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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION FOR REPEAL OF EXISTING RULES 709, 710 AND 711 CONCERNING SURFACE WASTE MANAGEMENT AND ADOPTION OF NEW RULES GOVERNING SURFACE WASTE MANAGEMENT

CASE NO. 13586

NOTICE OF FILING OF AMENDED PROPOSAL

The New Mexico Oil Conservation Division, the applicant in this case, hereby files its amended proposal.

Exhibit A hereto consists of the rule amendments the division now proposes in this case.

RESPECTFULLY SUBMITTED,

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EXHIBIT A to NOTICE OF FILING OF AMENDED PROPOSAL

Revised 12/28/2005 4:21 PM
Red-Lined from published draft of 11-14-05

19.15.1.7 DEFINITIONS:

B. Definitions beginning with the letter "B".

(1) Back allowable shall mean the authorization for production of any shortage or underproduction resulting from pipeline proration.

(2) Background shall mean, for purposes of ground[-]water abatement plans only, the amount of ground[-]water contaminants naturally occurring from undisturbed geologic sources or water contaminants occurring from a source other than the responsible person's facility. This definition shall not prevent the director from requiring abatement of commingled plumes of pollution, shall not prevent responsible persons from seeking contribution or other legal or equitable relief from other persons[,] and shall not preclude the division director from exercising enforcement authority under any applicable statute, regulation or common law.

(3) Barrel shall mean 42 United States gallons measured at 60 degrees fahrenheit and atmospheric pressure at the sea level.

(4) Barrel of oil shall mean 42 United States gallons of oil, after deductions for the full amount of basic sediment, water and other impurities present, ascertained by centrifugal or other recognized and customary test.

(5) Below-grade tank shall mean a vessel, excluding sumps and pressurized pipeline drip traps, where any portion of the sidewalls of the tank is below the surface of the ground and not visible.

(6) Berm shall mean an embankment or ridge constructed for the purpose of preventing the movement of liquids, sludge, solids[,] or other materials.

(7) Biopile, also known as biocell, bioheap, biomound and compost pile, shall mean a pile of contaminated soils used to reduce concentrations of petroleum constituents in excavated soils through the use of biodegradation. This technology involves heaping contaminated soils into piles or "cells" and stimulating aerobic microbial activity within the soils through the aeration or addition of minerals, nutrients and moisture.

[~~(7)~~](8) Bottom hole or subsurface pressure shall mean the gauge pressure in pounds per square inch under conditions existing at or near the producing horizon.

[~~(8)~~](9) Braden head gas well shall mean any well producing gas through wellhead connections from a gas reservoir [~~which~~]that has been successfully cased off from an underlying oil or gas reservoir.

O. Definitions beginning with the letter "O".

(1) Official gas-oil ratio test shall mean the periodic gas-oil ratio test made by order of the division by such method and means and in such manner as prescribed by the division.

(2) Oil, crude oil[,] or crude petroleum oil shall mean any petroleum hydrocarbon produced from a well in the liquid phase and [~~which~~]that existed in a liquid phase in the reservoir.

(3) Oil field wastes shall mean those wastes [~~produced~~]generated in conjunction with the exploration, production, refining, processing, gathering and transportation of crude oil [~~and/~~]or natural gas [~~and commonly collected at field storage, processing, disposal, or service facilities, and waste collected at gas processing plants, refineries and other processing or transportation facilities~~]or generated from oil field service company operations. Oil field waste does not include domestic waste such as tires, appliances, paper trash, ordinary garbage and refuse, sewage, sludge from a waste treatment plant or waste of a character not generally associated with oil and gas industry operations.

(4) Oil well shall mean any well capable of producing oil and [~~which~~]that is not a gas well as defined herein.

(5) Operator shall mean any person who, duly authorized, is in charge of the development of a lease or the operation of a producing property, or who is in charge of the operation or management of a facility.

(6) Overage or overproduction shall mean the amount of oil or the amount of natural gas produced during a proration period in excess of the amount authorized on the proration schedule.

(7) Owner means the person who has the right to drill into and to produce from any pool, and to appropriate the production either for himself or for himself and another.

S. Definitions beginning with the letter "S".

(1) Secondary recovery shall mean a method of recovering quantities of oil or gas from a reservoir which quantities would not be recoverable by ordinary primary depletion methods.

(2) Shallow pool shall mean a pool which has a depth range from [0]zero to 5000 feet.

(3) Shortage or underproduction shall mean the amount of oil or the amount of natural gas during a proration period by which a given proration unit failed to produce an amount equal to that authorized in the proration schedule.

(4) Shut-in shall be the status of a production well or an injection well which is temporarily closed down, whether by closing a valve or disconnection or other physical means.

(5) Shut-in pressure shall mean the gauge pressure noted at the wellhead when the well is completely shut in, not to be confused with bottom hole pressure.

(6) Significant modification of an abatement plan shall mean a change in the abatement technology used excluding design and operational parameters, or relocation of 25[%]percent or more of the compliance sampling stations, for any single medium, as designated pursuant to [~~Subsection E, Paragraph (4), Subparagraph (b), Subsubparagraph (iv) of Section~~]Subsubparagraph (iv) of Subparagraph (b) of Paragraph (4) of Subsection E of 19.15.5.19 NMAC.

(7) Soil shall mean:

(a) unconsolidated rock material over bedrock; or

(b) freely divided rock-derived material containing an admixture of organic material that may be capable of supporting vegetation.

[~~(7)~~](8) Spacing unit is the area allocated to a well under a well spacing order or rule. Under the Oil [&]and Gas Act, NMSA 1978, Section 70-2-12.B(10), the commission has the power to fix spacing units without first creating proration units. See *Rutter & Wilbanks Corp. v. Oil Conservation Comm'n*, 87 NM 286 (1975). This is the area designated on division form C-102.

[~~(8)~~](9) Subsurface water shall mean ground water and water in the vadose zone that may become ground water or surface water in the reasonably foreseeable future or may be utilized by vegetation.

(10) Surface waste management facility shall mean any facility that receives for collection, disposal, evaporation, remediation, reclamation, treatment or storage any produced water, drilling fluids, drill cuttings, completion fluids, contaminated soils, basic sediment and water (BS&W), tank bottoms or other oil field related waste, except:

(a) a facility that utilizes underground injection wells subject to regulation by the division pursuant to the federal Safe Drinking Water Act, and does not manage oil field wastes on the ground in pits, ponds, below-grade tanks or land application units;

(b) a facility for temporary storage of oil field wastes in above-ground tanks; or

(c) a facility permitted pursuant to environmental improvement board rules or water quality control commission rules.

W. Definitions beginning with the letter "W".

(1) Waste, in addition to its ordinary meaning, shall include:

(a) underground waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas;

(b) surface waste as those words are generally understood in the oil and gas business, and in any event to embrace the unnecessary or excessive surface loss or destruction without beneficial use, however caused, of natural gas of any type or in any form, or crude petroleum oil, or any product thereof, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage, or fire, especially such loss or destruction incident to or resulting from the manner of spacing, equipping, operating or producing a well or wells, or incident to or resulting from the use of inefficient storage or from the production of crude petroleum oil or natural gas, in excess of the reasonable market demand;

(c) the production of crude petroleum oil in this state in excess of the reasonable market demand for such crude petroleum oil; such excess production causes or results in waste which is prohibited by the Oil and Gas Act; the words "reasonable market demand" as used herein with respect to crude petroleum oil, shall be construed to mean the demand for such crude petroleum oil, for reasonable current requirements for current consumption and use within or outside of the state, together with the demand of such amounts as are reasonably necessary for building up or maintaining reasonable storage reserves of crude petroleum oil or the products thereof, or both such crude petroleum oil and products;

(d) the non-ratable purchase or taking of crude petroleum oil in this state; such non-ratable taking and purchasing causes or results in waste, as defined in Subparagraphs (a), (b), and (c) of this definition and causes waste by violating Section 70-2-16 of the Oil and Gas Act;

(e) the production in this state of natural gas from any gas well or wells, or from any gas pool, in excess of the reasonable market demand from such source for natural gas of the type produced or in excess of the capacity of gas transportation facilities for such type of natural gas; the words "reasonable market demand," as used herein with respect to natural gas, shall be construed to mean the demand for natural gas for reasonable current requirements, for current consumption and for use within or outside the state, together with the demand for such amounts as are necessary for building up or maintaining reasonable storage reserves of natural gas or products thereof, or both such natural gas and products.

(2) Water shall mean all water including water situated wholly or partly within or bordering upon the state, whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water.

(3) Water contaminant shall mean any substance that could alter if released or spilled the physical, chemical, biological or radiological qualities of water. "Water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954.

(4) ~~Watercourse shall mean any lake bed, or gully, draw, stream bed, wash, arroyo, or natural or human-made channel through which water flows or has flowed.~~ Watercourse shall mean a river, creek, arroyo, canyon, draw or wash, or any other channel having definite banks and bed with visible evidence of the occasional flow of water.

(5) Water pollution shall mean introducing or permitting the introduction into water, either directly or indirectly, of one or more water contaminants in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

(6) Well blowout shall mean a loss of control over and subsequent eruption of any drilling or workover well or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquids, from the well.

(7) Wellhead protection area shall mean the area within 200 horizontal feet of any private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or within1000 horizontal feet of any other fresh water well or spring. Wellhead protection areas shall not include areas around water wells drilled after an existing oil or natural gas waste storage, treatment, or disposal site was established.

(8) Wetlands shall mean those areas that are inundated or saturated by surface or ~~groundwater~~ ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Constructed wetlands used for wastewater treatment purposes are not included in this definition.

(9) Working interest owners are the owners of the operating interest under an oil and gas lease who have the exclusive right to exploit the oil & gas minerals. Working interests are cost bearing.

19.15.2.51 TRANSPORATION OF PRODUCED WATER, DRILLING FLUIDS AND OTHER LIQUID OIL FIELD WASTE:

A. No person shall transport any produced water, drilling fluids or other liquid oil field waste, including but not limited to drilling fluids and residual liquids in oil field equipment, except for small samples removed for analysis, by motor vehicle from any lease, central tank battery or other facility without an approved form C-133, authorization to move liquid waste. The transporter shall maintain a photocopy of the approved C-133 in any transporting vehicle.

B. A person may apply for authorization to move liquid waste by filing a complete form C-133 with the division's Santa Fe office. Authorization is granted upon the division's approval of form C-133.

C. No owner or operator shall permit produced water, drilling fluids or other liquid oil field waste to be removed from its leases or field facilities by motor vehicle except by a person possessing an approved form C-133. The division shall post a list of currently approved C-133s, authorization to move liquid waste, on its website.

