FINAL GENERAL PERMIT FOR DISCHARGES FROM THE OFFSHORE SUBCATEGORY OF THE OIL AND GAS EXTRACTION POINT SOURCE CATEGORY TO THE TERRITORIAL SEAS OFF TEXAS

(Permit No. TXG260000)

August 4, 2005

U.S. Environmental Protection Agency
Region 6
1445 Ross Ave.
Dallas, TX 75202

Authorization To Discharge Under
the National Pollutant Discharge Elimination System

In compliance with the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq. the "Act" or "Clean Water Act" or "CWA"), operators of lease blocks in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category which are located in the territorial seas off Texas are authorized to discharge to the territorial seas off Texas in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and Appendix A hereof. Also, operators of lease blocks in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category which are not located in the territorial seas off Texas (i.e. Outer Continental Shelf) are authorized to discharge produced water from those lease blocks to the territorial seas off Texas in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and Appendix A hereof.

Operators of lease blocks discharging within the area covered by this general permit must submit written notification to the Regional Administrator that they intend to be covered (See Part I.A.2). Unless otherwise notified in writing by the Regional Administrator after submission of the notification, owners or operators requesting coverage are authorized to discharge under this general permit. Operators of lease blocks discharging within the general permit area who fail to notify the Regional Administrator of intent to be covered by this general permit are not authorized under this general permit to discharge pollutants from those facilities.

Facilities which adversely affect properties that are listed or are eligible for listing in the National Register of historical Places are also not authorized to discharge under this permit.

This permit shall become effective at Midnight Central Daylight Savings Time November 5, 2005.

This permit and the authorization to discharge shall expire at midnight, Central Daylight Savings Time, November 4, 2010.

Signed this 26th day of August, 2005.

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Miguel I. Flores
Director, Water Quality Protection Division
EPA Region 6

OTHER LEGAL REQUIREMENTS:

Ocean Discharge Criteria Evaluation. At 68 FR 64895 (November 17, 2003), Region 6 determined that discharges in compliance with the proposed General Permit for the Territorial Seas off Texas (TXG260000) would not cause unreasonable degradation of the marine environment. No comments have been received which disagree with that determination.

Coastal Zone Management Act. At 68 FR 64895 (November 17, 2003), the Environmental Protection Agency (EPA) determined that the activities proposed to be authorized by the permit were consistent with approved Coastal Zone Management Plan for Texas. That determination was submitted to the Railroad Commission of Texas and the Texas Coastal Coordination Council for review. Certification was received from the Railroad Commission of Texas in a letter dated January 12, 2004. Therefore, all requirements of the Coastal Management Act have been met for this permit action.

Marine Protection, Research, and Sanctuaries Act. The Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 regulates the dumping of all types of materials into ocean waters and establishes a permit program for ocean dumping. In addition the MPRSA establishes the Marine Sanctuaries Program, implemented by the National Oceanographic and Atmospheric Administration (NOAA), which requires NOAA to designate ocean waters as marine sanctuaries for the purpose of preserving or restoring their conservation, recreational, ecological or aesthetic values. Pursuant to the Marine Protection Research and Sanctuaries Act, the National Oceanographic and Atmospheric Administration has not designated any marine sanctuaries within the area covered under the permit

Endangered Species Act. As explained at 68 FR 64895 (November 17, 2003), EPA has found that re-issuance of the General Permit for the Territorial Seas off Texas will not adversely affect any listed threatened or endangered species or designated critical habitat. EPA requested written concurrence on that determination from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service concurred with that determination and issued a "no Effect Finding" on January 5, 2004. In a letter dated May 18, 2005, the National Marine Fisheries Service also provided such concurrence on the proposed National Pollutant Discharge Elimination System (NPDES) general permit for the Territorial Seas off Texas.

State Water Quality Standards and State Certification. The proposed permit contained a number of conditions intended to ensure that discharges authorized under it will meet the requirements of State Water Quality Standards. On January 12, 2004, the Railroad Commission of Texas provided certification that the proposed permit is consistent with State Water Quality Standards.

