) a description of any testing to be performed to demonstrate that the proposed processing will result in a recyclable product that meets the health, safety, and environmental standards for the proposed use; and

(8) an estimate of the duration of operation of the proposed facility.

§4.268 Minimum Monitoring Information

A permit application for off-lease commercial recycling of fluid shall include:

(1) a sampling plan for the partially treated waste to ensure compliance with permit conditions and reuse requirements;

(2) a plan for sampling any monitoring wells at an off-lease commercial recycling of fluid facility as required by the permit and this division; and

(3) a plan to verify that fluid oil and gas wastes are confined to the facility pits, tanks, and processing areas, and a schedule for conducting periodic inspections, including plans to inspect pits and liner

systems, equipment, processing, and other waste storage areas

§4.269 Minimum Closure Information

(a) A permit application for off-lease commercial recycling of fluid shall include a closure cost estimate (CCE) prepared or supervised and approved by a professional engineer licensed in Texas.

(1) The CCE shall show all assumptions and calculations used to develop the estimate. The following assumptions are required:

(A) The facility is in compliance with permit conditions.

(B) The facility will be closed according to the permit or approved closure plan, under which collecting pits shall be dewatered, emptied and demolished prior to backfilling; all remaining waste will be disposed of at an authorized facility; and the site will be restored to its native state unless otherwise authorized by the permit.

(C) None of the operator's equipment or facilities that may have otherwise been available at the time of closure (e.g., disposal wells, land treatment facilities, trucks, bulldozers, and employees) are available to assist in the closure.

(D) The facility is at maximum capacity. All tanks and pits are full of waste.

(E) Storage tanks and pits contain basic sediment and water in normal operating proportions, with a minimum volume of at least 10% basic sediment.

(2) The CCE shall not assess a salvage value for any material or equipment at the site.

(3) The CCE shall include costs for sampling and analysis of soil for the areas around each waste management unit, including tank batteries, pads, and former pits.

(4) The CCE shall show unit costs for all material, equipment, services, and labor needed to close the facility. Units and fees used shall be appropriate for the type of waste material to be disposed. For example, disposal units for saltwater shall be reported in oil barrels rather than gallons. The CCE shall be specific and shall state the source or basis for the specific unit cost, including the following:

(A) the permitted waste hauler to be used and the hauler's mileage rate;

(B) the distance that waste will be transported for disposal;

(C) the name of each facility where waste will be taken and the disposal costs for that facility;

(D) the source of any material being brought to the facility, such as clean fill material;

(E) calculations for earth-moving equipment time and cost needed to move the fill dirt if fill dirt will be taken from the property;

(F) the total labor costs, including the titles and billing rates for personnel; and

(G) the quantity of each unit cost item and how the total quantity was determined (for example, cubic yards of material divided by size of load equals total number of loads).

(5) The CCE shall include maps and illustrations such as facility plans and photographs that show the current condition of the facility, and/or the condition of the facility upon reaching maximum permit conditions.

(6) For facilities with groundwater monitoring wells, the CCE shall include costs to plug and abandon the monitoring wells.

(7) For facilities that will require post-closure monitoring, the CCE shall include costs for a minimum of five years of monitoring.

(8) The CCE shall show all calculations used to arrive at total maximum closure costs.

(9) For all estimates submitted for existing facilities, a NORM screening survey of the facility shall be submitted. NORM screening surveys shall be performed using a properly calibrated scintillation meter with a sodium iodide detector (or equivalent), with the results reported in microroentgens per hour. Manufacturer's specifications and relevant calibration records shall be submitted to the Technical Permitting Section for all devices used for NORM detection. All equipment, including piping, pumps, and vessels shall be surveyed. Readings shall be taken around the perimeter of the pits and to the extent possible, over the pits. The ground surrounding the equipment and pits shall be surveyed in a systematic grid pattern. At a minimum, the following information shall be reported:

(A) the date of the survey;

(B) the instrument used and the last calibration date;

(C) a background reading;

(D) a site diagram showing where all readings, including the background, were taken; and

(E) the readings (in microroentgens per hour).

(10) If fill dirt will be excavated from the property to achieve closure, a restrictive covenant shall be submitted with the CCE. If the restrictive covenant requirements are not provided, the CCE shall assume that fill dirt is purchased from a commercial supplier. For a restrictive covenant, the following requirements shall be met whether the operator owns or leases the property:

(A) The operator shall provide a letter from the property owner specifically stating that the owner agrees that the material, which is described with specificity as to location, type and amount consistent with what is in the closure plan, will be available for closure whether the operator or the state performs closure, and agreeing to a restrictive covenant that reserves use of the material for closure.

(B) The operator shall submit an unsigned draft restrictive covenant on the form provided by the Commission. Once the Commission approves the closure cost and closure plan, the operator will be notified to submit a signed original of the restrictive covenant. The Commission will sign its portion of the restrictive covenant and return it to the operator for filing in the real property records of the county where the property is located. Once filed in the real property records, the operator shall provide the Commission with a

certified copy.

(C) If the facility operator leases the property, the operator shall provide to the Commission a copy of an amendment or addendum to the lease between the operator and the surface owner with a clause that specifically reserves use of material and states that the reservation shall inure to the Commission (as third-party beneficiary of this provision) if the Commission must initiate actions to close the facility.

(D) The operator shall submit supporting documentation showing that the dimensions of the restrictive covenant area can realistically store a stockpile in the amount needed. If soil will be excavated from the restrictive covenant area rather than stockpiled, the supporting documentation shall show the depth of the excavation is limited to what can be graded to prevent storm water from ponding in the excavated area.

(11) After the CCE has been calculated, an additional 10% of that amount shall be added to the total amount of the CCE to cover contingencies.

(b) A permit application for off-lease commercial recycling of fluid shall include a detailed plan for closure of the facility when operations terminate and include the required elements of §4.276 of this title (relating to Minimum Permit Provisions for Closure). The closure plan shall address how the applicant intends to:

(1) remove waste, partially treated waste, and/or recyclable product from the facility;

(2) close all storage pits, treatment equipment, and associated piping and other storage or waste processing equipment [~~areas/cells~~];

(3) remove dikes and equipment;

(4) contour and reseed disturbed areas;

(5) sample and analyze soil and groundwater throughout the facility; and

(6) plug groundwater monitoring wells.

§4.270 Notice.

(a) A permit applicant for off-lease commercial recycling of fluid shall give personal notice and file proof of such notice in accordance with the following requirements.

(1) The applicant shall mail or deliver notice to the following persons on or after the date the application is filed with the Technical Permitting Section [~~Commission's headquarters office in Austin~~]:

(A) the surface owner or owners of the tract upon which the commercial recycling facility will be located;

(B) the city clerk or other appropriate official, if the tract upon which the facility will be located lies within the corporate limits of an incorporated city, town, or village;

(C) the surface owners of tracts adjoining the tract on which the proposed facility will be located, unless the boundary with the adjoining tract is a distance of 1/2-mile or greater from the fenceline or edge of the facility as shown on the plat required under §4.265(b) of this title (relating to Minimum Real

Property Information); and

(D) any affected person or class of persons that the Director [~~director~~] determines should receive notice of a particular application.

(2) Personal notice of the permit application shall consist of:

(A) a copy of the application;

(B) a statement of the date the applicant filed the application with the Commission;

(C) a statement that any [~~a~~] protest to the application must [~~should~~] be filed with the Commission within 15 days of the date of receipt and the procedure for making a protest of the application to the Commission;

(D) a description of the location of the site for which the application was made, including the county in which the site is to be located, the name of the original survey and abstract number, and the direction and distance from the nearest municipality;

(E) the name of the owner or owners of the property on which the facility is to be located;

(F) the name of the applicant;

(G) the type of fluid or waste to be handled at the facility; and

(H) the recycling method proposed and the proposed end-use of the recyclable product.

(3) The applicant shall submit to the Commission proof that personal notice has been given as required. Proof of notice shall consist of a copy of each notification letter sent, along with a statement signed by the applicant that includes the names and addresses of each person to whom the notice was sent, and the date that each person was notified of the application.

(b) If the Director [~~director~~] has reason to believe that a person to whom the applicant was required to give notice of an application has not received such notice, then the Director [~~director~~] shall not take action on the application until the applicant has made reasonable efforts to give such person notice of the application and an opportunity to file a protest to the application with the Commission.