D. The division may deny approval of a form C-133 if:

(1) the applicant is a corporation or limited liability company, and is not registered with the public regulation commission to do business in New Mexico;

(2) the applicant is a limited partnership, and is not registered with the New Mexico secretary of state to do business in New Mexico;

(3) the applicant does not possess a carrier permit under the single state registration system administered by the public regulation commission, if it is required to have such a permit under applicable statutes and rules; or

(4) an officer, director or partner in the applicant, or a person with an interest in the applicant exceeding 25 percent, is or was within the past five years an officer, director, partner or person with an interest exceeding 25 percent in another entity that possesses or has possessed an approved form C-133 that has been cancelled or suspended, has a history of violating division rules or other state or federal environmental laws or rules; is subject to a commission or division order, issued after notice and hearing, finding such entity to be in violation of an order requiring corrective action; or has a penalty assessment for violation of division or commission rules or orders that is unpaid more than 70 days after issuance of the order assessing the penalty.

E. Cancellation or suspension of authorization to move liquid waste. Vehicular movement or disposition of produced water or other liquid oil field wastes in any manner contrary to division rules shall be cause, after notice and opportunity for hearing, for cancellation or suspension of a transporter's authorization to move liquid wastes.

19.15.2.52 DISPOSITION OF PRODUCED WATER AND OTHER OIL FIELD WASTES:

A. Prohibited dispositions. Except as authorized by 19.15.2.50 NMAC or 19.15.2.53 NMAC, no person, including any transporter, shall dispose of produced water or other oil field wastes:

(1) on the surface of the ground; in any pit; or in any pond, lake, depression or watercourse; or

(2) in any other place or in any manner that may constitute a hazard to fresh water, public health or the environment.

B. Authorized disposition of produced water. The following methods of disposition of produced water are authorized:

(1) delivery to a permitted salt water disposal well or facility, secondary recovery or pressure maintenance injection facility, surface waste management facility or to a drill site for use in drilling fluid, in a manner that does not constitute a hazard to fresh water, public health or the environment; or

(2) use in accordance with any division-issued use permit.

C. Authorized dispositions of other oil field waste. Other oil field waste shall be disposed of by transfer to an appropriate surface waste management facility or injection facility or as otherwise authorized by the division. Recovered drilling fluids may be transported to other drill sites for reuse provided that such fluids are transported and stored in a manner that does not constitute a hazard to fresh water, public health or the environment.

19.15.2.53 SURFACE WASTE MANAGEMENT FACILITIES:

A. Permit required.

(1) No person shall operate a surface waste management facility except pursuant to and in accordance with the terms and conditions of a division-issued surface waste management facility permit unless such facility is exempt from permitting pursuant to Paragraph (2) of Subsection A of 19.15.2.53 NMAC.

(2) The following facilities are exempt from the ~~permitting~~ requirements of 19.15.2.53 NMAC, but not from the requirements of 19.15.2.50 NMAC regarding pits:

(a) centralized facilities that receive wastes from a single well, regardless of capacity or volume of waste received;

(b) centralized facilities that receive only waste exempt from the provisions of the federal Resource Conservation and Recovery Act (RCRA), receive less than 50 barrels of liquid waste per day (averaged over a 30-day period), have a capacity to hold 500 barrels of liquids or less or 1400 cubic yards of solids or less and are permitted pursuant to 19.15.2.50 NMAC; ~~and~~

(c) emergency pits authorized by Subsection D of 19.15.2.50 NMAC;

(d) facilities operating pursuant to emergency order of the division; and

(e) remediations conducted in accordance with a division-approved corrective action or abatement plan pursuant to 19.15.3.116 NMAC or 19.15.1.19 NMAC.

B. Definitions applicable 19.15.2.53 NMAC only.

(1) Definitions relating to types of facilities:

(a) A centralized facility is a surface waste management facility that:

(i) does not receive compensation for waste management;

(ii) is used exclusively by one generator subject to New Mexico's "Oil and Gas Conservation Tax Act", Section 7-30-1 NMSA-1978 as amended; and

(iii) receives exclusively wastes that are generated from production units or leases operated by such generator, or by an affiliate of such generator. For this provision's purposes, an affiliate of a generator is a person who controls, is controlled by or is under common control with the generator.

(b) A commercial facility is a surface waste management facility that is not a centralized facility.

(c) A landfarm is a discrete area of land designated and used for the remediation of hydrocarbon-contaminated soils and soil-like materials such as drill cuttings or tank bottoms ~~that do not exceed the chloride standard contained in Paragraph (1) of Subsection G of 19.15.2.53 NMAC.~~

(d) A landfill is a discrete area of land or an excavation designed for permanent disposition of oil field wastes that are exempt from RCRA subtitle C or are not hazardous by listing or characteristic.

(2) Other definitions.

(a) Active life is the period of operation of a surface waste management facility, beginning with the initial receipt of oil field waste and ending with the completion of closure, but not including post closure.

(b) Active portion is that part of a surface waste management facility that has received or is receiving wastes and has not been closed.

(c) A cell is a confined area engineered for the disposal of solid waste.

(d) Geosynthetic is the generic classification of all synthetic materials used in geotechnical applications, including the following classifications:

(i) geocomposite is a manufactured material using geotextiles, geogrids, geomembranes, or combinations thereof, in a laminated or composite form;

(ii) geogrid is a deformed or non-deformed, netlike polymeric material used to provide reinforcement to soil slopes;

(iii) a geomembrane is an impermeable polymeric sheet material that is impervious to liquid and gas as long as it maintains its integrity, and is used as an integral part of an engineered structure designed to limit the movement of liquid or gas in a system;

(iv) geonet is a type of geogrid that allows planar flow of liquids and serves as a drainage system;

(v) a geosynthetic clay liner (GCL) is a relatively thin layer of processed clay (typically bentonite) that is either bonded to a geomembrane or fixed between two sheets of geotextile; and

(vi) geotextile is any sheet material that is less impervious to liquid than a geomembrane but more resistant to penetration damage, and is used as part of an engineered structure or system to serve as a filter to prevent the movement of soil fines into a drainage system, to provide planar flow for drainage, or to serve as a cushion to protect geomembranes or to provide structural support.

(e) A lateral expansion is a horizontal expansion of the waste boundaries of an existing landfill.

(f) Leachate is the liquid that has passed through or emerged from oil field waste and contains soluble, suspended or miscible materials.

(g) A lift is an accumulation of oil field waste which is compacted into a cell, and over which compacted cover is placed.

(h) A liner is a continuous layer constructed of natural or human-made materials beneath and on the sides of a surface impoundment, landfill or landfill cell that restricts the downward and lateral movement of liquid wastes, gases or leachate.

(i) Lower explosive limit is the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 degrees Celsius and atmospheric pressure.

(j) A major modification is a modification of a facility that involves an increase in the land area that the permitted facility occupies, a change in the nature of the permitted waste stream or addition of a new treatment process, or any other modification that the division determines is sufficiently substantial that public notice and public participation in the application process are appropriate.

(k) A minor modification is a modification of a facility that is not a major modification.

(l) Operator means the operator of a surface waste management facility.

(m) Poor foundation conditions are features which indicate that a natural or human-induced event may result in inadequate foundational support for the structural components of a landfill.

(n) Run-off is any rainwater, leachate or other liquid that drains over land from any part of a surface waste management facility.

(o) Run-on is any rainwater, leachate or other liquid that drains from other land on to any part of a surface waste management facility.

(p) Stormwater is an abnormal amount of surface water produced by a heavy precipitation event.

(q) Structural components of a landfill are liners, leachate collection systems, final covers, run-on/run-off systems and any other components used in the construction or operation of a landfill that are necessary for protections of fresh water, public health or the environment.

(r) An unstable area is a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the structural components of a landfill. Examples of unstable areas are areas of poor foundation conditions, areas susceptible to mass earth movements, and Karst terrain areas, where Karst topography, with its characteristic surface and subterranean features, is developed as a result of dissolution of limestone, dolomite or other soluble rock. Characteristic physiographic features of Karst terrain include, but are not limited to, sinkholes, sinking streams, caves, large springs and blind valleys.

(s) A waste management unit boundary is a vertical plane located at the hydraulically down-gradient limit of a landfill, that extends downward into the uppermost aquifer.

C. Permitting requirements, application, public notice and financial assurance. **Unless exempt from 19.15.2.53 NMAC, all new commercial or centralized facilities prior to commencement of construction, and all existing commercial or centralized facilities prior to major modification, shall be permitted by the division in accordance with the applicable requirements of Subsection C of 19.15.2.53 NMAC.**

(1) Application requirements for new facilities, major modifications and renewals. An application, form C-137, for a permit for a new facility, to modify an existing facility or for renewal of a permit shall be filed with the environmental bureau in the division's Santa Fe office. The application shall include:

(a) the names and addresses of the applicant and all principal officers and owners of 25 percent or more of the applicant;

(b) a plat and topographic map showing the facility's location in relation to governmental surveys (quarter-quarter section, township and range), highways or roads giving access to the facility site, watercourses, water sources and inhabited buildings within one mile of the site's perimeter;

(c) the names and addresses of the surface owners of the real property on which the facility is sited and surface owners of the real property within one mile of the site's perimeter;

(d) a description of the facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of any pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the facility, buildings and chemical storage areas;

(e) engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable disposal method and detailed designs of surface impoundments;

(f) a plan for management of approved wastes that complies with the operational requirements contained in Subsections E, F, G and H of 19.15.2.53 NMAC;

(g) an inspection and maintenance plan that complies with the requirements contained in Paragraph (12) of Subsection E of 19.15.2.53 NMAC;

(h) a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.3.118 NMAC that apply to surface waste management facilities;

(i) a closure and post closure plan, including a cost estimate, sufficient to close the facility to protect fresh water, public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor, and including costs as necessary for removal of all fluids and wastes; back-filling, grading and mounding of pits; cleanup of contaminated soils and re-vegetation of the surface, or other restoration sufficient to protect fresh water, public health and the environment; and post closure monitoring. The closure and post closure plan shall comply with the requirements contained in Paragraph (3) of Subsection I of 19.15.2.53 NMAC;

(j) a contingency plan that complies with the requirements of Paragraph (14) of Subsection E of 19.15.2.53 NMAC and with Sections 12-12-1 through 12-12-30, NMSA 1978, as amended (the emergency management act);

(k) a plan to control run-on water onto the site and run-off water from the site that complies with the requirements of Paragraph (13) of Subsection E of 19.15.2.53 NMAC;

(l) in the case of an application to permit a new or expanded landfill, a leachate management plan that describes the anticipated amount of leachate that will be generated and the handling, storage, treatment and disposal of the leachate, including final post closure options;

(m) in the case of an application to permit a new or expanded landfill, a gas safety management plan that complies with the requirements of Paragraph (15) of Subsection E of 19.15.2.53 NMAC;

(n) a best management practice plan to ensure protection of fresh water, public health and the environment;

(o) geological/hydrological data including:

~~(i) depth to and quality of ground water beneath the site;~~

~~(ii)~~(i) a map showing names and location of streams or other watercourses within one mile of the site;

~~(iii)~~(ii) laboratory analyses, performed by an independent commercial laboratory, for major cations and anions, RCRA metals and total dissolved solids (TDS) of ground water samples of the shallowest fresh water aquifer beneath the proposed site;

~~(iv)~~(iii) depth to, name of, and quality and thickness of, the shallowest fresh water aquifer;

~~(v)~~(iv) soil types beneath the proposed facility, including a lithologic description of all soil and rock members from ground surface down to the shallowest fresh water aquifer;

~~(vi)~~(v) geologic cross-sections;

~~(vii)~~(vi) potentiometric maps for the shallowest fresh water aquifer;

~~(viii)~~(vii) porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed;

(p) certification by ~~a registered professional engineer an authorized representative of~~ the applicant that the information submitted in the application is true, accurate, and complete to the best of his or her knowledge; and

(q) any other information that the division may require to demonstrate that the facility's operation will not adversely impact fresh water, public health or the environment and that the facility will comply with division rules and orders.