Executive Order 12866. The Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12291 pursuant to Section 8(b) of that order. Guidance on Executive Order 12866 contain the same exemptions on OMB review as existed under Executive Order 12291. In fact, EPA prepared a regulatory impact analysis in connection with its promulgation of guidelines on which a number of the permit's provisions are based and submitted it to OMB for review. See 58 FR 12494.

Paperwork Reduction Act. The information collection required by this permit has been approved by OMB under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq, in submission made for the NPDES permit program and assigned OMB control numbers 2040-0086 (NPDES permit application) and 2040-0004 (discharge monitoring reports).

Since this permit is very similar in reporting and application requirements and in discharges which are required to be monitored as the Western Gulf of Mexico Outer Continental Shelf (OCS) general permit (GMG290000) the paperwork burdens are expected to be nearly identical. When it issued the OCS general permit, EPA estimated it would take an affected facility three hours to prepare the request for coverage and 38 hours per year to prepare discharge monitoring reports. It is estimated that the time required to prepare the request for coverage and discharge monitoring reports for this permit will be the same.

However, the alternative to obtaining authorization to discharge under this general permit is under an individual permit. The application and reporting burden of obtaining authorization to discharge under the general permit is expected to be significantly less than under an individual permit.

Regulatory Flexibility Act. The Regulatory Flexibility Act, 5 U.S.C. 601 et seq, requires that EPA prepare a regulatory flexibility analysis for regulations that have a significant impact on a substantial number of small entities. As indicated below, the permit issued today is not a "rule" subject to the Regulatory Flexibility Act. EPA prepared a regulatory flexibility analysis, however, on the promulgation of the Offshore Subcategory guidelines on which many of the permit's effluent limitations are based. That analysis shows that issuance of this permit will not have a significant impact on a substantial number of small entities.

Unfunded Mandates Reform Act. Section 201 of the Unfunded Mandates Reform Act (UMRA), 2 U.S.C. §§ 1501, et seq, generally requires Federal agencies to assess the effects of their "regulatory actions" on State, local, and tribal governments and the private sector. UMRA uses the term "regulatory actions" to refer to regulations. (See, e.g., UMRA section 201, "Each agency shall . . . assess the effects of Federal regulatory actions . . . (other than to the extent that such regulations incorporate requirements specifically set forth in law)" (emphasis added)). UMRA section 102 defines "regulation" by reference to section 658 of Title 2 of the U.S. Code, which in turn defines "regulation" and "rule" by reference to section 601(2) of the Regulatory Flexibility Act (RFA). That section of the RFA defines "rule" as "any rule for which the agency publishes a notice of proposed rulemaking pursuant to section 553(b) of [the Administrative Procedure Act (APA)], or any other law. . ."

NPDES general permits are not "rules" under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits are also not subject to such a requirement under the CWA. While EPA publishes a notice to solicit public comment on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide "an opportunity for a hearing." Thus, NPDES general permits are not "rules" for RFA or UMRA purposes.

EPA has determined that the proposed permit reissuance would not contain a Federal requirement that may result in expenditures of $100 million or more for State, local and tribal governments, in the aggregate, or the private sector in any one year.

The Agency also believes that the permit would not significantly nor uniquely affect small governments. For UMRA purposes, "small governments" is defined by reference to the definition of "small governmental jurisdiction" under the RFA. (See UMRA section 102(1), referencing 2 U.S.C. 658, which references section 601(5) of the RFA.) "Small governmental jurisdiction" means governments of cities, counties, towns, etc., with a population of less than 50,000, unless the agency establishes an alternative definition.

The permit, as proposed, also would not uniquely affect small governments because compliance with the proposed permit conditions affects small governments in the same manner as any other entities seeking coverage under the permit. Additionally, EPA does not expect small governments to operate facilities authorized to discharge by this permit.

National Environmental Policy Act (NEPA). EPA determined that its decision on the NPDES general permit for oil and gas extraction in the Territorial Seas of Texas is a major federal action significantly affecting the quality of the human environment. Thus, EPA prepared a Draft EIS to evaluate the potential environmental consequences of its Federal (general permit) action, pursuant to its responsibilities under the National Environmental Policy Act of 1969 (NEPA).

