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022 POLLUTION AND SURFACE DRAINAGE

Operators shall take all reasonable precaution to avoid polluting streams, underground water and land surface and soils. No oil, salt water, brackish water or other water unfit for domestic, livestock, irrigation or other general use shall be allowed to flow over the surface or into any stream or underground fresh water zone.

<u>022.01</u> Spill Reporting Requirements

Any person operating any well, flow lines, receiving tanks, storage tanks, or receiving and storage receptacles into which crude oil or salt water is produced, received, or stored or through which oil or produced water is piped or transported shall notify the Director within two (2) business days of any oil and/or produced water spill, leak, or release in excess of twenty (20) barrels. The notice shall be followed within seven (7) working days by a written report. All such reports of breaks, leaks, and spills shall identify the location of the well, tank, receptacle or flow line by section, township, range, and property name so that the exact location may be readily located. Such report shall specify what steps have been taken or are in progress to remedy the situation reported and shall estimate the quantity of oil and/or produced water lost, or permitted to escape.

The operator shall immediately notify the appropriate State and Federal agencies of any oil or produced water spill, leak, or release which enters any surface or ground water or flows off the lease or unit lands.

<u>022.02</u> Cleanup Standards for Crude Oil Spills

Cleanup standards set forth in this section apply to only exempt E&P spills that do not: escape off the lease or enter any surface or ground water. For all other spills operators shall notify all appropriate State and Federal agencies.

022.03 Requirements for Cleanup

Removal of Free Oil - To prevent waste and to minimize the depth of oil penetration, all free oil must be removed immediately for reclamation.

Excavation - All soil containing over one (1) percent by weight total petroleum hydrocarbons must be remediated or disposed of at an authorized disposal site.

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Prevention of Stormwater Contamination - To prevent stormwater contamination soil excavated from the spill site containing over five (5) percent by weight total petroleum hydrocarbons must be:

- Mixed with clean soil to a mixture of less than five (5) percent, or
- Removed to an authorized disposal site, or
- Contained on secure location for future remediation.

The operator may select any technically sound method for remediation of soil.

022.04 Final Cleanup Level

The Commission shall have final authority to determine if remediation has achieved a cleanup level of less than one (1) percent by weight total petroleum hydrocarbons. Cleanup shall be completed as soon as technically feasible.

022.05 Remediation Reporting Requirements

For each spill exceeding twenty (20) barrels of crude oil, the operator must submit on a Form 4 a report to the Commission which shall give the following information:

- A detailed description of the disposal or remediation method used.
- The estimated date of completion of the site cleanup.
- Area, maximum depth and volume in cubic yards of soil affected by crude oil.
- A statement signed by the operator stating that all affected soils have been treated and the surface landowner has been notified.

<u>022.06</u> Crude Oil Spills of Twenty (20) Barrels or Less

Spills into the soil of twenty (20) barrels or less of crude oil must be remediated to these standards, but are not required to be reported to the Commission.

022.07 Cleanup Standards for Produced Water Spills

Cleanup standards set forth in this section apply to only exempt E&P spills that do not:

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- escape off the lease, or
- enter any surface or groundwater.

For all other spills operators shall notify the appropriate State and Federal agencies.

- O22.08 Standards set forth in this section do not include those produced waters released under the terms of a valid National Pollutant Discharge Elimination System (NPDES) permit.
- 022.09 Requirements for Cleanup

Removal of Free Water - To minimize the depth of produced water penetration, all free water must be removed for disposal.

Establish Containment Systems - To minimize the extent of the affected area, temporary dikes, pits, or tanks should be used.

The operator may select any technically sound method for remediation of affected soil.

022.10 Final Cleanup Level

The Commission shall have final authority to determine if the effected land has been restored to its prior beneficial use. Cleanup shall be completed as soon as technically feasible.

<u>022.11</u> Remediation Reporting Requirements

For each spill exceeding twenty (20) barrels of produced water, in which the water spilled exceeds ten thousand (10,000) parts per million total dissolved solids, or a spill exceeding two hundred (200) barrels of produced water, in which the water spilled contains less than 10,000 parts per million total dissolved solids, the operator must submit on a Form 4 a report to the Commission which shall give the following information:

- A detailed description of the disposal or remediation method used.
- The estimated date of completion of the site cleanup.
- Area, maximum depth and volume in cubic yards of soil affected by produced water.
- A statement signed by the operator stating that all affected soils have been treated and the surface landowner has been notified.

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022.12 Produced Water Pits

No person shall construct or operate a pit or pond to retain produced water without first filing an application for a permit on Form 15, RETAINING PIT PERMIT, and obtaining approval from the Director. Permit numbers shall be displayed on a weatherproof sign along with the name of the operator and lease at the pit site. Pits or ponds used to evaporate or retain water which were in existence prior to the effective date of this rule must be re-permitted within one year after the effective date of this rule.

If inspection indicates that the facility no longer meets the requirements of this rule, the use of the facility shall cease.

Upon application, an exception to the construction and operational requirements of Section 022.12 may be granted by the Director upon showing that the pit design, in consideration of geologic and hydrodynamic conditions, will protect water, soils, wildlife, and migratory birds.

<u>022.12A</u> All pits or ponds used to retain produced water shall:

- Be constructed in cut material or at least fifty (50) percent below original ground level.
- Be lined with a material compatible with the waste contained.
- Not be located in a natural drainage and shall be constructed above the seasonal high water table.
- Be bermed or diked and shall have at least two (2) feet of freeboard between the normal operating level of the water in the pit and the top of the banks, dikes or berms.
- Be fenced, screened, or netted to prevent access by livestock, wildlife and migratory birds if free oil is likely to be discharged to the pits.
- Not be used for the dumping of any wastes other than produced water.
- Approved monitoring systems may be required if a pit is located in an area that the Commission can reasonably define as environmentally sensitive.