(2) Application requirements for minor modifications. An existing facility applying for a minor modification shall file a form C-137 with the environmental bureau in the division's Santa Fe office describing the proposed change and identifying any information that has changed from its last C-137 filing.

(3) Determination that an application is administratively complete. Upon receipt of an application for a surface waste management facility permit or modification or renewal of an existing permit, the division shall review the application for administrative completeness. To be deemed administratively complete, the application shall provide all information required by Paragraph (1) or (2) (as applicable) of Section C of 19.15.2.53 NMAC. The division shall notify the applicant in writing when it deems the application administratively complete. If the division determines that the application is not administratively complete, the division shall notify the applicant of the deficiencies in writing within 30 days of receipt of the application and state what additional information is necessary.

(4) Notice requirement for new facilities, major modifications or renewals.

(a) Upon receipt of notification of the division's determination that the application is administratively complete, the applicant for a new permit, permit renewal or major modification shall give written notice of the application, by certified mail, return receipt requested, to the surface owners of record within one mile of the facility, the county commission of the county where the facility site is located, the appropriate city officials if the facility site is within city limits or within one mile of the city limits, and any affected federal, tribal or pueblo governmental agency. The division may extend the distance requirements for notice if the division determines that the proposed facility has the potential to adversely impact fresh water, public health or the environment at a distance greater than one mile. The applicant shall furnish proof that it has given the required notices.

(b) Following mailing of notice as provided in Subparagraph ~~(b)~~ (a) of Paragraph ~~(2)~~ (4) of Subsection C of 19.15.2.53 NMAC, the applicant shall publish notice, in a form approved by the division, in a newspaper of general circulation in the county of the facility's location or proposed location, and in a newspaper of general circulation in the state.

(c) The division shall distribute notice of its determination that an application for a new facility or for a renewal or major modification of an existing facility is administratively complete to all persons who have requested notification of division and commission hearing dockets within 30 days following the date that the division determines the application to be administratively complete.

(d) Any person wishing to comment on an application prior to the division's preliminary consideration of the application may file comments within 30 days, or as extended by the division director, after the date of publication of notice of the application in the newspaper.

(e) Within 60 days after the end of the public comment period provided in Subparagraph (d) of Paragraph (4) of Subsection C of 19.15.2.53 NMAC, the division shall issue a tentative decision concerning the application, renewal or modification, including proposed conditions for approval or reasons for disapproval, as applicable. The division shall mail notice of the tentative decision, together with a copy of the decision, by certified mail, return receipt requested, to the applicant and shall post notice on the division's website, together with a copy of the tentative decision.

(f) Within 30 days after receiving the division's tentative decision, the applicant shall provide notice of the tentative decision by:

(i) publishing notice, in a form approved by the division, in a newspaper of general circulation in this state and in a newspaper of general circulation in the county where the facility is or will be located;

(ii) mailing notice by first class mail or e-mail to, all persons, as identified to the applicant by the division, who have requested notification of applications generally, or of the particular application, including all persons who have filed comments on the particular application during the initial public comment period, and who have included in such comments a legible return address or e-mail address; and

(iii) mailing notice by first class or e-mail to any affected local, state, federal or tribal governmental agency, as determined and identified to the applicant by the division.

(g) This notice issued pursuant to Subparagraph (f) of Paragraph (4) of Subsection C of 19.15.2.53 NMAC shall include:

(i) the applicant's name and address;

(ii) the facility's location, including a street address if available, and sufficient information to locate the facility with reference to surrounding roads and landmarks;

(iii) a brief description of the proposed facility;

(iv) the depth to, and TDS concentration of, the ground water in the shallowest aquifer beneath the facility site;

(v) a statement that the division's tentative decision is available on the division's website, or, upon request, from the division clerk, including the division clerk's name, address and telephone number;

(vi) a statement of the comment period and of the procedures for requesting a hearing on the application; and

(vii) a brief statement of the procedures to be following by the division in making a final decision.

(h) Any person, whether or not such person has previously submitted comments, may file comments or request a hearing on the application by filing their comments or hearing request with the division clerk within 30 days after the date that the applicant issued public notice of the division's tentative decision. Any request for a hearing shall be in writing and shall state specifically the reasons why a hearing should be held. The division shall schedule a public hearing on the applications if:

(i) the division has proposed to deny the application or grant it subject to conditions not expressly required by rule, and the applicant requests a hearing;

(ii) the division director determines that there is significant public interest in the application;

(iii) the division director determines that comments have raised objections that have probable technical merit; or

(iv) determination of the application requires that the division make a finding, pursuant to Paragraph (3) of Subsection ~~G~~ F of 19.15.1.7 NMAC, whether any water source has a reasonably foreseeable beneficial use.

(i) If the division schedules a hearing on an application, it shall give notice of the hearing's date, time and place by certified mail, return receipt requested, to the applicant and to each person who has specifically requested a hearing in writing, and by first class or electronic mail to all other parties who have filed written comments and provided a current address on the application.

(5) Financial assurance requirements.

(a) Centralized facilities. Upon notification by the division that it has approved a permit but prior to the division issuing the permit, an applicant for a new centralized facility permit shall submit acceptable financial assurance in the amount of $25,000 per facility, or a statewide "blanket" financial assurance in the amount of $50,000 to cover all of that applicant's centralized facilities, unless such applicant has previously posted a blanket financial assurance for centralized facilities.

(b) New commercial facilities or major modifications of existing facilities. Upon notification by the division that it has approved a permit for a new commercial facility or a major modification of an existing commercial facility but prior to the division issuing the permit, the applicant shall submit acceptable financial assurance in the amount of the facility's estimated closure and post closure cost, or $25,000, whichever is greater. The facility's estimated closure and post closure cost shall be the amount provided in the closure plan the applicant submitted unless the division determines that such estimate does not reflect a reasonable and probable closure and post closure cost, in which event, the division shall determine the estimated closure and post closure cost and shall include such determination in its tentative decision. If the applicant disagrees with the division's determination of estimated closure and post closure cost, the applicant may request a hearing as provided in Subparagraph ~~(e)~~(h) of Paragraph (4) of Subsection C of ~~19.15.50.2~~ 19.15.2.53 NMAC. If the applicant so requests, and no other person files a request for a hearing regarding the application, the hearing shall be limited to determination of estimated closure and post closure cost.

(c) The financial assurance shall be on forms prescribed by the division, payable to the state of New Mexico and conditioned upon the proper operation of the facility, closure of the site and post closure monitoring in compliance with statutes of the state of New Mexico, division rules and the permit terms. The applicant shall notify the division of any material change affecting the financial assurance within 30 days of discovery of such change.

(6) Forms of financial assurance. The division may accept the following forms of financial assurance:

(a) Surety bonds. A surety bond shall be executed by the applicant and by a corporate surety licensed to do business in the state, and shall be non-cancelable.

(b) Letters of credit. A letter of credit shall be issued by a bank organized or authorized to do commercial banking business in the United States, shall be irrevocable for a term of not less than five years and shall provide for automatic renewal for successive, like terms upon expiration, unless the issuer has notified the division in writing of non-renewal at least 90 days before its expiration date. The letter of credit shall be payable to the state of New Mexico in part or in full upon receipt from the division director or his authorized representative of demand for payment accompanied by a notice of forfeiture.

(c) Cash accounts. An applicant may provide financial assurance in the form of a federally insured or equivalently protected cash account or accounts in a financial institution, provided that the operator and the financial institution shall execute as to each such account a collateral assignment of the account to the division, which shall provide that only the division may authorize withdrawals from the account, and the division may, at any time and from time to time, direct payment of all or any part of the balance of such account (excluding interest accrued on the account) to itself or its designee.

(d) Replacement of financial assurance.

(i) The division may allow an operator to replace existing forms of financial assurance with other forms of financial assurance that provide equivalent coverage.

(ii) The division shall not release any existing financial assurance until the operator has submitted, and the division has approved, an acceptable replacement.

(e) Review of adequacy of financial assurance. The division may at any time not less that five years after acceptance of financial assurance for a commercial facility, initiate a review of such financial assurance's adequacy. Upon determination, after notice to the operator and opportunity for a hearing, that the financial assurance is not adequate to cover the reasonable and probable cost of closure of such facility and post closure monitoring, the division may require the operator to furnish additional financial assurance sufficient to cover such reasonable and probable cost, provided that the financial assurance required of a facility permitted prior to the effective date of 19.15.2.53 NMAC shall not exceed $250,000 except in the event of a major modification of such facility. If such a facility applies for a major modification, the division shall determine the applicable financial assurance requirement based on the total estimated closure and post closure cost of the facility as modified, without regard to the $250,000 limit.

D. Permit approval, denial, revocation, suspension, ~~or~~ modification and transfer.

(1) Granting of permit.

(a) The division may issue a permit for ~~an~~ new facility or major modification upon finding that an acceptable application has been filed, that the conditions of Paragraphs (4) and (5) of Subsection C of 19.15.2.53 NMAC have been met and that the facility or modification can be constructed and operated in compliance with applicable statutes and rules and without endangering fresh water, public health or the environment.