EPA issued a Notice of Intent (NOI) on February 12, 1993, to prepare an Environmental Impact Statement (EIS) on new source NPDES General Permits for the Offshore Subcategory of the Oil & Gas Extraction Category proposed for the Territorial Seas of both Texas and Louisiana. Scoping issues were considered through the NOI and other informal procedures, including interagency meetings conducted in July, 1993. The Draft EIS was issued in January 1994, for review and comment from interested agencies, officials, groups and individuals. EPA's public hearing to receive comments on the Draft EIS was held on March 16, 1994. The Final EIS issued in June 1996, however, covered only EPA's proposed general permit action for Louisiana, and recognized that a separate Final EIS would be prepared prior to its decision on the NPDES general permit for the Territorial Seas of Texas.

The Final EIS for this general permit was published in the Federal Register at 69 FR 15829 on March 26, 2004, and the thirty day comment period expired on April 26, 2004. EPA responded to all issues raised on the Final EIS and issued a Record of Decision on January 11, 2005.

Magnuson-Stevens Fishery Management and Conservation Act. EPA determined that issuance of this general permit is not likely to adversely effect Essential Fish Habitat established under the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act. The proposed permit language and Fact Sheet were submitted to the National Marine Fisheries Service for review of that determination. On November 25, 2003 the National Marine Fisheries Service transmitted a letter concurring with the determination that issuance of the permit is not likely to adversely effect Essential Fish Habitat.

PART I. REQUIREMENTS FOR NPDES PERMITS

Section A. Permit Applicability and Coverage Conditions

1. Operations Covered

This permit establishes effluent limitations, prohibitions, reporting requirements, and other conditions on discharges from oil and gas facilities engaged in production, field exploration, developmental drilling, well completion, and well treatment operations.

The permit coverage area consists of lease blocks located in and discharging to the territorial seas off Texas, which as defined in CWA section 502 (8) to consist of "the belt of seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending

seaward a distance of three miles." In addition, permit coverage consists of discharges of produced water made to the territorial seas off Texas originating from lease blocks in other areas of the Offshore Subcategory. This permit does not authorize discharges from facilities defined as "coastal", "onshore", or "stripper" (see 40 CFR Part 435, Subparts C, D, and E).

2. Notification Requirements

Written notification of intent to be covered shall include the legal name and address of the operator, the lease area, the lease number and well number assigned by the Railroad Commission of Texas, and the number and type of facilities located within the lease block and shall be submitted at least fourteen days prior to the commencement of discharge. Operators discharging within the area of coverage of this permit prior to permit issuance shall submit notification of intent to be covered within 30 days after such issuance. If an application for an individual NPDES permit has been previously submitted for the lease, the notification shall include the application/permit number assigned by EPA.

All notifications of intent to be covered and any subsequent reports under this permit shall be sent to the following address:

Water Enforcement Branch (6EN-WC)
Region 6
U.S. Environmental Protection Agency
P.O. Box 50625
Dallas, TX 75250

3. Termination of Operations

Lease block operators shall notify the Regional Administrator within 60 days after the permanent termination of discharges from their facilities within the lease block.

4. Intent to be Covered by a Subsequent Permit

Operators who have submitted a notice of intent to be authorized to discharge by this permit need not submit a notice of intent to be authorized to discharge by a subsequent permit even in advance of permit expiration.

5. Changes in Facility/Lease Information

Operators shall notify EPA Region 6 of any changes to the information previously submitted in their notice of intent, within thirty days of such a change.

Section B. Effluent Limitations and Monitoring Requirements
(See also the limitations summary in Appendix A, Table 3)

1. Drilling Fluids and Drill Cuttings

There shall be no discharge of drilling fluids or drill cuttings.

De minimis discharges drilling fluids shall be contained to the extent practicable to prevent discharge. Allowable de minimis discharges may include wind blown drilling fluids from the pipe rack and minor drips and splatters around mud

handling and solids control equipment. Such de minimis discharges are not likely to be measurable.

2. Deck Drainage Limitations

Free Oil. No free oil shall be discharged, as determined by the visual sheen method on the surface of the receiving water. Monitoring shall be performed once per day when discharging, during conditions when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the facility is manned. The number of days a sheen is observed must be recorded.