§4.271 General Permit Provisions

(a) A permit for off-lease commercial recycling of fluid issued pursuant to this division shall be valid [~~issued~~] for a term of not more than two years. Permits issued pursuant to this division may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~].

(b) A permit issued pursuant to this division shall require that, prior to operating, off-lease commercial recycling of fluid comply with the financial security requirements of Texas Natural Resources Code, §91.109, relating to Financial Security for Persons Involved in Activities Other than Operation of Wells, as implemented by §3.78 of this title (relating to Fees and Financial Security Requirements).

(c) A permit for off-lease commercial recycling of fluid shall include a condition requiring that the

permittee notify the surface owner of the tract upon which recycling will take place and the appropriate Commission District Office [~~district office~~] before recycling operations commence on each tract.

§4.272 Minimum Permit Provisions for Siting

(a) A permit for off-lease commercial recycling of fluid may be issued only if the Director [~~director~~] or the Commission determines that the facility is to be located in an area where there is no unreasonable risk of pollution or threat to public health or safety. The Director will presume that an application meeting the requirements of §4.264(a) of this title (relating to Minimum Siting Information) does not present an unreasonable risk of pollution or threat to public health or safety with regard to siting, unless extraordinary circumstances indicate otherwise.

(b) Off-lease commercial recycling of fluid permitted pursuant to this division and after the effective date of this division shall not be located:

(1) within a 100-year flood plain, in a streambed, or in a sensitive area as defined by Subchapter A of this chapter and §3.91 of this title (relating to Cleanup of Soil Contaminated by a Crude Oil Spill); or

(2) within 150 feet of surface water or public, domestic, or irrigation water wells.

(c) Factors that the Commission will consider in assessing potential risk from off-lease commercial recycling of fluid include:

(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 surface water;

(3) depth to and quality of the shallowest groundwater;

(4) distance to the nearest property line or public road;

(5) proximity to coastal natural resources, sensitive areas as defined by Subchapter A of this chapter and §3.91 of this title, or water supplies, and/or public, domestic, or irrigation water wells; and

(6) any other factors the Commission deems reasonably necessary in determining whether or not issuance of the permit will pose an unreasonable risk.

(d) All siting requirements in this section refer to conditions at the time the facility is constructed.

§4.273 Minimum Permit Provisions for Design and Construction

(a) A permit issued pursuant to this division shall contain any requirement that the Director [~~director~~] or the Commission determines to be reasonably necessary to ensure that:

(1) 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 prevent pollution of surface and subsurface water;

(2) the pollution of 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 storm water runoff, from the facility to the land surface at and adjacent to the facility or to surface and subsurface water;

(B) requiring that the permittee control spills at the facility; and

(C) requiring that the permittee make regular inspections of the facility; and

(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 from the facility.

(b) A permit issued for off-lease commercial recycling of fluid pursuant to this division shall require that the permittee:

(1) install monitoring wells in accordance with 16 Texas Administrative Code, Part 4, Chapter 76, relating to Water Well Drillers and Water Well Pump Installers; and

(2) submit to the Technical Permitting Section [~~Commission's office in Austin~~] a soil boring log and other information for each well.

(c) The soil boring log and other information required in subsection (b) of this section shall:

(1) describe the soils using the Unified Soils Classification System (equivalent to ASTM D 2487 and 2488);

(2) identify the method of drilling, total depth, and the top of the first encountered water or saturated soils;

(3) include a well completion diagram for each monitoring well;

(4) include a survey elevation for each wellhead reference point; and

(5) include a potentiometric map showing static water levels and the direction of groundwater flow.

(d) The Commission or the Director [~~director~~] may waive any or all of the requirements in subsections (b) and (c) of this section if the permittee demonstrates that an on-site boring to a minimum depth of 100 feet recovers no water during a 24-hour test.

(e) A permit for off-lease commercial recycling of fluid issued pursuant to this division shall require that the permittee notify the Commission District Office [~~district office~~] for the county in which the facility is located 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 only after the facility has been inspected by the Commission to ensure that construction of all elements of the facility is consistent with the representations in the application and the requirements of the permit.

(f) An operator shall not locate material excavated during construction:

(1) within 100 feet of a continuously flowing watercourse or significant watercourse;

(2) within 200 feet from a lakebed, sinkhole, stock pond or lake (measured from the ordinary

high-water mark);

(3) within 100 feet of a wetland; or

(4) within a 100-year floodplain.

(g) The following requirements apply to signage, fencing, and security.

(1) A sign shall be posted at each entrance to the facility. The sign shall be readily visible and show the operator's name, facility name, and permit number in letters and numerals at least three inches in height.

(2) A sign shall be posted identifying the permit number of each pit using letters and numerals at least three inches in height. The signs shall clearly state that the fluid within the pit is not potable or suitable for consumption.

(3) The facility shall maintain security to prevent unauthorized access. Security shall be maintained by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended.

(h) Any pit associated with an off-lease commercial fluid recycling facility permitted pursuant to this division after [insert the estimated effective date of this rulemaking], shall comply with the requirements of §4.265(a) of this title (relating to Minimum Design and Construction Information).

§4.274 Minimum Permit Provisions for Operations

(a) A permit for off-lease commercial recycling of fluid 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 are received at the facility, including requirements that the permittee test incoming oil and gas waste and keep records of amounts and sources of incoming wastes; and

(2) the processing operation and resulting recyclable product meet the environmental and engineering standards established in the permit.

(b) A permit for a facility 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 [~~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 [~~director~~] for review a report of the results of the trial run prior to commencing operations.

(3) The Director [~~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.

(4) The permittee shall not use the recyclable product until the Director [~~director~~] approves the trial run report.

(c) A permit 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 facility, that the Commission determines to be reasonably necessary to ensure that the permittee does not speculatively 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.

(d) A permit issued pursuant to this division shall include a requirement that the operator of the facility comply with the requirements of §3.56 of this title (relating to Scrubber Oil and Skim Hydrocarbons), if applicable.

(e) Oil shall not accumulate on top of the produced or treated water stored in the tanks and pits. Any oil on top of the liquids shall be skimmed off and handled in accordance with Commission rules. Any recovered oil shall be recorded and filed with the Commission on the appropriate forms or through an electronic filing system when implemented by the Commission.

(f) The permittee shall notify the Commission of the existence and location of all buried pipelines conveying produced or treated water to or from the facility. The notification shall be provided within 30 days of the buried pipeline becoming operational and shall include:

(1) a name or number that identifies each pipeline;

(2) the owner and operator of each pipeline;

(3) the diameter and the material of construction of each pipeline; and

(4) a shapefile containing the location information of each pipeline, including all endpoints and routes.

§4.275 Minimum Permit Provisions for Monitoring

(a) Operational monitoring.

(1) The operator shall inspect the pits, tanks, and processing equipment weekly. The operator shall maintain a current log of such inspections and make the log available for review by the Commission upon request.

(2) The leak detection system shall be monitored on a weekly basis to determine if the primary liner has failed. The primary liner has failed if the volume of water passing through the primary liner exceeds the action leakage rate, as calculated using accepted procedures, or 1,000 gallons per acre per day, whichever is smaller.

(3) The operator of the pit shall keep records to demonstrate compliance with the pit liner integrity requirements and shall make the records available to the Commission upon request.

(4) If the primary liner is compromised below the fluid level in the pit, the operator shall remove all fluid above the damage or leak within 48 hours of discovery, notify the appropriate District Office, and repair the damage or replace the primary liner. The pit shall not be returned to service until the liner has

been repaired or replaced.

(5) If the pit's primary liner is compromised above the fluid level in the pit, the operator shall repair the damage or initiate replacement of the primary liner within 48 hours of discovery or seek an extension of time from the appropriate District Office.

(6) If groundwater monitoring wells are required, no waste shall be received at the facility until the groundwater monitoring wells have been completed, developed, and sampled. The documentation of these activities shall be provided to the Commission within 30 days after installation of groundwater monitoring wells. Groundwater samples will be analyzed for the parameters in Figure 1.

Figure: 16 TAC §4.291(a)(6)

(7) If an operator has determined the background analyte concentrations in soil and/or groundwater, those site-specific background levels shall be signed and sealed by a professional geoscientist or professional engineer licensed in Texas and, if accepted by the Director, may be included in the permit as appropriate monitoring standards.

(b) Recyclable product monitoring.