(b) Each permit issued for a new surface waste management facility shall remain in effect for 10 years from the date of its issuance. If the division grants a permit for a major modification of any facility, the

permit for that facility shall remain in effect for 10 years from the date the division approves the major modification. Any permit may be renewed for successive 10-year terms. If the holder of a surface waste management facility permit submits an application for permit renewal at least 120 days before the permit expires, and the operator is not in violation of the permit on the date of its expiration, then the existing permit for the same activity shall not expire until the division has approved or denied an application for renewal. A surface waste management facility permit continued under this provision remains fully effective and enforceable. An application for permit renewal shall include and adequately address all of the information necessary for evaluation of a new permit as provided in Paragraph (1) of Subsection C of 19.15.2.53 NMAC. Previously submitted materials may be included by reference provided they are current, readily available to the division and sufficiently identified so that the division may retrieve them. At the time of the renewal there shall be public notice in the manner prescribed by Paragraph (4) of Subsection C of 19.15.2.53 NMAC. The division shall grant an application for renewal if the division finds that an acceptable application has been filed, that the conditions of Paragraphs (4) and (5) of Subsection C of 19.15.2.53 NMAC have been met, and that the facility can be operated in compliance with applicable statutes and rules and without endangering fresh water, public health or the environment.

(c) The division shall review each permit at least once during the ten-year term, and shall review permits to which Subparagraph (b) of Paragraph (1) of Subsection D of 19.15.2.53 NMAC does not apply at least every five years. The review shall address the operation, compliance history, financial assurance and technical requirements for the surface waste management facility. The division, after notice to the operator and opportunity for a hearing, may require appropriate modifications of the permit, including modifications necessary to make the permit terms and conditions consistent with statutes, rules or judicial decisions.

(2) Denial of permit. The division may deny an application for a permit or modification of a permit if it finds that the proposed facility or modification may endanger fresh water or may be detrimental to public health or the environment. The division may also deny an application for a permit if the applicant, an owner of 25 percent or greater interest in the applicant, or an affiliate of the applicant, has a history of failure to comply with division rules and orders or state or federal environmental laws, is subject to a division or commission order, issued after notice and hearing, finding such entity to be in violation of an order requiring corrective action, or has a penalty assessment for violation of division or commission rules or orders that is unpaid more than 70 days after issuance of the order assessing the penalty. An affiliate of an applicant, for purposes of Paragraph (2) of Subsection D of 19.15.2.53 NMAC, shall be a person who controls, is controlled by, or under common control with, the applicant or a 25 percent or greater owner of the applicant.

(3) Additional requirements. The division may impose additional conditions or requirements, in addition to the operational requirements set forth in 19.15.2.53 NMAC, that it determines are necessary and proper for the protection of fresh water, public health or the environment. Any such additional conditions or requirements shall be incorporated into the permit.

(4) Revocation, suspension or modification of a permit. The division may revoke, suspend or impose additional operating conditions or limitations on a permit at any time, for good cause, after notice to the operator and opportunity for a hearing. If the division initiates a major modification it shall direct the operator to provide notice in accordance with Paragraph (4) of Subsection C of 19.15.2.53 NMAC. Suspension of a permit may be for a fixed period of time or until the operator remedies the violation or potential violation. If a facility's permit is suspended, such facility shall not accept new waste during the suspension period.

(5) An operator shall not transfer a permit without the division's prior written approval. A request for transfer of a permit shall identify all officers, directors and owners of 25 percent or greater interest in the transferee. No public notice or hearing shall be required for approval of such a request unless the director otherwise orders. Until the division approves the transfer and the required financial assurance is in place, the division shall not release the transferor's financial assurance.

E. Siting and operational requirements applicable to all permitted facilities.

(1) No surface waste management facility shall be located where ground water is less than 50 feet below the surface.

(2) No surface waste management facility shall be located:

(a) within 200 feet of ~~in~~ any watercourse, ~~or~~ lakebed, sinkhole or playa lake;

(b) within a wellhead protection area or 100-year floodplain;

(c) within, or within 500 feet of, any wetland;

(d) within the area overlying any subsurface mine registered with the department of energy, minerals and natural resources, as listed on the mines, mills and quarries map;

(e) within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application;

(g) within any seismic impact zone, unless the operator demonstrates that all containment structures, including liners, leachate collection systems and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site; or

(h) within any unstable area, unless the operator demonstrates that engineering measures have been incorporated into the facility design to ensure that the integrity of the facility will not be compromised. ~~Facilities located adjacent to any watercourse or lakebed shall have a division-approved plan for handling storm water runoff.~~

(3) No surface waste management facility shall exceed 500 acres.

(4) No liquid **wastes transported by motor vehicle shall be accepted at the facility unless the transporter has a form C-133, authorization to move liquid waste, approved by the division.**

(5) No waste containing free liquids shall be placed in any landfill or landfarm cell. Operators shall use the paint filter test, as prescribed by the federal Environmental Protection Agency (EPA SW-846, Method 9095) to determine conformance of the waste to this criterion.

(6) **Facilities shall accept only oil field** ~~related~~ **wastes, except as provided in Subparagraph (c) of Paragraph (6) of Subsection E of 19.15.2.53 NMAC. No non-exempt wastes, which are RCRA subtitle C hazardous wastes by either listing or characteristic testing shall be accepted at a permitted facility.** No wastes containing regulated NORM shall be accepted at a permitted facility except as provided in Subsection C of 19.15.9.714 NMAC. **The operator shall require the following documentation for accepting wastes,** and both the operator and the generator shall maintain and make said documentation available for division inspection.~~:~~

(a) Exempt oil field wastes. ~~A~~ The **generator**~~, or his authorized agent,~~ **shall provide a certification,** on form C-138, oil field waste manifest, **that represents and warrants that the wastes are generated from oil and gas exploration and production operations; exempt from RCRA subtitle C regulations; and not mixed with non-exempt wastes. The operator shall have the option to accept** such **certifications**~~, on form C-142, certification of waste status C-138, oil field waste manifest,~~ **on a monthly, weekly or per load basis. Both the generator and the operator shall maintain and shall make said certificates available for the division's inspection.**

(b) Non-exempt, non-hazardous, oil field wastes. The ~~operator~~ generator **shall** provide ~~complete and maintain, subject to division inspection,~~ **a form C-138,** ~~request for approval to accept solid waste~~ oil field waste manifest, **accompanied by acceptable documentation to determine that the waste is non-hazardous** pursuant to 40 CFR, parts 260 through 299.

(c) Emergency non-oil-field wastes. Non-hazardous, non-oil-field wastes may be accepted in an emergency if ordered by the department of pubic safety. The operator shall complete a form C-138, ~~request to accept solid wastes~~ oil field waste manifest, describing the waste, **and maintain the same, accompanied by the department of public safety order, subject to division inspection.**

(7) The operator of a commercial facility shall maintain records reflecting, ~~for each calendar month,~~ **the generator, the location of origin, the location of disposal** within the facility ~~based on exempt and non-exempt categories~~**, the volume and type of waste, the date of disposal and the hauling company for each load or category of waste accepted at the facility.** The records shall separately reflect the disposal of exempt and non-exempt categories of waste, so as to demonstrate that exempt and non-exempt waste have not been mixed. **Such records shall be maintained in appropriate books and records for a period of not less than five years after facility closure, subject to division inspection.**

(8) Disposal at a facility shall occur only when an attendant is on duty unless loads can be monitored or otherwise isolated for inspection before disposal. The facility shall be secured to prevent unauthorized disposal when no attendant is present.

(9) To protect migratory birds, all tanks exceeding eight feet in diameter, and exposed pits and ponds shall be screened, netted or covered. Upon the operator's written application, the division may grant an exception to screening, netting or covering of a facility upon the operator's showing that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds. All waste management facilities shall be fenced in a manner approved by the division.

(10) All waste management facilities shall have a sign, readable from a distance of 50 feet and containing the operator's name, permit or order number, **facility location by unit letter, section, township and range and emergency telephone numbers.**

(11) Operators shall comply with the spill reporting and corrective action **provisions of 19.15.3.116 NMAC.**

(12) Each operator shall have an inspection and maintenance plan that includes the following:

(a) weekly inspection of all leak detection sumps including sampling if fluids are present, with analyses of any fluid samples furnished to the division; and maintenance of records of inspection dates, the inspector and the status of the leak detection system;

(b) ~~monthly~~ quarterly inspection and sampling of all monitor wells as required for landfills and that may be required for other facilities where ground water has been contaminated, with analyses of ground water furnished to the division; and maintenance of records of inspection dates, the inspector and the status of ground water monitoring wells;

(c) inspections of the berms after any rainfall or windstorm, and maintenance of berms in such a manner as to prevent erosion; and

(d) inspections of the outside walls of all pond levees after any rainfall, and maintenance of outside walls of all levees in such a manner as to prevent erosion.

(13) Each operator shall have a plan to control run-on water onto the site and run-off water from the site, such that:

(a) the run-on control system shall prevent flow onto the facility's active portion during the peak discharge from a 100-year storm;

(b) the run-off control system from the facility's active portion collects and controls at least the water volume resulting from a 24-hour, 100-year storm; and

(c) run-off from the facility's active portion shall not be allowed to discharge any pollutant to the waters of the state or United States that violates any state water quality standards.

(14) Contingency plan. Each operator shall have a contingency plan. The operator shall provide the division's environmental bureau with a copy of any amendment to the contingency plan, including amendments required by Subparagraph (h) of Paragraph (14) of Subsection E of 19.15.2.53 NMAC; and promptly notify the division's environmental bureau of any changes in the emergency coordinator or in the emergency coordinator's contact information. The contingency plan shall be designed to minimize hazards to public health, welfare or the environment from fires, explosions or any unplanned sudden or non-sudden release of contaminants or waste to air, soil, surface water or ground water. The operator shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or hazardous waste constituents that could threaten public health, welfare or the environment. The contingency plan for emergencies shall:

(a) describe the actions facility personnel must take in response to fires, explosions or releases of contaminants or hazardous waste constituents to air, soil, surface water or ground water;

(b) describe arrangements with local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services;

(c) list the emergency coordinator's name, address and phone numbers (office and home). Where more than one person is listed, one must be named as the primary emergency coordinator;

(d) include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment). This list must be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list and a brief outline of its capabilities;

(e) include an evacuation plan for facility personnel. The plan must describe signals to be used to begin evacuation, evacuation routes and ~~alternate~~ alternative evacuation routes in cases where fire or releases of hazardous wastes could block the primary routes;

(f) include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation;

(g) list where copies of the contingency plan will be kept, which shall include the facility; all local police departments, fire departments and hospitals; and state and local emergency response teams;

(h) indicate when the contingency plan will be amended, which shall be immediately if necessary, whenever:

(i) the facility permit is revised or modified;

(ii) the plan fails in an emergency;

(iii) the facility changes design, construction, operation, maintenance or other circumstances in a way that increases the potential for fires, explosions or releases of hazardous waste constituents, or changes the response necessary in an emergency;

(iv) the list of emergency coordinators or their contact information changes; or

(v) the list of emergency equipment changes;

(i) describe how the emergency coordinator or his designee, whenever there is an imminent or actual emergency situation, will immediately;

(i) activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) notify appropriate state and local agencies with designated response roles if their assistance is needed;

(j) describe how the emergency coordinator, whenever there is a release, fire or explosion, will immediately identify the character, exact source, amount and extent of any released materials (The emergency coordinator may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.) and describe how the emergency coordinator will concurrently assess possible hazards to public health, welfare or the environment that may result from the release, fire or explosion (This assessment shall consider both the direct and indirect hazard of the release, fire or explosion.);

(k) describe how if the facility stops operations in response to fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes or the equipment, wherever this is appropriate;

(l) describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered waste, or any other material that results from a release, fire or explosion at a facility; and

(m) describe how the emergency coordinator will ensure that no waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete.