3. Produced Water
a) Limitations

Oil and Grease. Produced water discharges must not exceed both a daily maximum of 42 mg/l and a monthly average of 29 mg/l for oil and grease. The sample type shall be either grab, or a 24-hour composite which consists of the arithmetic average of the results of 4 grab samples taken over a 24-hour period. If only one sample is taken for any one month, it must meet both the daily maximum and monthly average limits. Samples shall be collected prior to the addition of any seawater to the produced water waste stream. The analytical method is that specified at 40 CFR Part 136.

Toxicity. The 7-day average minimum and monthly average minimum No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Appendix A, Tables 1A through 1F of this permit. Critical dilution shall be determined using Table 1A through 1F in Appendix A of this permit and is based on the discharge rate most recently reported on the discharge monitoring report, discharge pipe diameter, and water depth between the discharge pipe and the bottom. Facilities which have not previously reported produced water flow on the discharge monitoring report shall use the highest monthly average flow measured during the previous three months for determining the critical dilution from Appendix A, Tables 1A through 1F of this permit. The monthly average minimum NOEC value is defined as the arithmetic average of all 7-day average NOEC values determined during the month. See Part I.D.2 of this permit.

[Exception] Permittees wishing to increase mixing may use a horizontal diffuser, add seawater, or install multiple discharge ports. If the permittee chooses to increase mixing by adding seawater, the rate of addition must remain constant at all times. Adding seawater only for obtaining samples for whole effluent toxicity testing or other purposes is not permitted. Alternatively, permittees wishing to reduce the critical dilution of the discharge may make operational changes that reduce the flow rate, such as, shutting-in wells.

Permittees wishing to reduce a produced water discharge rate, and thereby the critical dilution, through operational changes must provide EPA with a description of the specific changes that were made and the resultant flow rate. The permittee must certify that this flow rate will not be exceeded for the remainder of the DMR period, unless the permittee re-certifies.

Permittees using a horizontal diffuser shall install the diffuser so that the 7-day average minimum and monthly average minimum No Observable Effect Concentration (NOEC) is equal to or greater than the critical dilution concentration as calculated using CORMIX2 version 4.2 GT, or newer, with the following input conditions:

Density Gradient = 0.2291 σ_τ/m
Ambient seawater density at diffuser depth = 1017 kg/m^3
Produced water density = 1070 kg/m^3
Current speed = 4 cm/sec.

Permittees shall submit a certification that the diffuser has been installed and state the critical dilution corresponding to the diffuser in the certification. The CORMIX2 model runs shall be retained by the permittee as part of its NPDES records.

Permittees discharging produced water at a rate greater than 25,000 bbl/day shall determine the critical dilution using CORMIX version 4.2 GT (or a newer version of CORMIX) with the input parameters shown above. Permittees shall retain the model output files as a part of their NPDES records.

Permittees using vertically aligned multiple discharge ports shall provide vertical separation between ports that is consistent with Appendix A, Tables 1A through 1F of this permit. When multiple discharge ports are installed, the depth difference between the discharge port closest to the sea floor and the sea floor shall be the depth difference used to determine the critical dilution from Appendix A, Tables 1A through 1F of this permit. The critical dilution value shall be based on the port flow rate (total flow rate divided by the number of discharge ports) and based on the diameter of the discharge port (or smallest discharge port if they are of different styles).

When seawater is added to produced water prior to discharge, the total produced water flow, including the added seawater, shall be used in determining the critical dilution from Appendix A, Tables 1A through 1F.

24-Hour Acute Toxicity Produced water discharges must pass a 24-hour LC50 test using 100% effluent. As allowed above, for the 7-day chronic toxicity limit, operators may add seawater to the produced water stream prior to discharging to meet this toxicity limit. See Part I.D.4. of this permit.

b) Monitoring Requirements

Flow. Once per month, an estimate of the flow (MGD) must be recorded.

7-Day Chronic and 24-Hour Acute Toxicity. Toxicity testing shall be conducted on representative produced water samples collected once per six months.

Toxicity testing requirements for new discharges shall become effective at the start of the first calendar quarter after discharge begins (i.e. January - March, April - June, July - September, and October - December).