(1) [~~(a)~~] A permit for off-lease commercial recycling fluid issued pursuant to this division shall include monitoring requirements the Director [~~director~~] or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director [~~director~~] or the Commission and included in the permit.

(2) [~~(b)~~] A permit under this division for use of the treated fluid for any purpose other than re-use as makeup water for hydraulic fracturing fluids to be used in other wells 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 division or in a permit issued by the Commission.

(c) Quarterly reporting. A permit issued under this division shall include provisions for filing quarterly reports documenting the fluid volumes into and out of the system in a form and manner prescribed by the Director.

§4.276 Minimum Permit Provisions for Closure

(a) Notifications.

(1) The operator shall notify the Commission within 60 days after the cessation of operations.

(2) The operator shall notify the Commission 45 days before the commencement of closure activities.

(b) Time requirements for closure.

(1) Once the operations have ceased, the operator shall complete closure of the facility within one year.

(2) The Commission may grant an extension to close the facility not to exceed one additional year, provided all fluid has been removed and the operator attests to its plans for future operation.

(3) If the operator intends to use the pit for a purpose other than recycling, then the operator shall have that use approved or permitted by the Commission in accordance with the appropriate rules.

(c) Fluid and waste removal.

(1) The operator shall remove all fluids from the treatment equipment and tanks within 60 days from the date the operations cease. The contents of all tanks, vessels, or other containers shall be disposed of in an authorized manner. All equipment shall be removed and salvaged, if possible, or disposed of in an authorized manner.

(2) The operator shall remove all fluids from pits within six months from the date operations cease.

(3) All wastes, including the pit liners, shall be removed and disposed of in an authorized manner.

(4) Any concrete areas and access roads shall be cleaned and demolished, and the concrete rubble and wash water shall be disposed of in an authorized manner.

(5) All visibly contaminated soils shall be excavated and removed. The contaminated soil shall be disposed of in an authorized manner.

(d) Confirmation sampling and analysis.

(1) After the removal of wastes and visibly contaminated soils, grab samples shall be collected from around and underneath each pit, processing area, and waste storage, and the samples shall be analyzed for the parameters listed in Figure 1.

Figure: 16 TAC §4.292(d)(1)

(2) The minimum number of grab samples required is as follows:

(A) for pits, five samples per acre of surface area, with a minimum of four samples; and

(B) for areas containing treatment equipment and storage tanks, five samples per acre of surface area.

(3) Any soil sample that exceeds the parameter limitations specified in Figure 1 in this subsection or in site-specific limitations established in the permit is considered waste and shall be disposed of at an authorized disposal facility.

(4) If any soil samples exceed the parameter limitations specified in Figure 1 in this subsection or in site-specific limitations established in the permit, the operator shall prepare and submit a plan for confirmation, delineation, and remediation, if necessary.

(e) The site shall be restored to a safe and stable condition that blends with the surrounding land. Topsoil and subsoils shall be replaced and contoured so as to achieve erosion control, long-term stability, and preservation of surface water flow patterns. Final surface grading of the pits and the storage tank battery areas

shall be accomplished in such a manner that rainfall will not collect at these former locations. The site shall be re-vegetated as appropriate for the geographic region.

(f) Within 60 days of closure completion, the operator shall submit a closure report, including required attachments, to document all closure activities including sampling results and the details on any backfilling, capping, or covering, where applicable. The closure report shall certify that all information in the report and attachments is correct, and that the operator has complied with all applicable closure requirements and conditions specified in Commission rules or directives.

(g) The operator shall notify the Commission when closure and re-vegetation are complete.

(h) The Commission will inspect the site and verify compliance with closure requirements.

[~~A permit for off-lease commercial recycling fluid 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 at the facility, and the design and construction of the facility. 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 from the facility property; and post-closure monitoring.~~]

§4.277 Permit Renewal

Before the expiration of a permit issued pursuant to this division, the permittee may submit an application to renew the permit. The 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 permittee's permit number. The application shall comply with the requirements of §4.262 of this title (relating to General Permit Application Requirements for Off-Lease Commercial Recycling of Fluid), and the notice requirements of §4.270 of this title (relating to Notice). The Director [~~director~~] may require the applicant to comply with any of the requirements of §§4.263 - 4.269 of this title (relating to Minimum Engineering and Geologic Information; Minimum Siting Information; Minimum Real Property Information; Minimum Design and Construction Information; Minimum Operating Information; Minimum Monitoring Information; and Minimum Closure Information), depending on any changes made or planned to the construction, operation, monitoring, and/or closure of the facility.

DIVISION 6. REQUIREMENTS FOR STATIONARY COMMERCIAL RECYCLING OF FLUID.

§4.278 General Permit Application Requirements for a Stationary Commercial Fluid Recycling Facility

(a) An application for a permit for a stationary commercial fluid recycling facility shall be filed with the Technical Permitting Section [~~Commission's headquarters office in Austin~~], and on the same day the [~~. The~~] applicant shall mail or deliver a copy of the application to the Commission District Office for the county in

which the facility is to be located [~~on the same day the original application is mailed or delivered to the Commission's headquarters office in Austin~~]. A permit application shall be considered filed with the Commission on the date a complete application [~~it~~] is received by the Technical Permitting Section [~~Commission's headquarters office in Austin~~].

(b) The permit application shall contain the applicant's name; organizational report number; physical office address and, if different, mailing address; facility address; telephone number; [~~and facsimile transmission (fax) number;~~] and the name of a contact person. [~~A permit for a stationary commercial recycling facility also shall contain the facility address.~~]

(c) The permit application shall contain information addressing each applicable application requirement of this division and all information necessary to initiate the final review by the Director [~~director~~]. The Director [~~director~~] shall neither administratively approve an application nor refer an application to hearing unless the Director [~~director~~] has determined that the application is administratively complete. If the Director [~~director~~] determines that an application is incomplete, the Director [~~director~~] shall notify the applicant in writing and shall describe the specific information required to complete the application.

(1) An applicant may make no more than two supplemental filings to complete an application.

(2) After the second supplemental submission, if the application is complete, the Director shall act on the application. The Director's action on the application shall be:

(A) approval if the application meets the requirements of this division and the application has not been protested;

(B) referral to the Hearings Division if the application meets the requirements of this division and the application has been protested; or

(C) denial if the application does not meet the requirements of this division.

(3) If after the second supplemental submission the application is still incomplete, the Director shall administratively deny the application.

(4) The Director shall notify the applicant in writing of the administrative decision and, in the case of an administrative denial, the applicant's right to request a hearing on the application as it stands at the time of administrative denial.

(d) The Director shall approve or deny a complete application for a permit issued under this division that does not include a request for an exception to the requirements of this division not later than the 90th day after the date the complete application was received by the Commission, unless a protest is filed with the Commission, in which case the Commission may extend the amount of time to approve or deny the application in order to allow for a public hearing on the application pursuant to Chapter 1 of this title (relating to Practice and Procedure). If the Director does not approve or deny the application before that date, the permit application is considered approved and the applicant may operate under the terms specified in the application for a period of one year.

(e)[~~(d)~~] The permit application shall contain [~~an original signature in ink, the date of signing, and~~] the following certification signed and dated by an authorized representative of the applicant: "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."

§4.279 Minimum Engineering and Geologic Information.

(a) A [~~The director may require a~~] permit applicant for a stationary commercial fluid recycling facility shall include [~~to provide the Commission with~~] engineering, geological, or other information [~~which the director deems~~] necessary to:

(1) describe the subsurface geology underlying the facility to a depth of at least 100 feet, including the identification of the soil and subsoil by typical name and description of the approximate proportion of grain sizes, texture, consistency, moisture condition, permeability, and other pertinent characteristics;

(2) describe the subsurface hydrogeology underlying the facility to a depth of at least 100 feet, including an assessment of the presence and characteristics of permeable and impermeable strata; and

(3) evaluate the geology, hydrogeology, and proposed engineering design to show that issuance of the permit will not result in the waste of oil, gas, or geothermal resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(b) Information for engineering and geological site characterization may be obtained from available information or from a site investigation including installation of soil borings, soil and groundwater sampling, and soil and groundwater analysis. Site-specific investigation information is considered more reliable and, therefore, will have a greater effect on the permit determination.

(c) If an operator intends to establish and later rely on actual background concentrations of contaminants in environmental media, then the operator shall collect site-specific soil and groundwater samples for analysis and include these findings with the application.