(15) Gas safety management plan. Each operator of a facility that includes a landfill shall have a gas safety management plan that describes in detail procedures and methods that will be used to prevent landfill-generated gases from interfering or conflicting with the landfill's operation, and protect public health, safety and the environment. The plan shall address anticipated amounts and types of gases that may be generated, an air monitoring plan that includes the vadose zone, and measuring, sampling, analyzing, handling, control and processing methods. The plan shall also include final post closure monitoring and control options.

(16) Training program. Each operator shall conduct an annual training program for key personnel that includes general operations, permit conditions, emergencies, proper sampling methods, and identification of RCRA exempt and non-exempt waste, including hazardous waste. The operator shall maintain records of such training, subject to division inspection, for five years.

F. ~~Operational requirements~~ Specific requirements applicable to **landfills.**

(1) ~~No landfill cell shall exceed five acres in size.~~

~~(2) Landfills shall be constructed using 40 mil high density polyethylene (HDPE) or equivalent double liners with leak detection systems as described in Paragraph (5) of Subsection H of 19.15.3.53 NMAC incorporated into the design, unless the operator shows to the division's satisfaction that fresh water will not be adversely impacted.~~

(3) The operator shall confine the landfill's working face to the smallest practical area and compact the ~~solid~~ oil field waste to the smallest practical volume.

(2) The operator shall prevent unauthorized access by the public and entry by large animals to the landfill's active portion through the use of fences, gates, locks or other means that attain ~~equal~~ equivalent protection.

(3) The ~~surface waste management facility~~ operator shall provide adequate means to prevent and extinguish fires.

(4) The operator shall control litter and odors.

(5) The operator shall not excavate a closed cell or allow others to excavate a closed cell except as approved by the division.

(6) The operator shall provide adequate cover for the landfill's active face as needed to control dust, debris and other nuisances, or as otherwise required by the division ~~with a six-inch layer of earth or approved alternate daily cover at the conclusion of each day's operation or more often as conditions may dictate.~~

(7) For all areas of the landfill that will not receive additional waste for one month or more, but have not reached final elevation, the operator shall provide intermediate cover that shall be:

(a) approved by the division ~~one foot thick~~;

(b) ~~placed on all areas of the landfill that will not receive further waste for one month or greater, but have not reached final elevation;~~

~~(c)~~ stabilized with vegetation on any areas that will be inactive for more than two years; and

(c) inspected and maintained to prevent erosion and infiltration.

(8) ~~Once~~ When a landfill cell has been filled it shall be closed pursuant to the conditions contained in the surface waste management facility permit and the requirements of clause (i) of Subparagraph (b) of Paragraph

(3) of Subsection I of 19.15.2.53 NMAC. ~~No more than two landfill cells may be open at a facility at the same time.~~ The operator shall notify the division's environmental bureau at least 72 hours prior to closure of a landfill cell.

(9) Ground water monitoring program. The operator shall establish a ground water monitoring program, approved by the division's environmental bureau, that shall include a ground water monitoring work plan, a sampling and analysis plan, and a ground water monitoring system. The ground water monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield ground water samples from the uppermost aquifer that:

(a) represent the quality of background ground water that has not been affected by leakage from a landfill; and

(b) represent the quality of ground water passing beneath the surface waste management facility.

~~(12) Monitoring wells shall be constructed in such a manner that the integrity of the borehole and well is maintained and is in accordance with ASTM method 5092.~~

(10) All new landfills and lateral expansions of existing landfills shall include a base layer, a lower geomembrane liner, a leak detection system, an upper geomembrane liner, a leachate collection system, a leachate collection system protective layer, an oil field waste zone and a top landfill cover.

(a) The base layer shall, at a minimum, consist of two feet of clay soil compacted to a minimum 90% Standard Proctor Density (ASTM D-698.) with a hydraulic conductivity of 1×10^{-7} cm/sec or less. In areas where depth to ground water is greater than 100 feet, or where no ground water is present, the operator may propos an alternative material or method for the base layer, subject to division approval.

(b) The lower geomembrane liner shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division.

(c) The leak detection system shall be placed between the lower and upper geomembrane liners and shall consist of two feet of compacted soil with a saturated conductivity of 1×10^{-5} cm/sec, or greater, to facilitate drainage. The leak detection system shall consist of a drainage and collection system placed above the lower geomembrane liner in depressions and sloped so as to facilitate earliest possible leak detection. All piping shall be designed to withstand chemical attack from waste or leachate and structural loading and other stresses and disturbances from overlying waste, cover materials, equipment operation, expansion or contraction, and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the interior landfill and all drainage lines and laterals shall be at least a two percent grade; i.e., two feet of vertical drop per 100 horizontal feet. The piping collection network shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. A solid drainage pipe shall be sealed to convey any collected fluids to a corrosion-proof sump located outside the perimeter of the landfill, for observation. Alternative methods may be installed as approved by the Division.

(d) The upper geomembrane liner shall be placed over the leak detection system and shall consist of a 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner approved by the division.

(e) The leachate collection system shall be placed over the upper geomembrane liner and shall consist of at least two feet of compacted soil with a saturated hydraulic conductivity of 1×10^{-5} cm/sec or greater, to facilitate drainage. The leachate collection system shall consist of a drainage and collection system placed no more than six inches above the upper geomembrane liner in depressions and sloped so as to facilitate the maximum leachate collection. All piping shall be designed to withstand chemical attack from waste or leachate and structural loading and other stresses and disturbances from overlying waste, cover materials, equipment operation, expansion or contraction, and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the interior landfill and all drainage lines and laterals shall be at least a two percent grade; i.e., two feet of vertical drop per 100 horizontal feet. The piping collection network shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. A solid drainage pipe shall be sealed to convey any collected fluids outside the perimeter of the landfill for storage, treatment and disposal. Alternative methods may be installed as approved by the Division.

(f) The leachate collection system protective layer shall be placed over the leachate collection system and shall consist of a soil layer at least one foot thick with a saturated hydraulic conductivity of 1×10^{-5} cm/sec or greater.

(g) Oil field waste shall be placed above the leachate collection system protective layer.

(h) The top landfill cover shall consist, at a minimum, of a two-foot thick layer of compacted soil, or alternative material approved by the division, and be compacted to a minimum 90% Standard Proctor

Density with a hydraulic conductivity of 1 x 10^{-5} cm/sec or less. The filter layer shall consist of a geogrid and geonet drainage system, or alternative system approved by the division, placed over the top landfill cover to stabilize the top landfill cover and provide for additional drainage. The landfill shall be capped with a minimum of six inches of topsoil placed over the filter layer, and stabilized with grass or other approved vegetative cover.

(11) Liner specifications and requirements.

(a) General requirements:

(i) Geomembrane liner specifications. Geomembrane liners shall be at least 30 mils (0.030 inches or 0.762 millimeters) thick and manufactured from PVC or other equivalent material, such as 60 mil HDPE, that meets or exceeds ASTM standards for PVC. All geomembrane liners shall have a hydraulic conductivity no greater than 1 x 10^{-9} cm/sec. Geomembrane liners shall be composed of an impervious, synthetic material that is resistant to hydrocarbons, salts and acidic and alkaline solutions. Liners shall also be resistant to ultraviolet light, or provision shall be made to protect the material from sunlight. Liner compatibility shall comply with United States Environmental Protection Agency SW-846 Method 9090A.

(ii) All liners must be able to withstand projected loading stresses and disturbances from overlying waste, waste cover materials and equipment operations.

(iii) All liners shall be constructed with a minimum two percent slope to promote positive drainage and to facilitate leachate collection and leak detection.

(b) Additional requirements for geomembranes:

(i) Geomembranes shall be compatible with the waste to be disposed. Geomembranes shall be resistant to chemical attack from the waste or leachate. The operator shall demonstrate this by means of the manufacturer's test reports, laboratory analyses or other division-approved method.

(ii) Any geosynthetic material installed on a slope greater than 25 percent shall be designed to withstand the calculated tensile forces acting upon the material. The design must consider the maximum friction angle of the geosynthetic with regard to any soil-geosynthetic or geosynthetic-geosynthetic interface and must ensure that overall slope stability is maintained.

(iii) Field seams in geosynthetic material shall be oriented parallel to the line of maximum slope; i.e., oriented along, not across, the slope. The number of field seams in corners and irregularly shaped areas shall be minimized. There shall be no horizontal seams within five feet of the toe of the slope.

(c) Requirements for the soil component of liners.

(i) The bottom geosynthetic layer shall be placed on a prepared subgrade consisting, at a minimum, of a 6-inch layer of in-situ soil or select fill, compacted to 90% Standard Proctor Density.

(ii) The surface of the soil upon which a geosynthetic will be installed must be free of stones greater than one half inch in any dimension, organic matter, local irregularities, protrusions, loose soil and any abrupt changes in grade that could damage the geosynthetic.

(iii) Any clay soil component of any liner shall be compacted to a minimum of 90% Standard Proctor Density and shall, unless otherwise approved by the division, have a plasticity index greater than 10%, a liquid limit between 25% and 50%, a portion of material passing the No. 200 sieve (0.074 mm and less fraction) greater than 40% by weight; and clay content greater than 18% by weight.