Samples for monitoring produced water toxicity shall be collected after the addition of any added substances, including seawater that is added prior to discharge, and before the flow is split for multiple discharge ports. Samples also shall be representative of produced water discharges when scale inhibitors, corrosion inhibitors, biocides, paraffin inhibitors, well completion fluids, workover fluids, and/or well treatment fluids are used in operations.

If the permittee has been compliant with these toxicity limits for one full year (twelve consecutive months), the required testing frequency shall be reduced to once per year. See also Part I.D.2.e and Part I.D.4.d of this permit.

Visual Sheen The permittee shall monitor free oil using the visual sheen test method on the surface of the receiving water. Monitoring shall be performed once per day when discharging, during conditions when observation of a sheen, in the vicinity of the discharge on the surface of the receiving water is possible, and the facility is manned.

Oil and Grease A produced water sample shall be collected and analyzed for oil and grease when a sheen is observed in the vicinity of the produced water discharge. At a minimum a sample shall be collected and analyzed once per month.

4. Produced Sand

There shall be no discharge of produced sand.

5. Well Treatment, Completion, and Workover Fluids

a) Limitations

Free Oil. No free oil shall be discharged. Monitoring shall be performed using the static sheen test method once per day when discharging and the facility is manned. The number of days a sheen is observed must be recorded.

Oil and Grease. Well treatment, completion, and workover fluids must meet both a daily maximum of 42 mg/l and a monthly average of 29 mg/l limitation for oil and grease.

Priority Pollutants. For well treatment fluids, completion fluids, and workover fluids, the discharge of priority pollutants is prohibited except in trace amounts. Information on the specific chemical composition of any additives containing priority pollutants shall be recorded.

[Note] If materials added downhole as well treatment, completion, or workover fluids contain no priority pollutants, the discharge is assumed not to contain priority pollutants except possibly in trace amounts.

b) Monitoring Requirements

This discharge shall be considered produced water, for monitoring purposes, when commingled with produced water.

Free Oil. Monitoring shall be performed using the static sheen test method once per day

when discharging and the facility is manned. The number of days a sheen is observed must be recorded.

Oil and Grease. Monitoring shall be performed once per month. The sample type may be either grab or a 24-hour composite consisting of the arithmetic average of the results of 4 grab samples taken within the 24-hour period. If only one sample is taken for any one month, it must meet both the daily and monthly limits.

6. Sanitary Waste (Facilities Continuously Manned by 10 or more Persons)

a) Prohibitions

Solids. No floating solids may be discharged to the receiving waters. An observation must be made once per day for floating solids. Observation must be made during daylight in the vicinity of sanitary waste outfalls following either the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed must be recorded.

b) Limitations

Residual Chlorine. Total residual chlorine is a surrogate parameter for fecal coliform. Discharge of residual chlorine must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded (approved method, Hach CN-66-DPD).

Exception: Any facility which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained at the facility.

7. Sanitary Waste (Facilities Continuously Manned by 9 or Fewer Persons or Intermittently by Any Number)

a) Prohibitions

Solids. No floating solids may be discharged to the receiving waters. An observation must be made once per day for floating solids. Observation must be made during daylight in the vicinity of sanitary waste outfalls following either the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed must be recorded.

Exception: Any facility which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained at the facility.

8. Domestic Waste

a) Prohibitions

Solids. No floating solids or foam shall be discharged.

b) Monitoring Requirements

An observation shall be made once per day during daylight in the vicinity of domestic waste outfalls following the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed must be recorded.

9. Miscellaneous Discharges

The following miscellaneous discharges are authorized:

Desalination Unit Discharge
Diatomaceous Earth Filter Media
Blowout Preventer Fluid
Uncontaminated Ballast Water
Uncontaminated Bilge Water
Mud, Cuttings, and Cement at the Seafloor
Uncontaminated Freshwater
Uncontaminated Seawater
Boiler Blowdown
Source Water and Sand
Excess Cement Slurry

a) Limitations

Free Oil. No free oil shall be discharged. Discharge is limited to those times that a visual sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water once per week when discharging, or by use of the static sheen method at the operator's option. The number of days a sheen is observed must be recorded.