(d) [~~(b)~~] Engineering and geologic work products prepared by the applicant shall be sealed by a professional [~~registered~~] engineer or geologist, respectively, licensed in Texas as required by the Texas Occupations Code, Chapters 1001 and 1002.

§4.280 Minimum Siting Information.

(a) A pit permitted under this division shall not be located:

(1) where there has been observable groundwater within 100 feet of the ground surface unless the pit design includes a geosynthetic clay liner (GCL);

(2) within a sensitive area as defined by §4.204 of this title (relating to Definitions);

(3) within 300 feet of surface water, domestic supply wells, or irrigation water wells;

(4) within 500 feet of any public water system wells or intakes.

(5) within 1,000 feet of a permanent residence, school, hospital, institution or church in existence at the time of the initial permitting;

(6) within 500 feet of a wetland; or

(7) within a 100-year floodplain.

(b) A permit application for a stationary commercial fluid recycling facility shall include:

(1) a description of the proposed facility site and surrounding area;

(2) the name, physical address and, if different, mailing address; and telephone number ~~[; and facsimile transmission (fax) 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;

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

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

(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;

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

(7) a complete, original 7 1/2 minute United States Geological Survey topographic quadrangle map clearly indicating the outline of the proposed facility; the location of any pipelines that underlay the facility but are not included on the topographic map; and the location of the 100-year flood plain and the source of the flood plain information.

§4.281 Minimum Real Property Information. (No change,)

§4.282 Minimum Design and Construction Information.

(a) A pit permitted under this division shall be designed, built, and maintained as follows.

(1) The pit shall contain the material placed in the pit and prevent releases, overflow, or failure.

(2) The maximum depth from the natural surface elevation shall not exceed 22 feet.

(3) The foundation and interior slopes shall consist of a firm, unyielding base, smooth and free of rocks, debris, sharp edges, or irregularities to prevent the liner's rupture or tear. All interior and exterior surfaces of the pit shall be smooth drum rolled.

(4) The pit sides and berms shall have interior and exterior grades no steeper than three horizontal feet to one vertical foot. The top of the berm shall be wide enough to provide adequate room for inspection, maintenance, and any other structural or construction requirements.

(A) Fill for berms shall be placed and compacted in continuous lifts with a maximum loose lift thickness of 10 inches, compacted to eight inches.

(B) Berm fill shall be compacted to at least 95% of maximum dry density determined by the Standard Proctor (ASTM D698) and at moisture content within +2% to -2% of optimum moisture content as determined by a standard proctor soil test on samples from the source area. One nuclear density test shall be conducted for each 2,500 cubic yards, and the applicant shall provide compaction testing results upon completion.

(5) Both primary and secondary liners in a pit shall be geomembrane liners composed of ASTM GRI-13 compliant materials and be impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts, and acidic and alkaline solutions. Each pit shall incorporate, at a minimum, a liner system as follows:

(A) The primary liner shall be a minimum 60-mil high density polyethylene (HDPE).

(B) A leak detection system shall be placed between the primary and secondary geomembrane liners that shall consist of 200-mil biplanar geonet or geo-composite equivalent. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the secondary geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. The leak detection system shall be designed with the capability of removing a minimum of 1,000 gallons of leachate per acre per day or an alternative action leakage rate shall be calculated.

(C) The secondary liner shall be at a minimum 40-mil HDPE. If the depth to groundwater is less than 100 feet below the ground surface, the secondary liner shall include a geosynthetic clay liner.

(D) A geotextile (felt) liner shall be placed under the secondary liner and in contact with the prepared ground surface.

(6) The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench that is at least 24 inches deep.

(7) Field seams in geosynthetic material shall be performed in accordance with the manufacturer's instructions and include the following considerations:

(A) Field seams in geosynthetic material shall be minimized and oriented perpendicular to the slope of the berm, not parallel.

(B) Prior to field seaming, the operator shall overlap liners four to six inches. The operator shall minimize the number of field seams and corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe.

(C) Qualified personnel shall perform field seam welding and testing. Documented quality assurance/quality control testing reports shall be maintained for the life of the liner.

(8) At a point of discharge into or suction from the pit, the operator shall ensure that the liner is

protected from excessive hydrostatic force or mechanical damage.

(9) All piping and equipment that is in contact with the liner shall be secured to prevent liner wear and damage.

(10) There shall be no penetrations of the liner system.

(11) The pit shall be designed to prevent run-on of surface water. The pit shall be surrounded by a berm, ditch, or other diversion to prevent run-on of surface water.

(12) The pit shall be designed to operate with a minimum two feet of freeboard that includes the precipitation expected from a 25-year, 24-hour rainfall event.

(b) Tanks and treatment equipment shall be located within a secondary containment system.

(c) [~~(a)~~] A permit application for a stationary commercial fluid recycling facility shall include the layout and design of the facility by including a plat drawn to scale with north arrow to top of the map showing the location and information on the design and size of all receiving, processing, and storage areas and all equipment, tanks, silos, monitor wells, dikes, fences, and access roads.

(d) [~~(b)~~] A permit application for a commercial fluid recycling facility also shall include:

(1) 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;

(2) for storage areas where tanks and/or liners are not used, credible engineering and/or geologic information demonstrating that tanks or liners are not necessary for the protection of surface and subsurface water;

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

(4) a plan to control and manage storm water runoff and to retain incoming wastes during wet weather, including the location and dimensions of dikes and/or storage basins that would collect storm water from the facility during a 25-year, 24-hour [~~maximum~~] rainfall event, and all calculations made to determine the required capacity and design; and

(5) a plan for the installation of monitoring wells at the facility.

§4.283 Minimum Operating Information.

A permit application for a stationary commercial fluid recycling facility shall include the following operating information:

(1) the estimated maximum volume of untreated oil and gas waste and partially treated oil and gas waste to be stored at the facility;

(2) the estimated maximum volume and time that the recyclable product will be stored at the facility;

(3) a plan to control unauthorized access to the facility;

(4) a detailed waste acceptance plan that:

(A) identifies anticipated volumes and specific types of oil and gas wastes (e.g., hydraulic fracturing flowback fluid and/or produced water) to be accepted at the facility for treatment and recycling; and

(B) provides for testing of wastes to be processed to ensure that only oil and gas waste authorized by this division or the permit will be received at the facility;

(5) plans for keeping records of the source and volume of wastes accepted for recycling in accordance with the permit, including maintenance of records of the source of waste received by well number, API number, lease or facility name, lease number and/or gas identification number, county, and Commission district;

(6) a general description of the treatment process to be employed; a flow diagram showing the process and identifying all equipment and chemicals or additives to be used in the process; and the [~~Material~~] Safety Data Sheets (SDS) for any chemical or additive;

(7) a description of any testing to be performed to demonstrate that the proposed processing will result in a recyclable product that meets the health, safety, and environmental standards for the proposed use; and

(8) an estimate of the duration of operation of the proposed facility.

§4.284 Minimum Monitoring Information.

A permit application for a stationary commercial fluid recycling facility shall include:

(1) a sampling plan for the partially treated waste to ensure compliance with permit conditions and reuse requirements;

(2) a plan for monitoring groundwater based on the subsurface geology and hydrogeology, which may include the installation and sampling of [~~any~~] monitoring wells [~~at a commercial fluid recycling facility as required by the permit and this division~~]; and

(3) a plan to verify that fluid oil and gas wastes are confined to the facility pits, tanks, and processing areas, and a schedule for conducting periodic inspections, including plans to inspect pits and liner systems, equipment, processing, and other waste storage areas.

§4.285 Minimum Closure Information.

(a) A permit application for a stationary commercial fluid recycling facility shall include a closure cost estimate (CCE) prepared or supervised and approved by a professional engineer licensed in Texas.

(1) The CCE shall show all assumptions and calculations used to develop the estimate. The following assumptions are required:

(A) The facility is in compliance with permit conditions.

(B) The facility will be closed according to the permit or approved closure plan, under which collecting pits shall be dewatered, emptied and demolished prior to backfilling; all remaining waste will be disposed of at an authorized facility; and the site will be restored to its native state unless otherwise authorized by the permit.

(C) None of the operator's equipment or facilities that may have otherwise been available at the time of closure (e.g., disposal wells, land treatment facilities, trucks, bulldozers, and employees) are available to assist in the closure.