(d) The leachate collection system protective layer and the soil component of the leak detection system shall consist of soil materials that shall be free of any organic matter, shall have a portion of material passing the No. 200 sieve no greater than five percent by weight, and a uniformity coefficient (Cu) less than 6, where Cu is defined as D60/D10. Any geosynthetic materials such as geonets and geotextiles, if used as components of the leachate collection or leak detection system, shall have a hydraulic conductivity, transmissivity and chemical and physical qualities that will not be adversely affected by waste placement, equipment operation or leachate generation. These geosynthetics, if used in conjunction with the soil protective cover for liners, shall have a hydraulic conductivity designed to ensure that the hydraulic head on the liner never exceeds one foot.

(12) Landfill Gas Control Systems: If the gas safety management plan requires the installation of a gas control system at a landfill, the operator shall submit a plan for approval by the division which shall include the following:

(a) design of the system, indicating the location and design of vents, barriers, collection piping and manifolds and other control measures that will be installed;

(b) if gas recovery is proposed, the design of the proposed gas recovery system and the major on-site components of the system, including storage, transportation, processing, treatment or disposal measures required in the management of the generated gases, condensates or other residues;

(c) if gas processing is proposed, a processing plan designed in a manner that does not interfere or conflict with the activities on the site or required control measures, or create or cause danger to persons or property;

(d) if gas disposal is proposed, a disposal plan designed:

(i) in a manner that does not interfere or conflict with the activities on the site or required control measures;

(ii) so as not to create or cause danger to persons or property; and

(iii) with active forced ventilation, using vents located at least one foot above the landfill surface at the location of each gas vent;

(e) physical and chemical characterization of condensates or residues which are generated and a plan for their disposal;

(f) means that will be implemented to prevent the generation and lateral migration of methane gas such that:

(i) the concentration of the gases generated by the facility does not exceed 25 percent of the lower explosive limit for all gases in facility structures (excluding gas control or recovery system components); and

(ii) the concentration of any gases does not exceed the lower explosive limit for all gases at the facility property boundary;

(g) a routine gas monitoring program providing for monitoring at least quarterly; the specific type and frequency of monitoring to be determined based on the following:

(i) soil conditions;

(ii) the hydrogeologic and hydraulic conditions surrounding the facility; and

(iv) the location of facility structures and property lines.

(13) Landfill gas response. If gas levels exceed the limits specified in Subparagraph (f) of Paragraph (12) of Subsection F of 19.15.2.53 NMAC, the operator shall:

(i) immediately take all necessary steps to ensure protection of public health, welfare and the environment and notify the division;

(ii) within seven days of detection, record gas levels detected and a description of the steps taken to protect public health, welfare and the environment; and

(iii) within 60 days of detection, implement a remediation plan for gas releases, and notify the division that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.

G. ~~Operational requirements –~~ Specific requirements applicable to **landfarms. The following operational requirements shall apply to all landfarms.**

(1) Only soils and soil like material such as drill cuttings or tank bottoms that do not have a chloride concentration exceeding 1000 mg/kg and that pass the paint filter test **shall be placed in** a **landfarm. The person tendering waste for treatment at a landfarm shall certify**, on form C-138, **that representative samples of the waste have been tested for chloride content** and subjected to the paint filter test **and** that the samples have been **found to conform to** ~~this~~ these **requirements.** ~~, and~~ **The landfarm's operator shall not accept waste for landfarm treatment unless accompanied by such certification.**

~~**(2)** No landfarm cell shall exceed five acres in size.~~

~~**(3)**~~ The operator shall not place ~~No~~ **contaminated soils** ~~shall be placed~~ **within 100 feet of a boundary of the facility.**

(3) The operator shall not place ~~No~~ **contaminated soils** ~~shall be placed~~ **within 20 feet of any pipeline crossing the landfarm.**

(4) The operator shall berm the landfarm ~~The portions of the facility containing contaminated soils shall be bermed~~ **to prevent run-on and run-off of rainwater.**

(5) The operator shall not place exempt and non-exempt, contaminated soils in the same landfarm cell. ~~A treatment zone in each landfarm cell shall be monitored to ensure that contaminants are not transferred to the underlying native soil or to the ground water. Such treatment zone shall not exceed three feet in depth from the ground surface to the bottom of the treatment zone. One background soil sample shall be taken from the center of each landfarm cell two feet below the native ground surface prior to operation. The sample shall be analyzed for total petroleum hydrocarbons (TPH), major cations/anions, volatile aromatic organics benzene, toluene, ethyl benzene and xylenes (BTEX), and heavy metals using approved United States environmental protection agency (EPA) methods. Thereafter, a minimum of four representative samples shall be taken from each landfarm cell six months after the first contaminated soils are received and then semi-annually thereafter. The samples shall be taken~~

~~from soils no deeper than three feet below the cell's original surface. The soil samples shall be analyzed, using EPA approved methods, for total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene and xylenes (BTEX). The soil samples shall be analyzed, using approved EPA methods, for major cations and anions and RCRA metals, annually. Reports showing the results of the analyses shall be submitted to the environmental bureau in division's Santa Fe office no later than 45 days after completion of the sampling. If the semi-annual or annual sampling results show concentrations of TPH, major cations/anions, BTEX or heavy metals that exceed the concentrations from the results of the background sampling a remediation plan shall be required.~~

~~(6)(11)~~ The operator shall add m**oisture**~~shall be added~~**, as necessary,** to enhance bioremediation and **to control blowing dust.**

~~(7)(12) The~~ **The application of microbes for the purposes of enhancing bioremediation requires prior division approval.**

(8) The operator shall take, at a minimum, four background soil samples from each landfarm cell, three feet below the original ground surface, prior to beginning operations, to establish background concentrations. The operator shall analyze the background soil samples for total petroleum hydrocarbons (TPH), benzene, toluene, ethyl benzene and xylenes (BTEX), chlorides, metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, using approved United States Environmental Protection Agency (EPA) methods.

(9) The operator shall ~~All contaminated soils shall be either~~ **biopiled or spread and disked** all contaminated soils **within 72 hours of receipt. The division's environmental bureau may approve other** ~~remediation~~ treatment **procedures if** the operator demonstrates that **they provide equivalent protection for fresh water, public health and the environment. The operator shall maintain records of the facility's remediation activities**~~y schedule~~ **in a form readily accessible for division inspection.**

(10) ~~Contaminated soils that are to be land-spread shall be spread on the surface in six-inch, or less, lifts. The TPH concentration of each lift shall be reduced to 100 mg/kg prior to adding an additional lift. The maximum thickness of land-spread soils in any cell shall not exceed two feet, at which time the soils shall be removed prior to adding additional lifts.~~ The operator shall spread contaminated soils on the surface in six-inch or less lifts. The operator shall conduct treatment zone monitoring to ensure that the TPH concentration of each lift, as determined by EPA SW-846 Method 8015M or EPA Method 418.1, does not exceed 2500 mg/kg and that the chloride concentration, as determined by EPA Method 300.1, does not exceed 1000 mg/kg, prior to adding an additional lift. The maximum thickness of treated soils in any landfarm cell shall not exceed two feet in thickness. When that thickness is reached, the operator shall either remove the treated soils or close the landfarm cell.

(11) Soils shall be disked biweekly; ~~or~~ **biopiles shall be turned at least monthly.**

~~(10) Exempt and non-exempt contaminated soils shall be physically separated so that the division can visually identify whether the waste is exempt or non-exempt.~~

~~(13) No free liquids shall be placed in the landfarm cells.~~

~~(14) No drill cuttings or soils contaminated with produced water generated within the division's districts I and II, or other salt-contaminated wastes, shall be placed in a landfarm cell. Wastes shall be considered salt-contaminated if the chloride concentration exceeds 2,000 parts per million. The person tendering waste for treatment at a landfarm shall certify that representative samples of the waste have been tested for chloride content and found to conform to this requirement, and the landfarm's operator shall not accept waste for landfarm treatment unless accompanied by such a certification.~~

(12) The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell to ensure that contaminants do not migrate to the underlying native soil or to ground water. The operator shall collect and analyze a minimum of four representative, independent samples from the vadose zone six months after the first contaminated soils are received and then semi-annually thereafter. The vadose zone samples shall be taken from soils between three and four feet below the cell's original surface. The vadose zone samples shall be analyzed semi-annually, using the methods specified below, for total petroleum hydrocarbons (TPH), benzene, toluene, ethyl benzene and xylenes (BTEX) and chlorides. The vadose zone samples shall also be analyzed at least annually, using the methods specified below, for metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall maintain a copy of the monitoring reports at the landfarm facility. If any vadose zone sampling results show that the concentrations of TPH, BTEX, chlorides, or metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, exceed the background concentrations, then the operator shall notify the division's environmental bureau of the exceedance, and shall submit a corrective action plan, within 15 days.

(13) Pooling of liquids in the landfarm is prohibited. Freestanding water shall be removed.

(14) After a landfarm cell has been filled to the maximum thickness of two feet, the operator shall continue treatment until the contaminated soil has been remediated to the following closure performance standards.

(a) Benzene, as determined by EPA SW-846 Method 8021B, shall not exceed 0.2 mg/kg.

(b) Total BTEX, as determined by EPA SW-846 Method 8021B, shall not exceed 50 mg/kg.

(c) Total petroleum hydrocarbons (TPH), as determined by EPA SW-846 Method 8015M or EPA Method 418.1, shall not exceed 1000 mg/kg. The gasoline range organics (GRO)/diesel range organics (DRO) fraction, as determined by EPA SW-846 Method 8015M, shall not exceed 500 mg/kg. The total extractable petroleum hydrocarbon fractions, as determined by EPA Method 418.1, shall not exceed 1000 mg/kg.

(d) Chlorides, as determined by EPA Method 300.1, shall not exceed 1000 mg/kg.

(e) The concentration of the metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, as determined by EPA SW-846 Methods 6010B or 6020, or other methods approved by the division, shall not exceed the background soil concentration or the applicable closure concentration specified below, whichever is greater:

(i) Arsenic (As)	0.0146 mg/kg
(ii) Barium (Ba)	106 mg/kg
(iii) Cadmium (Cd)	1.37 mg/kg
(iv) Chromium (Cr)	2.1 mg/kg
(v) Copper (Cu)	51.5 mg/kg
(vi) Cyanide (CN)	7.35 mg/kg
(vii) Fluoride (F)	329 mg/kg
(viii) Iron (Fe)	277 mg/kg
(ix) Lead (Pb)	400 mg/kg
(x) Manganese (Mn)	334 mg/kg
(xi) Total Mercury (Hg)	334 mg/kg
(xii) Nitrate (NO3 as N)	17.1 mg/kg
(xiii) pH	between 6 and 9
(xiv) Selenium (Se)	0.953 mg/kg
(xv) Silver (Ag)	1.57 mg/kg
(xvi) Zinc (Zn)	682 mg/kg
(xvii) Aluminum (Al)	54,800 mg/kg
(xviii) Boron (B)	24 mg/kg
(xix) Cobalt (Co)	33.1 mg/kg
(xx) Molybdenum (Mo)	3.7 mg/kg
(xxi) Nickel (Ni)	47.7 mg/kg

(15) If the operator achieves the closure performance standards specified in Paragraph 13 of Subsection G of 19.15.1.53 NMAC, then the operator may either leave the treated soil in place, or with prior division approval dispose or reuse the treated soil in an alternative manner.