[Exceptions] Uncontaminated seawater, uncontaminated freshwater, source water and source sand, uncontaminated bilge water, and uncontaminated ballast water may be discharged from platforms that are on automatic purge systems without monitoring for free oil, when the facilities are not manned. Additionally, discharges at the seafloor of: muds and cuttings prior to installation of the marine riser, cement, and blowout preventer fluid may be discharged without monitoring with the static sheen test when conditions make observation of a visual sheen on the surface of the receiving water impossible.

10. Miscellaneous Discharges of Seawater and Freshwater which have been chemically treated.

The following miscellaneous discharges of seawater and freshwater which have been chemically treated are authorized:

Excess seawater which permits the continuous operation of fire control and utility lift pumps
Excess seawater from pressure maintenance and secondary recovery projects
Water released during training or testing of personnel in fire protection

Seawater used to pressure test new piping and new pipelines
Seawater used to pressure test existing piping and existing pipelines
Ballast water
Once Through Non-contact cooling water
Desalinization unit discharge

a) Limitations

Treatment Chemicals. The concentration of treatment chemicals in discharged seawater or freshwater shall not exceed the most stringent of the following three constraints:

1) the maximum concentrations and any other conditions specified in the EPA product registration labeling if the chemical is an EPA registered product

2) the maximum manufacturer's recommended concentration

3) 500 mg/l

Free Oil. No free oil shall be discharged. Discharge is limited to those times that a visible sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water once per week when discharging, or by use of the static sheen method at the operator's option. The number of days a sheen is observed must be recorded.

Exception: Monitoring for free oil on discharges from existing piping and existing pipelines shall be performed at least three times per discharge as follows: 1) within thirty minutes after commencement of discharge; 2) at the estimated middle of the discharge; and 3) within fifteen minutes before or after the discharge has ceased.

Toxicity. The 48-hour minimum and monthly average minimum No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in this permit in Appendix A, Table 2-A for seawater discharges and 2-B for freshwater discharges. Critical dilution shall be determined using Table 2 in Appendix A of this permit and is based on the discharge rate and discharge pipe diameter. The monthly average minimum NOEC value is defined as the arithmetic average of all 48-hour average NOEC values determined during the month. See Part I.D.3 of this permit.

b) Monitoring Requirements

Flow. Once per month, an estimate of the flow (MGD) must be recorded.

Toxicity. The required frequency of testing for continuous discharges shall be once per six months.

Intermittent or batch discharges shall be monitored once per discharge but are required to be monitored no more frequently than once per six months.

Samples shall be collected after addition of any added substances, including seawater that is added prior to discharge, and before the flow is split for multiple discharge ports. Samples also shall be representative of the discharge. Methods to increase dilution

previously described for produced water in Part I.B.2.a also apply to seawater and freshwater discharges which have been chemically treated.

If the permittee has been compliant with this toxicity limit for one full year (12 consecutive months) for a continuous discharge of chemically treated seawater or freshwater, the required testing frequency shall be reduced to once per year for that discharge.

Section C. Other Discharge Limitations

1. Halogenated Phenolic Compounds

There shall be no discharge of halogenated phenolic compounds as a part of any waste stream authorized in this permit.

2. Dispersants, Surfactants, and Detergents

The facility operator shall minimize the discharge of dispersants, surfactants, and detergents except as necessary to comply with the safety requirements of the Occupational Safety and Health Administration. This restriction applies to tank cleaning and other operations which do not directly involve the safety of workers.

3. Garbage

The discharge of garbage is prohibited (See Part II.G.30).

4. Areas of Biological Concern

There shall be no discharge in Areas of Biological Concern, including marine sanctuaries.

Section D. Other Conditions

1. Samples of Wastes

If requested, the permittee shall provide EPA with a sample of any waste in a manner specified by the Agency.

2. <u>PRODUCED WATER TOXICITY TESTING REQUIREMENTS (7-DAY CHRONIC NOEC MARINE LIMITS)</u>

<u>Scope, Frequency and Methodology</u>

a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.

b. The permittee shall conduct all toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified below and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition" (EPA-821-R-02-014), or the most recent update thereof:

1) Chronic static renewal 7-day survival and growth test using the mysid shrimp *(Mysidopsis bahia*) (Method 1007.0 or the most recent update thereof). A minimum of eight replicates with five organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per six months.