(D) The facility is at maximum capacity. All tanks and pits are full of waste.

(E) Storage tanks and pits contain basic sediment and water in normal operating proportions, with a minimum volume of at least 10% basic sediment.

(2) The CCE shall not assess a salvage value for any material or equipment at the site.

(3) The CCE shall include costs for sampling and analysis of soil for the areas around each waste management unit, including tank batteries, pads, and former pits.

(4) The CCE shall show unit costs for all material, equipment, services, and labor needed to close the facility. Units and fees used shall be appropriate for the type of waste material to be disposed. For example, disposal units for saltwater shall be reported in oil barrels rather than gallons. The CCE shall be specific and shall state the source or basis for the specific unit cost, including the following:

(A) the permitted waste hauler to be used and the hauler's mileage rate;

(B) the distance that waste will be transported for disposal;

(C) the name of each facility where waste will be taken and the disposal costs for that facility;

(D) the source of any material being brought to the facility, such as clean fill material;

(E) calculations for earth-moving equipment time and cost needed to move the fill dirt if fill dirt will be taken from the property;

(F) the total labor costs, including the titles and billing rates for personnel; and

(G) the quantity of each unit cost item and how the total quantity was determined (for example, cubic yards of material divided by size of load equals total number of loads).

(5) The CCE shall include maps and illustrations such as facility plans and photographs that show the current condition of the facility, and/or the condition of the facility upon reaching maximum permit conditions.

(6) For facilities with groundwater monitoring wells, the CCE shall include costs to plug and abandon the monitoring wells.

(7) For facilities that will require post-closure monitoring, the CCE shall include costs for a minimum of five years of monitoring.

(8) The CCE shall show all calculations used to arrive at total maximum closure costs.

(9) For all estimates submitted for existing facilities, a NORM screening survey of the facility shall be submitted. NORM screening surveys shall be performed using a properly calibrated scintillation meter with a sodium iodide detector (or equivalent), with the results reported in microroentgens per hour. Manufacturer's specifications and relevant calibration records shall be submitted to the Technical Permitting Section for all devices used for NORM detection. All equipment, including piping, pumps, and vessels shall be surveyed. Readings shall be taken around the perimeter of the pits and to the extent possible, over the pits. The ground surrounding the equipment and pits shall be surveyed in a systematic grid pattern. At a minimum, the following information shall be reported:

(A) the date of the survey;

(B) the instrument used and the last calibration date;

(C) a background reading;

(D) a site diagram showing where all readings, including the background, were taken; and

(E) the readings (in microroentgens per hour).

(10) If fill dirt will be excavated from the property to achieve closure, a restrictive covenant shall be submitted with the CCE. If the restrictive covenant requirements are not provided, the CCE shall assume that fill dirt is purchased from a commercial supplier. For a restrictive covenant, the following requirements shall be met whether the operator owns or leases the property:

(A) The operator shall provide a letter from the property owner specifically stating that the owner agrees that the material, which is described with specificity as to location, type and amount consistent with what is in the closure plan, will be available for closure whether the operator or the state performs closure, and agreeing to a restrictive covenant that reserves use of the material for closure.

(B) The operator shall submit an unsigned draft restrictive covenant on the form provided by the Commission. Once the Commission approves the closure cost and closure plan, the operator will be notified to submit a signed original of the restrictive covenant. The Commission will sign its portion of the restrictive covenant and return it to the operator for filing in the real property records of the county where the property is located. Once filed in the real property records, the operator shall provide the Commission with a certified copy.

(C) If the facility operator leases the property, the operator shall provide to the Commission a copy of an amendment or addendum to the lease between the operator and the surface owner with a clause that specifically reserves use of material and states that the reservation shall inure to the Commission (as third-party beneficiary of this provision) if the Commission must initiate actions to close the facility.

(D) The operator shall submit supporting documentation showing that the dimensions of the restrictive covenant area can realistically store a stockpile in the amount needed. If soil will be excavated from the restrictive covenant area rather than stockpiled, the supporting documentation shall show the depth of

the excavation is limited to what can be graded to prevent storm water from ponding in the excavated area.

(11) After the CCE has been calculated, an additional 10% of that amount shall be added to the total amount of the CCE to cover contingencies.

(b) [~~(a)~~] A permit application for a stationary commercial fluid recycling facility shall include a detailed plan for closure of the facility when operations terminate and include the required elements of §4.292 of this title (relating to Minimum Permit Provisions for Closure). The closure plan shall address how the applicant intends to:

(1) remove waste, partially treated waste, and/or recyclable product from the facility;

(2) close all pits, treatment equipment, and associated piping and other storage or waste processing equipment [~~areas/cells~~];

(3) remove dikes and equipment; [~~and~~]

(4) contour and reseed disturbed areas;[~~.~~]

[~~(b) A permit application for a stationary commercial fluid recycling facility also shall include in the closure plan information addressing how the applicant intends to:~~]

(5) [~~(1)~~] sample and analyze soil and groundwater throughout the facility; and

(6) [~~(2)~~] plug groundwater monitoring wells.

§4.286 Notice.

(a) A permit applicant for a stationary commercial fluid recycling facility shall publish notice and file proof of publication in accordance with the following requirements.

(1) A permit applicant shall publish notice of the application in a newspaper of general circulation in the county in which the proposed facility will be located at least once each week for two consecutive weeks with the first publication occurring not earlier than the date the application is filed with the Commission and not later than the 30th day after the date on which the application is filed with the Commission.

(2) The published notice shall:

(A) be entitled, "Notice of Application for Stationary Commercial Fluid Recycling Facility";

(B) provide the date the applicant filed the application with the Commission for the permit;

(C) identify the name of the applicant;

(D) state the physical address of the proposed facility and its location in relation to the nearest municipality or community;

(E) identify the owner or owners of the property upon which the proposed facility will be located;

(F) state that affected persons may protest the application by filing a protest with the

Railroad Commission within 15 days of the last date of publication; and

(G) provide the address to which protests may be mailed.

(3) The applicant shall submit to the Commission proof that the applicant published notice as required by this section. Proof of publication of the notice shall consist of a sworn affidavit from the newspaper publisher that states the dates on which the notice was published and the county or counties in which the newspaper is of general circulation, and to which are attached the tear sheets of the published notices.

(b) A permit applicant for a stationary commercial fluid recycling facility shall give personal notice and file proof of such notice in accordance with the following requirements.

(1) The applicant shall mail or deliver notice to the following persons on or after the date the application is filed with the Technical Permitting Section [~~Commission's headquarters office in Austin~~]:

(A) the surface owner or owners of the tract upon which the commercial recycling facility will be located;

(B) the city clerk or other appropriate official, if the tract upon which the facility will be located lies within the corporate limits of an incorporated city, town, or village;

(C) the surface owners of tracts adjoining the tract on which proposed facility will be located, unless the boundary with the adjoining tract is a distance of 1/2-mile or greater from the fenceline or edge of the facility as shown on the plat required under §4.281 of this title (relating to Minimum Real Property Information); and

(D) any affected person or class of persons that the Director [~~director~~] determines should receive notice of a particular application.

(2) Personal notice of the permit application shall consist of:

(A) a copy of the application;

(B) a statement of the date the applicant filed the application with the Commission;

(C) a statement that any [~~a~~] protest to the application must [~~should~~] be filed with the Commission within 15 days of the last date of published notice, a statement identifying the publication in which published notice will appear, and the procedure for making a protest of the application to the Commission;

(D) a description of the location of the site for which the application was made, including the county in which the site is to be located, the name of the original survey and abstract number, and the direction and distance from the nearest municipality;

(E) the name of the owner or owners of the property on which the facility is to be located;

(F) the name of the applicant;

(G) the type of fluid or waste to be handled at the facility; and

(H) the recycling method proposed and the proposed end-use of the recycled material.

(3) The applicant shall submit to the Commission proof that personal notice has been given as

required. Proof of notice shall consist of a copy of each notification letter sent, along with a statement signed by the applicant that includes the names and addresses of each person to whom the notice was sent, and the date that each was notified of the application.

(c) If the Director [~~director~~] has reason to believe that a person to whom the applicant was required to give notice of an application has not received such notice, then the Director [~~director~~] shall not take action on the application until the applicant has made reasonable efforts to give such person notice of the application and an opportunity to file a protest to the application with the Commission.

§4.287 General Permit Provisions.