(16) If the operator cannot achieve the closure performance standards specified in Paragraph 14 of Subsection G of 19.15.1.53 NMAC, then the operator shall remove all contaminated soil from the landfarm cell and properly dispose of it at a division-approved landfill, or reuse or recycle it in a manner approved by the division. The operator may request approval of an alternative soil closure standard from the division through the hearing process. The operator shall give public notice of an application for alternative soil closure standards in the manner provided in Paragraph (4) of Subsection C of 19.15.2.53 NMAC.

H. ~~Operational requirements - evaporation ponds~~Specific requirements applicable to evaporation, storage, treatment and skimmer ponds.

~~**(1)** Evaporation ponds shall be constructed in such a manner as to prevent overtopping due to wave action or rainfall.~~

~~**(2)** Evaporation ponds shall be constructed so that the inside grade of the levee is no steeper than 2:1. Levees shall have an outside grade no steeper than 3:1. The tops of the levees shall be at least 18 inches wide.~~

~~**(3)** Synthetic materials used for lining evaporation ponds shall be impermeable.~~

~~**(4)** Evaporation ponds shall be double-lined with a leak detection system incorporated into the design. Such leak detection systems shall be monitored monthly. A monitoring record shall be maintained and shall be readily accessible for division inspection. The discovery of any liquids in the leak detection system shall be reported to the division within 24 hours.~~

~~**(5)** Leak detection system specifications:~~

~~**(a)** The operator shall install a leak detection system of an approved design between the primary and secondary liner, and notify the appropriate division district office at least 72 hours in advance of the primary liner's scheduled installation to afford the opportunity for a division representative to inspect the leak detection system.~~

~~(b) Leak detection systems may consist of, but are not necessarily limited to, approved fail-safe electric detection systems or drainage and sump systems.~~

~~(c) If an electric grid detection system is used, it shall be monitored to ensure that all components of the system remain functional.~~

~~(d) If a drainage and sump system is used, the operator shall install a network of slotted or perforated drainage pipes between the primary and secondary liners. The network shall be of sufficient density so that no point in the pond bed is more than 20 feet from such drainage pipe or lateral thereof. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of the fluids to the drainage pipe. The slope for all drainage lines and laterals shall be at least six inches per 50 feet. The slope of the pond bed shall also conform to these values to assure fluid flow towards the leak detection system. The drainage pipe shall convey any fluids to a corrosion-proof sump located outside the pond's perimeter.~~

~~(6) Thickness of flexible membrane liners shall be at least 40 mil.~~

~~(7) All materials used for lining evaporation ponds shall be resistant to hydrocarbons, salts and acidic and alkaline solutions. The liners shall also be resistant to ultraviolet light.~~

~~(8) The division may approve spray systems to enhance natural evaporation. Engineering designs for such systems shall be submitted to the division's environmental bureau for approval prior to installation. Spray systems shall be operated such that spray-borne salt does not leave the pond area.~~

~~(9) A skimmer pond or tank shall be used to separate any oil from produced water prior to water discharge into the pond.~~

~~(10) Design of a skimmer pond shall conform to the same design criteria as those for an evaporation pond.~~

(1) Engineering design plan. An applicant for a facility permit or modification requesting inclusion of a skimmer pit, an evaporation, storage or treatment pond or a below-grade tank, shall submit with the permit application a detailed engineering design plan, certified by a registered professional engineer, including operating and maintenance procedures; a closure plan; and a hydrologic report that provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology to enable the division to evaluate the actual and potential effects on soils, surface water and ground water. The plan shall include detailed information on dike protection and structural integrity; leak detection, including an adequate fluid collection and removal system; liner specifications and compatibility; freeboard and overtopping prevention; prevention of nuisance and hazardous odors such as H2S; an emergency response plan, unless the pit is part of a facility that has an integrated contingency plan; type of waste stream, including chemical analysis; climatological factors, including freeze-thaw cycles; a monitoring and inspection plan; erosion control and any other pertinent information the division requests.

(2) Construction, standards.

(a) In general. Each pit, pond and below-grade tank shall be designed, constructed and operated so as to contain liquids and solids in a manner that will prevent contamination of fresh water and protect public health and the environment.

(b) Liners required. Each pit or pond shall contain, at a minimum, a primary (upper liner) and a secondary (lower liner) with a leak detection appropriate to the site's conditions.

(c) Liner specifications. All liners shall meet the following requirements:
Liners shall be at least 30 mils (.030 inches or .762 millimeters) thick and manufactured from PVC, or other equivalent material such as 60 mil HDPE, that meets or exceeds the various ASTM standards for PVC. Synthetic (geomembrane) liners shall have a hydraulic conductivity no greater than 1×10^{-9} centimeters per second. Geomembrane liners shall be composed of an impervious, synthetic material that is resistant to hydrocarbons, salts and acidic and alkaline solutions. Liner materials shall be resistant to ultraviolet light, or provisions shall be made to protect the material from sunlight. Liner compatibility shall comply with United States Environmental Protection Agency SW-846 method 9090A.

(d) Alternative liner media. The division may approve other liner media if the operator demonstrates to the division's satisfaction that the alternative liner protects fresh water, public health, and the environment as effectively as the specified media.

(e) Each pit or pond shall have a properly constructed foundation or firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities, in order to prevent rupture or tear of the liner; an adequate anchor trench; and shall be constructed so that the inside grade of the levee is no steeper than 2H:1V. Levees shall have an outside grade no steeper than 3H:1V. The tops of the levees shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance. The system shall have an adequate vent

design. Liner seams shall be minimized and oriented up and down, not across a slope. Factory seams should be used where possible. Qualified personnel shall perform all field seaming.

(f) At any point of discharge into or suction from the lined pit, the liner shall be protected from the fluid force or mechanical damage.

(g) Primary liners shall be constructed of a synthetic material.

(h) A secondary liner may be a synthetic liner or an alternative liner approved by the division. Secondary liners constructed with compacted soil membranes, i.e., natural or processed clay and other soils, shall be at least three feet thick, placed in six-inch lifts and compacted to 95 percent of the material's standard proctor density, or equivalent. Compacted soil membranes used in a liner shall undergo permeability testing in conformity with ASTM standards and methods approved by the division, before and after construction. All compacted soil membranes shall have a hydraulic conductivity no greater than 1×10^{-8} cm/sec. The operator shall submit results of pre-construction testing to the division for approval prior to construction.

(i) A leak detection system shall be placed between the lower and upper geomembrane liners and shall consist of two feet of compacted soil with a saturated hydraulic conductivity of 1×10^{-5} cm/sec or greater to facilitate drainage. Leak detection systems shall consist of a properly designed drainage and collection system placed above the lower geomembrane liner in depressions and sloped so as to facilitate earliest possible leak detection. All piping used shall be designed to withstand chemical attack from waste or leachate, structural loading from stresses and disturbances from overlying waste, waste cover materials, equipment operation, expansion or contraction, and to facilitate clean-out maintenance. The material placed between the pipes and laterals shall be sufficiently permeable to allow the transport of the fluids to the drainage pipe. The slope of the interior landfill and of all drainage lines and laterals shall be at least a two percent grade, i.e. 2 feet vertical drop per 100 horizontal feet. The piping collection network shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. A solid drainage pipe shall be sealed to convey any collected fluids to a corrosion-proof sump located outside the perimeter of the landfill, for observation. Alternative methods may be installed as approved by the division.

(j) The operator shall notify the division at least 72 hours prior to the primary liner's installation so that a division representative may inspect the leak detection system before it is covered.

(k) All pits and ponds shall be constructed in such a manner as to prevent overtopping due to wave action or rainfall, and a three foot freeboard shall be maintained at all times.

(l) The maximum size of any evaporation or storage pond shall not exceed 10 acre feet.

(3) Operating Standards.

(a) Only produced fluids, exempt pursuant to RCRA subtitle C, or non-hazardous oil field waste, shall be discharged into or stored in any pit or pond. No measurable or visible layer of oil may be allowed to accumulate or remain anywhere on the surface of any pit, except an approved skimmer pit. Spray evaporation systems shall be operated such that all spray-borne suspended or dissolved solids remain within the perimeter of the pond's lined portion.

(b) Leak detection systems shall be monitored pursuant to the approved permit conditions. The operator shall maintain a monitoring records in a form readily accessible for division inspection, and shall report discovery of any liquids in the leak detection system to the division within 24 hours.

(c) Fencing and netting. Operators shall fence or enclose all pits or ponds to prevent unauthorized access and maintain fences in good repair. Fences are not be required if there is an adequate perimeter fence surrounding the surface waste management facility. All tanks exceeding 8 eight feet in diameter, exposed pits and ponds shall be screened, netted, covered or otherwise rendered non-hazardous to migratory birds. Upon written application, the division may grant an exception to screening, netting or covering requirements upon the operator's showing that an alternative method will adequately protect migratory birds or that the tank or pit is not hazardous to migratory birds.

(d) The division may approve spray systems to enhance natural evaporation. Engineering designs for such systems shall be submitted to the division's environmental bureau for approval prior to installation. Spray systems shall be operated such that spray-borne salt does not leave the pond area.

(e) A skimmer pond or tank shall be used to separate any oil from produced water prior to water discharge into the pond. All connected ponds shall have a trap device installed to prevent solids and oils from transferring from one pond to the other unless approved in the facility permit.

(4) Below-grade tanks and sumps:

(a) Below-grade tanks shall be constructed with secondary containment and leak detection. Operators shall not allow below grade tanks to overflow. Operators shall install only below-grade tanks of materials resistant to the tank's particular contents and to damage from sunlight.

(b) Operators shall test all sumps' integrity annually, and shall promptly repair or replace any sump that does not demonstrate integrity. Operators may test sumps that can be removed from their emplacements by visual inspection. Other sumps shall be tested by appropriate mechanical means. The operator shall maintain records of sump inspection and testing and make such records available for division inspection.

(5) Closure required. The operator shall properly close all pits, ponds and below-grade tanks within six months after cessation of use.