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022.12B

Unlined evaporation pits shall be allowed for produced waters containing less than ten thousand (10,000) milligrams per liter total dissolved solids. Unlined evaporation pits that receive less than five (5) barrels per day on a monthly average shall be allowed when it can be shown that the pit will not impact water, soils, wildlife and migratory birds.

<u>022.12C</u> Pit Lining Requirements

The application for a lined pit submitted on Form 15 shall include the type and specifications of the liner to be used. All liners constructed of manufactured materials must meet or exceed the specifications set forth by the Commission.

Soil mixture liners, recompacted clay liners and manufactured liners must be compatible with the waste contained. The operator must provide evidence of the chemical resistance of the liner selected for use.

Manufactured liners must be installed over smooth fill subgrade which is free of pockets, loose rocks, or other materials which could damage the liner. Sand, sifted dirt, or bentonite are suggested as cushion materials if needed. At no time shall any organic material, except synthetic cushion fabric designed for that purpose, be used for a liner cushion.

Liner edges must be secured to prevent wind damage.

If a lined pit does not have an approved monitoring system, then it shall be drained, cleaned and inspected for leaks or holes each year.

The Director may grant an exception to this pit lining requirement where, the operator shows that due to the surface or subsurface geology, the uses of the known sources of groundwater, the permeability of the surrounding soils, or similar consideration, the known sources of underlying groundwater will not be adversely impacted.

022.12D

All retaining pits shall be kept free of surface accumulations of oil and other hydrocarbon substances

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and shall be cleaned within ten (10) days after the discovery of the accumulation by the operator or notice from the Commission, unless weather conditions or other conditions, as approved by the Commission, do not allow such removal within the time frame specified. In the event such removal is delayed by weather or other factors, the operator will notify the Commission on Form 4 within ten (10) working days of the operator noticing said accumulation, or of Commission notification. The notification will include an estimated time table during which the problem can be practically corrected, in an approved manner.

- <u>022.12E</u> This rule shall not apply to pits used in conjunction with drilling or reworking operations under a valid permit to drill unless such pit is used after the cessation of the drilling or reworking operations.
- O22.12F Produced water may be discharged into pits, onto land, or into other water sources if the operator has a valid discharge permit issued under the National Pollutant Discharge Elimination System (NPDES). The operator shall file a copy of the NPDES permit with the Commission.
- O22.13 Temporary Emergency Pits and Flare Pits Operators must file a Form 15 for approval of these facilities. These pits shall be exempt from the construction and monitoring requirements of this section.

Production fluid may not be retained for more than seventytwo (72) hours in any unlined pit prior to disposal.

<u>022.14</u> Pit closure must be done in accordance with a preapproved plan which must be submitted on a Form 4.

Verbal notice twenty-four (24) hours prior to closure is required to provide the Commission the opportunity to witness the closure procedure.

If closure plans or treatment procedures have changed from the original proposal, then a Form 4 must be resubmitted. Any wastes disposed of off-lease must be transported to an authorized disposal site.

Pit solids showing high concentrations of salt (exchangeable sodium percentage above fifteen (15) by weight) must be

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encapsulated or chemically or mechanically treated or removed and disposed of in an authorized disposal site.

Oil that may be present must be removed and recycled by commercially available utilized conventional means as soon as the weather permits or disposed of in an authorized disposal site or mixed with soil to less than one (1) percent oil content by weight when road spread, or land farmed.

Dispersants, wetting agents, surface reduction agents, surfactants or other chemicals that destroy, remove or reduce the fluid seal of a pit and allow the fluids therein to seep, drain or percolate into the soil underlying the pit are prohibited.

Pits cannot be used for disposal of refuse, equipment parts or unused chemicals. Proper closure of the pit is compromised by the inappropriate use of the pit for trash disposal and may result in the revocation of the permit.

- O22.15 After the pits have been properly backfilled, a biodegradable mulch may be required if soil erosion or the establishment of vegetation is determined to be a problem by the Director.
- No water produced in association with oil or gas production shall be transported from the lease of origin for disposal or used for road building without authorization of the Director.
 - <u>022.16A</u> Every person that transports water produced in association with the production of oil or gas shall possess a run ticket or equivalent documents containing the following:

destination.

022.16A1	The name and address of the transporter.
<u>022.16A2</u>	The name of the operator of the lease of origin.
<u>022.16A3</u>	The location of the lease tank battery by section, township, range and county.
<u>022.16A4</u>	The location of the destination by section township, range and county.
<u>022.16A5</u>	The date and time the fluids were loaded for transportation and unloaded at the

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	<u>022.16A6</u>	The estimated volume of fluids, or the opening and closing tank gauges or meter readings.			
	022.16A7	The signature of the driver.			
<u>022.16B</u>	One copy of the documentation shall be left at the facility from which the water was loaded for transportation.				
<u>022.16C</u>	One copy of the documentation shall be carried in the vehicle during transportation and shall be produced for examination and inspection by any agent of the Commission or any authorized law officer upon request.				
022.16D	All persons that store, possess, or dispose of water produced in association with the production of oil or gas shall retain a record reflecting a complete inventory, including detail of the acceptance and disposition of the fluids for a period of at least five (5) years.				