(a) A permit for a stationary commercial fluid recycling facility issued pursuant to this division shall be valid for a term of not more than five years. Permits issued pursuant to this division may be renewed, but are not transferable to another operator without the written approval of the Director [~~director~~].

(b) A permit issued pursuant to this division shall require that, prior to operating, the facility shall comply with the financial security requirements of Texas Natural Resources Code, §91.109, relating to Financial Security for Persons Involved in Activities Other than Operation of Wells, as implemented by §3.78 of this title (relating to Fees and Financial Security Requirements).

(c) A permit for a stationary commercial fluid recycling facility shall include a condition requiring that the permittee notify the surface owner of the tract upon which recycling will take place and the appropriate Commission District Office [~~district office~~] before recycling operations commence on each tract.

§4.288 Minimum Permit Provisions for Siting.

(a) A permit for a stationary commercial fluid recycling facility may be issued only if the Director [~~director~~] or the Commission determines that the facility is to be located in an area where there is no unreasonable risk of pollution or threat to public health or safety. The Director will presume that an application meeting the requirements of §4.280(a) of this title (relating to Minimum Siting Information) does not present an unreasonable risk of pollution or threat to public health or safety with regard to siting, unless extraordinary circumstances indicate otherwise.

(b) A stationary commercial fluid recycling facility permitted pursuant to this division and after the effective date of this division shall not be located within a 100-year flood plain.

(c) Factors that the Commission will consider in assessing potential risk from a stationary commercial fluid recycling facility include:

(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 surface water;

(3) depth to and quality of the shallowest groundwater;

(4) distance to the nearest property line or public road;

(5) proximity to coastal natural resources, sensitive areas as defined by §3.91 of this title (relating to Cleanup of Soil Contaminated by a Crude Oil Spill), or water supplies, and/or public, domestic, or irrigation water wells; and

(6) any other factors the Commission deems reasonably necessary in determining whether or not issuance of the permit will pose an unreasonable risk.

(d) All siting requirements in this section refer to conditions at the time the facility is constructed.

§4.289 Minimum Permit Provisions for Design and Construction.

(a) A permit issued pursuant to this division for a stationary commercial fluid recycling facility shall contain any requirement that the Director [~~director~~] or the Commission determines to be reasonably necessary to ensure that:

(1) 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 prevent pollution of surface and subsurface water;

(2) the pollution of 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 storm water runoff, from the facility to the land surface at and adjacent to the facility or to surface and subsurface water;

(B) requiring that the permittee control spills at the facility; and

(C) requiring that the permittee make regular inspections of the facility; and

(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 from the facility.

(b) A permit issued for a stationary commercial recycling facility pursuant to this division shall require that the permittee:

(1) install monitoring wells in accordance with 16 Texas Administrative Code, Part 4, Chapter 76, relating to Water Well Drillers and Water Well Pump Installers; and

(2) submit to the Technical Permitting Section [~~Commission's office in Austin~~] a soil boring log and other information for each well.

(c) The soil boring log and other information required in subsection (b) of this section shall:

(1) describe the soils using the Unified Soils Classification System (equivalent to ASTM D 2487 and 2488);

(2) identify the method of drilling, total depth, and the top of the first encountered water or saturated soils;

(3) include a well completion diagram for each monitoring well;

(4) include a survey elevation for each wellhead reference point; and

(5) include a potentiometric map showing static water levels and the direction of groundwater flow.

(d) The Commission or the Director [~~director~~] may waive any or all of the requirements in subsections (b) and (c) of this section if the permittee demonstrates that an on-site boring to a minimum depth of 100 feet recovers no water during a 24-hour test.

(e) A permit for a stationary commercial fluid recycling facility issued pursuant to this division shall require that the permittee notify the Commission District Office [~~district office~~] for the county in which the facility is located 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 only after the facility has been inspected by the Commission to ensure that construction of all elements of the facility is consistent with the representations in the application and the requirements of the permit.

(f) An operator shall not locate material excavated during construction:

(1) within 100 feet of a continuously flowing watercourse or significant watercourse;

(2) within 200 feet from a lakebed, sinkhole, stock pond or lake (measured from the ordinary high-water mark);

(3) within 100 feet of a wetland; or

(4) within a 100-year floodplain.

(g) The following requirements apply to signage, fencing, and security.

(1) A sign shall be posted at each entrance to the facility. The sign shall be readily visible and show the operator's name, facility name, and permit number in letters and numerals at least three inches in height.

(2) A sign shall be posted identifying the permit number of each pit using letters and numerals at least three inches in height. The signs shall clearly state that the fluid within the pit is not potable or suitable for consumption.

(3) The facility shall maintain security to prevent unauthorized access. Security shall be maintained by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended.

(h) Any pit associated with a stationary commercial fluid recycling facility permitted pursuant to this division after [insert the estimated effective date of this rulemaking], shall comply with the requirements of §4.282(a) of this title (relating to Minimum Design and Construction Information).

§4.290 Minimum Permit Provisions for Operations.

(a) A permit for a stationary commercial fluid recycling facility 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 are received at the facility, including requirements that the permittee test incoming oil and gas waste and keep records of amounts and sources of incoming wastes; and

(2) the processing operation and resulting recyclable product meet the environmental and engineering standards established in the permit.

(b) A permit for a stationary commercial fluid recycling facility 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 [~~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 [~~director~~] for review a report of the results of the trial run prior to commencing operations.

(3) The Director [~~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.

(4) The permittee shall not use the recyclable product until the Director [~~director~~] approves the trial run report.

(c) A permit 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 facility, that the Commission determines to be reasonably necessary to ensure that the permittee does not speculatively 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.

(d) A permit issued pursuant to this division shall include a requirement that the operator of the facility comply with the requirements of §3.56 of this title (relating to Scrubber Oil and Skim Hydrocarbons), if applicable.

(e) Oil shall not accumulate on top of the produced or treated water stored in the tanks and pits. Any oil on top of the liquids shall be skimmed off and handled in accordance with Commission rules. Any recovered oil shall be recorded and filed with the Commission on the appropriate forms or through an electronic filing system when implemented by the Commission.

(f) The permittee shall notify the Commission of the existence and location of all buried pipelines conveying produced or treated water to or from the facility. The notification shall be provided within 30 days of the buried pipeline becoming operational and shall include:

(1) a name or number that identifies each pipeline;

(2) the owner and operator of each pipeline;

(3) the diameter and the material of construction of each pipeline; and

(4) a shapefile containing the location information of each pipeline, including all endpoints and

routes.

§4.291 Minimum Permit Provisions for Monitoring.

(a) Operational monitoring.

(1) The operator shall inspect the pits, tanks, and processing equipment weekly. The operator shall maintain a current log of such inspections and make the log available for review by the Commission upon request.

(2) The leak detection system shall be monitored on a weekly basis to determine if the primary liner has failed. The primary liner has failed if the volume of water passing through the primary liner exceeds the action leakage rate, as calculated using accepted procedures, or 1,000 gallons per acre per day, whichever is smaller.

(3) The operator of the pit shall keep records to demonstrate compliance with the pit liner integrity requirements and shall make the records available to the Commission upon request.

(4) If the primary liner is compromised below the fluid level in the pit, the operator shall remove all fluid above the damage or leak within 48 hours of discovery, notify the appropriate District Office, and repair the damage or replace the primary liner. The pit shall not be returned to service until the liner has been repaired or replaced.

(5) If the pit's primary liner is compromised above the fluid level in the pit, the operator shall repair the damage or initiate replacement of the primary liner within 48 hours of discovery or seek an extension of time from the appropriate District Office.

(6) If groundwater monitoring wells are required, no waste shall be received at the facility until the groundwater monitoring wells have been completed, developed, and sampled. The documentation of these activities shall be provided to the Commission within 30 days after installation of groundwater monitoring wells. Groundwater samples will be analyzed for the parameters in Figure 1.

Figure: 16 TAC §4.291(a)(6)

(7) If an operator has determined the background analyte concentrations in soil and/or groundwater, those site-specific background levels shall be signed and sealed by a professional geoscientist or professional engineer licensed in Texas and, if accepted by the Director, may be included in the permit as appropriate monitoring standards.

(b) Recyclable product monitoring.

(1) [~~(a)~~] A permit [~~issued~~] for a stationary commercial fluid recycling facility pursuant to this division may [~~shall~~] include requirements the Director [~~director~~] or Commission determines to be reasonably necessary to ensure that the recyclable product meets the environmental and engineering standards established by the Director [~~director~~] or the Commission and included in the permit.