I. Closure and post closure.

(1) Facility closure by operator. The operator shall notify the division's environmental bureau at least 30 days prior to cessation of operations at the facility and provide a proposed schedule for closure. Upon receipt of such notice and proposed schedule, the division shall inspect the facility and review the current closure plan for adequacy. The division shall notify the operator when it has completed its review and inspection and shall specify in such notice any modifications of the closure plan and proposed schedule or additional requirements that it determines are necessary for the protection of fresh water, public health or the environment. The operator shall be entitled to a hearing concerning any modification or additional requirement the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements. Closure shall proceed in accordance with the approved closure plan and schedule and any modifications or additional requirements imposed by the division. During closure operations the operator shall maintain the facility to protect fresh water, public health and the environment. ~~If it is~~ When the division determines~~d~~ that closure is complete ~~the division~~ it shall release the financial assurance, except for the amount needed to maintain monitoring wells for 30 years, to perform semi-annual analysis of such monitoring wells and to re-vegetate the site. Prior to the partial release of the financial assurance covering the facility, the division will inspect the site to determine that closure is complete. After the 30 years following closure have expired, the division shall release the remainder of the financial assurance if the monitoring wells show no contamination and the re-vegetation is successful. If monitoring wells or other monitoring or leak detection systems reveal contamination during the facility's operation or in the 30 years following the facility's closure the division shall not release the financial assurance.

(2) Facility closure initiated by the division. Forfeiture of financial assurance.

(a) For good cause, the division may, after notice to the operator and opportunity for a hearing, order immediate cessation of a facility's operation when it appears that such cessation is necessary to protect fresh water, public health or the environment, or to assure compliance with statutes or division rules and orders. The division may order closure without notice and opportunity for hearing in the event of an emergency, subject to Section 70-2-23 NMSA 1978, as amended.

(b) If an operator refuses or is unable to conduct operations at a facility in a manner that protects public health, fresh water and the environment, refuses or is unable to conduct or complete an approved closure plan, is in material breach of the terms and conditions of its permit, or the operator defaults on the conditions under which the financial assurance was accepted, or if disposal operations have ceased and there has been no significant activity at the facility for six months, the division may take the following actions to forfeit all or part of the financial assurance:

(i) send written notice by certified mail, return receipt requested, to the ~~surface waste management facility~~ operator and the surety, if any, informing them of the decision to close the facility and to forfeit the financial assurance, including the reasons for the forfeiture and the amount to be forfeited, and notifying the operator and surety that a hearing request or other response must be made within 10 days of receipt of the notice; and

(ii) advise the operator and surety of the conditions under which the forfeiture may be avoided. Such conditions may include but are not limited to an agreement by the operator or another party to perform closure and post closure operations in accordance with the permit conditions, the closure plan (including any modifications or additional requirements imposed by the division) and division rules, and satisfactory demonstration that such party has the ability to perform such agreement.

(c) The division may allow a surety to perform closure if the surety can demonstrate an ability to timely complete the closure and post closure in accordance with the approved plan.

(d) If the operator and the surety do not respond to a notice of proposed forfeiture within the time provided, or fail to satisfy the specified conditions for non-forfeiture, the division shall proceed, after hearing if a hearing has been timely requested, to declare forfeiture of the financial assurance. The division may then proceed to collect the forfeited amount and use the funds to complete the closure, or, at the division's election, to close the facility and collect the forfeited amount as reimbursement. All amounts collected as a result of forfeiture of any

financial assurance shall be deposited in the Oil and Gas Reclamation Fund. In the event the amount forfeited and collected is insufficient for closure, the operator shall be liable for the deficiency. The division may complete or authorize completion of closure and post closure and may recover from the operator all reasonably incurred costs of closure and forfeiture in excess of the amount collected pursuant to the forfeiture. In the event the amount collected pursuant to the forfeiture was more than the amount necessary to complete closure and all costs of forfeiture, the excess shall be returned to the operator or surety, as applicable, reserving such amount as may be reasonably necessary for post closure.

(e) If the operator abandons the facility or cannot fulfill the conditions and obligations of the permit or division rules, the state of New Mexico, its agencies, officers, employees, agents, contractors and other entities designated by the state shall have all rights of entry into, over and upon the facility property, including all necessary and convenient rights of ingress and egress with all materials and equipment to conduct operation, termination and closure of the facility, including but not limited to the temporary storage of equipment and materials, the right to borrow or dispose of materials and all other rights necessary for operation, termination and closure of the facility in accordance with the permit and to conduct post closure monitoring.

(3) Facility and cell closure and post closure standards. The following minimum standards shall apply to closure and post closure of the installations indicated, whether the entire surface waste management facility is being closed or only a part of the facility.

(a) Oil treating plant closure. The operator shall ensure that:

(i) all tanks and equipment used for oil treatment are removed from the site and recycled or properly disposed of in accordance with division rules;

(ii) the site is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, for TPH, BTEX, major cations and anions and RCRA metals, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved; and

(iii) sample results are submitted to the environmental bureau in the division's Santa Fe office.

(b) Landfill cell closure. ~~The operator shall ensure that:~~

(i) The operator shall properly close all landfill cells ~~are properly closed~~, covering the cell with a top cover pursuant to Subparagraph (h) of Paragraph (10) of Subsection F of 19.15.2.53 NMAC, ~~40-mil thick liner, or division-approved evapo-transpiration cap, and at least three feet of uncontaminated native~~ with soil contoured to promote drainage of precipitation; side slopes shall not exceed a 25 percent grade (four feet horizontal to one foot vertical), such that the final cover of the landfill's top portion has a gradient of two percent to five percent, and the slope ~~are~~ is sufficient to prevent the ponding of water and erosion of the cover material. ~~; and~~

(ii) The area ~~is~~ shall be re-vegetated or otherwise restored in a manner that is capable of sustaining native plant growth.

(c) Landfill post closure. Following facility closure, the post closure care period for a landfill shall be 30 years.

(i) A post closure care and monitoring plan shall include maintenance of cover integrity, maintenance and operation of a leak detection system and operation of ~~methane~~ gas and ground water monitoring systems.

(ii) The operator or other responsible entity shall sample existing ground water monitoring wells annually and submit reports of monitoring performance and data collected within 45 days from the end of each calendar year.

(d) Landfarm closure. The operator shall ensure that:

(i) disking and addition of bioremediation enhancing materials continues until soils within the cells are remediated to ~~a TPH concentration of 100 mg/kg, a benzene concentration of 0.2 mg/kg and a BTEX concentration of 50 mg/kg~~ the standards provided in Paragraph (14) of Subsection G of 19.15.2.53 NMAC, or as otherwise approved by the division;

(ii) soil remediated to the foregoing standards are re-vegetated;

(iii) landfarmed soils that have not been or cannot be remediated to the above standards are removed, and the cell filled in with native soil and re-vegetated;

(iv) all berms on the ~~compost~~ facility are removed;

(v) buildings, fences, roads and equipment are removed, the site cleaned-up and tests conducted on the soils for contamination; and

(vi) annual reports of vadose zone and treatment zone sampling are submitted to the division's environmental bureau until the division has approved final closure of the facility.

(e) Landfarm post closure. The post-closure care period for a landfarm shall be five years. The operator or other responsible entity shall ensure that:

(i) ground water monitoring, if required because of ground water contamination, is maintained to detect possible migration of contaminants; and

(ii) any cover material is inspected and maintained.

(f) Evaporation pond closure. The operator shall ensure that:

(i) all liquids in the ponds are removed and disposed of in a division-approved surface waste management facility;

(ii) all liners are disposed of in a division-approved surface waste ~~disposal~~ management facility ~~permit~~;

(iii) all equipment associated with the facility is removed;

(iv) the site ~~shall be~~ is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods for TPH, BTEX, ~~major cations and anions and RCRA metals~~ metals and other inorganics listed in Subse4ctions A and B of 20.69.2.3103 NMAC, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved; and

(v) sample results are submitted to the environmental bureau in the division's Santa Fe office.

(4) Alternatives to re-vegetation. If the operator or owner of the land contemplates use of the land where a cell or facility ~~if~~ is located for purposes inconsistent with re-vegetation, the operator may, with division approval, ~~implement,~~ implement an alternative surface treatment appropriate for the contemplated use, provided that the alternative treatment will effectively prevent erosion.

J. Exceptions and waivers.

(1) In a permit application, the applicant may propose alternatives to any of the design and construction criteria provided in 19.15.2.53 NMAC, and the division may approve such alternative criteria if it determines that the proposed design and construction plan will adequately protect fresh water, public health, safety and the environment.

(2) Any division approval specifically described in 19.15.2.53 NMAC that relates to the operation or closure of a facility, and is not a part of the permitting process, may be handled administratively, without public notice or hearing, unless otherwise specifically provided. If the division denies any requested approval, the operator may file an application for review of such denial through the division hearing process. In such cases, the operator shall give notice of such application in accordance with Paragraph (4) Subsection C of 19.15.2.53 NMAC.

(3) The division may grant exceptions to, or waivers of, or approve alternatives to, any requirement of 19.15.2.53 NMAC, in an emergency, or otherwise after notice and opportunity for a hearing. An operator requesting an exception or waiver pursuant to Paragraph (3) of Subsection J of 19.15.2.53 NMAC shall provide notice of such request in accordance with Paragraph (4) Subsection C of 19.15.2.53 NMAC. The division may grant the requested exception, waiver or approval administratively, without hearing, if no person files a written objection with the division within thirty days after the mailing of such notice.

K. Transitional provisions. Existing permitted facilities. Surface waste management facilities in operation prior to the effective date of 19.15.2.53 NMAC pursuant to permits or orders of the division may continue to operate in accordance with such permits or orders, subject to the following provisions.

(1) All existing facilities shall comply with the operational, waste acceptance and closure requirements provided in 19.15.2.53 NMAC, except as otherwise specifically provided in the applicable permit or order, or in any specific waiver, exception or agreement that the division has granted in writing to the particular facility.

(2) Any major modification of an existing facility~~, and any new cells constructed at an existing facility,~~ shall conform to the design and construction specifications provided in 19.15.2.53 NMAC.

~~(3) Operators of existing facilities that were permitted under the 19.15.9.711 NMAC shall, not later than April 1, 2007, either bring all existing cells into compliance with the design and construction specifications provided in 19.15.2.53 NMAC, or close any cells that do not conform to those requirements; provided that the division may grant waivers to allow continued operation of existing cells not conforming to such requirements on a case-by-case basis as long as the existing design and construction specifications adequately protect fresh water, public health and the environment. If an operator applies for a waiver of this requirement, the operator shall give notice of the application in the manner provided in Subparagraphs (a) and (b) of Paragraph (4) of Subsection C of~~

~~19.15.2.53 NMAC. The division may grant such a waiver administratively if it receives no objection within 30 days after the notice's publication.~~