(2) [~~(b)~~] A permit under this division for use of the treated fluid for any purpose other than as

makeup water for hydraulic fracturing fluids or other down-hole uses 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 division or in a permit issued by the Commission.

(c) Quarterly reporting. A permit issued under this division shall include provisions for filing quarterly reports documenting the fluid volumes into and out of the system in a form and manner prescribed by the Director.

§4.292 Minimum Permit Provisions for Closure.

(a) Notifications.

(1) The operator shall notify the Commission within 60 days after the cessation of operations.

(2) The operator shall notify the Commission 45 days before the commencement of closure activities.

(b) Time requirements for closure.

(1) Once the operations have ceased, the operator shall complete closure of the facility within one year.

(2) The Commission may grant an extension to close the facility not to exceed one additional year, provided all fluid has been removed and the operator attests to its plans for future operation.

(3) If the operator intends to use the pit for a purpose other than recycling, then the operator shall have that use approved or permitted by the Commission in accordance with the appropriate rules.

(c) Fluid and waste removal.

(1) The operator shall remove all fluids from the treatment equipment and tanks within 60 days from the date the operations cease. The contents of all tanks, vessels, or other containers shall be disposed of in an authorized manner. All equipment shall be removed and salvaged, if possible, or disposed of in an authorized manner.

(2) The operator shall remove all fluids from pits within six months from the date operations cease.

(3) All wastes, including the pit liners, shall be removed and disposed of in an authorized manner.

(4) Any concrete areas and access roads shall be cleaned and demolished, and the concrete rubble and wash water shall be disposed of in an authorized manner.

(5) All visibly contaminated soils shall be excavated and removed. The contaminated soil shall be disposed of in an authorized manner.

(d) Confirmation sampling and analysis.

(1) After the removal of wastes and visibly contaminated soils, grab samples shall be collected

from around and underneath each pit, processing area, and waste storage, and the samples shall be analyzed for the parameters listed in Figure 1.

Figure: 16 TAC §4.292(d)(1)

(2) The minimum number of grab samples required is as follows:

(A) for pits, five samples per acre of surface area, with a minimum of four samples; and

(B) for areas containing treatment equipment and storage tanks, five samples per acre of surface area.

(3) Any soil sample that exceeds the parameter limitations specified in Figure 1 in this subsection or in site-specific limitations established in the permit is considered waste and shall be disposed of at an authorized disposal facility.

(4) If any soil samples exceed the parameter limitations specified in Figure 1 in this subsection or in site-specific limitations established in the permit, the operator shall prepare and submit a plan for confirmation, delineation, and remediation, if necessary.

(e) The site shall be restored to a safe and stable condition that blends with the surrounding land. Topsoil and subsoils shall be replaced and contoured so as to achieve erosion control, long-term stability, and preservation of surface water flow patterns. Final surface grading of the pits and the storage tank battery areas shall be accomplished in such a manner that rainfall will not collect at these former locations. The site shall be re-vegetated as appropriate for the geographic region.

(f) Within 60 days of closure completion, the operator shall submit a closure report, including required attachments, to document all closure activities including sampling results and the details on any backfilling, capping, or covering, where applicable. The closure report shall certify that all information in the report and attachments is correct, and that the operator has complied with all applicable closure requirements and conditions specified in Commission rules or directives.

(g) The operator shall notify the Commission when closure and re-vegetation are complete.

(h) The Commission will inspect the site and verify compliance with closure requirements.

[~~A permit for a stationary commercial fluid recycling facility 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 at the facility, and the design and construction of the facility. 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 from the facility property; and post-closure monitoring.~~]

§4.293 Permit Renewal.

Before the expiration of a permit issued pursuant to this division, the permittee may submit an

application to renew the permit. An application for renewal of an existing permit issued pursuant to this division [~~or §3.8 of this title (relating to Water Protection)~~] shall be submitted in writing a minimum of 60 days before the expiration date of the permit and shall include the permittee's permit number. The application shall comply with the requirements of §4.278 of this title (relating to General Permit Application Requirements for a Stationary Commercial Fluid Recycling Facility), and the notice requirements of §4.286 of this title (relating to Notice). The Director [~~director~~] may require the applicant to comply with any of the requirements of §§4.279 - 4.285 of this title (relating to Minimum Engineering and Geologic Information; Minimum Siting Information; Minimum Real Property Information; Minimum Design and Construction Information; Minimum Operating Information; Minimum Monitoring Information; and Minimum Closure Information), depending on any changes made or planned to the construction, operation, monitoring, and/or closure of the facility.

DIVISION 7. BENEFICIAL USE OF DRILL CUTTINGS.

§4.301. Activities Related to the Treatment and Recycling for Beneficial Use of Drill Cuttings.

(a) In addition to the requirements of Divisions 3 and 4 of this subchapter (relating to Requirements for Off-Lease or Centralized Commercial Solid Oil and Gas Waste Recycling, and Requirements for Stationary Commercial Solid Oil and Gas Waste Recycling Facilities, respectively), operators performing activities permitted under those divisions shall comply with the requirements of this division for activities related to the treatment and recycling for beneficial use of drill cuttings.

(b) The Commission may approve a permit for the treatment and recycling for beneficial use of drill cuttings if the treated drill cuttings are used:

(1) in a legitimate commercial product for the construction of oil and gas lease pads or oil and gas lease roads;

(2) in a legitimate commercial product for the construction of county roads; or

(3) in a legitimate commercial product used as a concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or construction fill if the applicant can demonstrate that the product:

(A) meets the engineering and environmental standards for the proposed use; and

(B) is at least as protective of public health, public safety, and the environment as the use of an equivalent product made without treated drill cuttings.

§4.302. Additional Permit Requirements for Activities Related to the Treatment and Recycling for Beneficial Use of Drill Cuttings.

(a) An applicant for a permit to treat and recycle drill cuttings for beneficial use shall show that there is a demonstrated commercial market for the treated drill cuttings. The applicant may make this showing by providing:

(1) evidence that the same product made with drill cuttings or a product that is substantially similar is commonly used in the area where the product is created;

(2) evidence of actual commitments from customers who intend to use the product made with drill cuttings, including information regarding the volume of product the customers intend to use annually; or

(3) other credible and verifiable means consistent with the rules in this chapter.

(b) An applicant for a permit to treat and recycle drill cuttings for beneficial use shall perform a trial run in accordance with the following procedure.

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

(2) The applicant shall demonstrate the ability to successfully process a 1,000 cubic yard batch of drill cuttings before the facility receives or processes any additional drill cuttings.

(3) The applicant shall collect samples of the treated drill cuttings from every 200 cubic yards of the first 1,000 cubic yard batch.

(4) Samples collected shall be analyzed and shall not exceed the parameters specified in Figure 1 or Figure 2 in subsection (c) of this section, as applicable.

(5) A written report of the results from the trial run shall be submitted to the appropriate District Office and the Technical Permitting Section within 60 days of receipt of the analytical requirement in §4.258 of this title (relating to Minimum Permit Provisions for Operations). The report shall include:

(A) a summary of the trial run and description of the process;

(B) the actual volume of drill cuttings processed;

(C) the type of waste and description of the waste material;

(D) the volume and type of each stabilization material used; and

(E) copies of all chemical and geotechnical laboratory analytical reports and chain of custody sheets for the samples required in paragraph (3) of this subsection, as applicable.

(6) The applicant shall notify the District Office for the county in which the facility is located and the Technical Permitting Section at least 72 hours before processing begins. No additional drill cuttings shall be received or processed while the results of the trial run are being reviewed by the Technical Permitting Section. Any legitimate commercial product produced during the trial run shall not be used until the Technical Permitting Section has received the trial run reports and provides written confirmation that the trial run requirements have been met.

(c) In addition to the permit standards under this subchapter, beneficial uses for treated and recycled drill cuttings shall meet the following criteria.

(1) For use of treated and recycled drill cuttings in a legitimate commercial product for the construction of oil and gas lease pads, oil and gas lease roads, and county roads:

(A) Bench scale tests shall be performed as needed to determine optimum mixing

composition. If the composition mixture changes from the treated drill cuttings produced during the trial run, the treated drill cuttings shall be analyzed for wetting and drying durability by ASTM 559-96, modified to provide samples that are compacted and molded from finished treated drill cuttings. Total weight loss after 12 cycles shall not exceed 15%;

(B) A sample of the treated drill cuttings shall be tested for the parameters listed in Figure 1 in this subsection for the trial run required by subsection (b) of this section and for every 800 cubic yard batch of treated drill cuttings produced thereafter. Each 800 cubic yard sample shall be composed of a composite of four sub-samples obtained at 200 cubic yard intervals. Each sample shall have a complete chain of custody and shall be analyzed for the parameters on Figure 1 in this subsection; and

(C) Any treated drill cuttings not meeting the limitations specified in Figure 1 in this subsection shall be returned to the mixing cycle, reprocessed, and reanalyzed until the drill cuttings meet the required parameters or shall be disposed of in accordance with Commission rules.

Figure: 16 TAC §4.302(c)(1)

(2) For use of treated and recycled drill cuttings as a concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or other construction fill material as specified in §4.301(b) of this chapter (relating to Activities Related to the Treatment and Recycling for Beneficial Use of Drill Cuttings):

(A) Bench scale tests shall be performed as needed to determine optimum mixing composition if the composition mixture changes from the treated drill cuttings produced during the trial run;

(B) A sample of the treated drill cuttings shall be tested for the parameters listed in Figure 2 in this subsection for the trial run required by subsection (b) of this section and every 800 cubic yard batch of treated drill cuttings produced thereafter. Each 800 cubic yard sample shall be composed of a composite of four sub-samples obtained at 200 cubic yard intervals. Each sample shall be analyzed for the parameters in Figure 2;

Figure: 16 TAC §4.302(c)(2)

(C) Any treated drill cuttings not meeting the parameters specified in Figure 2 in this subsection shall be returned to the mixing cycle, reprocessed, and reanalyzed until the drill cuttings meet the required parameters or shall be disposed of in accordance with Commission rules;

(D) Copies of the laboratory analytical reports and chain of custody sheets demonstrating that the treated drill cuttings meet these requirements shall be submitted to the Technical Permitting Section as part of the quarterly report; and

(E) Once the permit to produce the treated drill cuttings has been granted, the permittee shall submit a separate application to the Technical Permitting Section for a letter of authority authorizing the application of the product to each specific project and location. The following information shall be included in the letter of authority application:

(i) a map drawn to scale showing the location of the final disposition of the product with latitude and longitude coordinates for the site location;

(ii) a description of the purpose for the product, such as concrete bulking agent, oil and gas waste disposal pit cover or capping material, treated aggregate, closure or backfill material, berm material, or other construction fill material;

(iii) the estimated volume of product to be used at the location;

(iv) the time frame needed for the production and application of the whole volume of treated material for this project; and

(v) landowner approval for the management and final disposition of the product at the final disposition location. If the treated drill cuttings are to be used as a concrete bulking agent at a concrete production plant, written approval from a company officer from the receiving facility or corporation is sufficient.

(3) The Commission may require that use of treated drill cuttings in legitimate commercial products other than those described in paragraphs (1) and (2) of this subsection comply with criteria in addition to those specified in this section.

Figure: 16 TAC §4.291(a)(6)

1

FIGURE 1: PARAMETERS AND UNITS FOR GROUNDWATER MONITORING	
PARAMETER	**UNITS**
Static Water Level	Feet (ft)
Total Depth	ft
pH EPA Method 150.1, 150.2, or equivalent	s.u
Total Dissolved Solids (TDS) EPA Method 2540C or equivalent	mg/L
Total Petroleum Hydrocarbon (TPH) Method TX1005	mg/L
Benzene EPA Method 602 or equivalent	mg/L
Soluble Cations: Calcium, Magnesium, Potassium, and Sodium EPA Method 6010/6020 or equivalent	mg/L
Soluble Anions: Bromides, Carbonates, Chlorides, Nitrates, and Sulfates EPA Method 300/9056 or equivalent	mg/L

2
3

Figure: 16 TAC §4.292(d)(1)

FIGURE 1: STANDARD SOIL SAMPLING CLOSURE PARAMETERS	
PARAMETER	**LIMITATION**
pH *EPA Method 9045C or equivalent*	6 to 10 standard units
Chlorides	≤ 3,000 mg/kg
Total Petroleum Hydrocarbons (TPH) *EPA Method 5035A/TX1005*	≤ 10,000 mg/kg or 1% by weight
Total benzyne, Toluene, Ethylbenzene, Xylenes (BTEX) *EPA Method 5035A/8021/8260B or equivalent*	≤ 30 mg/kg
Metals (Total) *EPA Method 6010/6020/7471A or equivalent* Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver	 ≤ 10.00 mg/kg ≤ 10,000 mg/kg ≤ 10 mg/kg ≤ 100 mg/kg ≤ 200 mg/kg ≤ 10 mg/kg ≤ 10 mg/kg ≤ 200 mg/kg

Figure: 16 TAC §4.302(c)(1)

FIGURE 1: PARAMETERS AND LIMITATIONS FOR ROADBASE	
PARAMETER	**LIMITATION**
Minimum Compressive Strength by *ASTM D 698, ASTM D 1557,* or *TxDOT Methods Tex-113-E, Tex-120-E, Tex-121-E, Tex-117-E* or equivalent	35 psi
Synthetic Precipitation Leaching Procedure (SPLP) *EPA Method 1312* Metals *EPA Method 6010, 6020,* or *7471A* Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver Zinc	 ≤ 5.00 mg/L ≤ 100.0 mg/L ≤ 1.00 mg/L ≤ 5.00 mg/L ≤ 5.00 mg/L ≤ 0.20 mg/L ≤ 1.00 mg/L ≤ 5.00 mg/L ≤ 5.00 mg/L
Benzene *EPA Method 1312, 8021,* or *8260B*	≤ 0.50 mg/L
~~1:4 Solid:Solution 7 Day~~ Leachate Test[1] Total Chlorides Total Petroleum Hydrocarbons (TPH) pH	 ≤ 700 mg/L ≤ 100 mg/L 6-12.49 s.u.

[1]Use the methodology described in "Laboratory Procedures for Analysis of Exploration and Production Waste," Louisiana Department of Natural Resources, Office of Conservation, Injection and Mining Division, May 2005, or similar.

Figure: 16 TAC §4.302(c)(2)

FIGURE 2: PARAMETERS AND LIMITATIONS FOR REUSABLE PRODUCT	
PARAMETER	**LIMITATION**
Moisture Content *ASTM D2216* or equivalent	<50% (by weight) or zero free moisture
pH [2] *EPA Method 9045* or equivalent	6.5 - 9 s.u.
~~Electrical Conductivity (EC)~~ Chlorides	≤ 3,000 mg/kg ~~8.0 mmhos/cm~~
Sodium Adsorption Ratio (SAR) [2]	≤ 12
Exchangeable Sodium Percentage (ESP) [2]	≤ 15
Total Barium [2]	≤ 100,000 ppm
LDNR Leachate Test Method, 1:4 Solid:Solution [3] TPH [2] Chlorides [2]	 ≤ 10.0 mg/L ≤ 500 mg/L
Leachable Metals [2] *EPA Method SW-846, 6010, 6020, 7000, 7470,* or *7471* Arsenic Barium Cadmium Chromium Copper Lead Mercury Molybdenum Nickel Selenium Silver Zinc	 ≤ 0.5 mg/L ≤ 10.0 mg/L ≤ 0.1 mg/L ≤ 0.5 mg/L ≤ 0.5 mg/L ≤ 0.5 mg/L ≤ 0.02 mg/L ≤ 0.5 mg/L ≤ 0.5 mg/L ≤ 0.1 mg/L ≤ 0.5 mg/L ≤ 5.0 mg/L
TCLP Benzene *EPA Method SW-846/1311/8021/8260B*	≤ 0.50 mg/L

[2] In addition to the criteria set forth, exploration and production waste, when chemically treated (fixated) shall be acceptable as reusable material with a pH range of 6.5 to 12 s.u. and an electrical conductivity of up to 50 mmhos/cm, provided such reusable material passes leachate testing requirements for chlorides and metals, and dependent on site conditions.

[3] Use the methodology described in "Laboratory Procedures for Analysis of Exploration and Production Waste," Louisiana Department of Natural Resources, Office of Conservation, Injection and Mining Division, May 2005, or similar.