2) Chronic static renewal 7-day larval survival and growth test using the inland silverside (*Menidia beryllina*) (Method 1006.0 or the most recent update thereof). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per six months.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, including Percent Minimum Significant Difference (PMSD) boundary requirements, procedures, and quality assurance requirements specified in the test methods and permit.

d) The effluent dilution series used for the toxicity test shall be based on the critical dilution, using a dilution factor of 0.5. The effluent dilution series must bracket the critical dilution, with two effluent dilutions lower than the critical dilution and two effluent dilutions greater than the critical dilution.

e) If the effluent fails the survival endpoint at the critical dilution, the permittee shall be considered in violation of this permit limit. Also, when the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the critical dilution, the monitoring frequency for the affected species will increase to monthly until such time as compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months or three consecutive tests, if the operator is unable to collect a monthly sample due to cessation of discharge. After compliance is demonstrated by the three tests, the permittee may return to the testing frequency stated in Part I.B.4.b of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

f) This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean dry weight of surviving mysid shrimp of 0.20 mg or greater;

3) a control mean dry weight for surviving unpreserved inland silverside of 0.50 mg or greater and 0.43 mg or greater for surviving preserved inland silverside.

4) a control Coefficient of Variation percent (CV%) between replicates of 40 or less in the in the growth and survival tests.

5) a critical dilution CV% of 40 or less in the growth and survival endpoints for either growth and survival test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test.

6) a PMSD range of 11 - 37 for mysid shrimp growth;

7) a PMSD range of 11 - 28 for inland silverside growth.

b. Statistical Interpretation

1) For the mysid shrimp and the inland silverside larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the methods described in the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition" (EPA-821-R-02-014), or the most recent update thereof.

2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The EPA manual, "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.

4) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is herein defined as a statistically significant difference at the 95% confidence level between the survival, reproduction, or growth of the test organism(s) in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism(s) in the control (0% effluent).

5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2 above and a full report will be submitted to the Water Quality Standards Team

6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The above-referenced guidance manual will be used when making a determination of test acceptability

7) The Water Quality Standards Team will review test results (i.e., Table 1 and Table 2 forms) for consistency with established TCEQ rules, procedures, and permit requirements.

c. Dilution Water

Operators mat use either ambient seawater or synthetic seawater for dilution water in the toxicity test. When using synthetic seawater, the following conditions must be met:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements listed above, and

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days);

g) The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms", EPA-821-R-02-014, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part II.C.3 of this permit. The permittee shall submit full reports only upon the specific request of the Agency.

h) In accordance with Part II.D.4 of this permit, the permittee shall report on the DMR for the reporting period the lowest Whole Effluent Lethality values determined for either species for the 30-Day Average Minimum and 7-Day Minimum under Parameter No. 22414, and the permittee shall report only the results of the valid toxicity test as follows:

1. MENIDIA BERYLLINA (INLAND SILVERSIDE MINNOW)
   A) If the Inland Silverside minnow No Observed Effect Concentration (NOEC) for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B on the Discharge Monitoring Report.

   B) Report the Inland Silverside minnow NOEC value for survival, Parameter No. TOP6B on the Discharge Monitoring Report.

   C) Report the Inland Silverside minnow NOEC value for growth, Parameter No. TPP6B on the Discharge Monitoring Report.

2. MYSIDOPSIS BAHIA (MYSID SHRIMP)
   A) If the Mysid shrimp NOEC for survival is less than the critical effluent dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E on the Discharge Monitoring Report.

   B) Report the Mysid shrimp NOEC value for survival, Parameter No. TOP3E on the Discharge Monitoring Report.

   C) Report the Mysid shrimp NOEC value for growth, Parameter No. TPP3E on the Discharge Monitoring Report.

3. CHEMICALLY TREATED SEAWATER AND FRESHWATER TOXICITY TESTING REQUIREMENTS (48-HOUR ACUTE NOEC MARINE LIMITS)

The approved test methods for permit compliance are identified in 40 CFR Part 136.

a) The permittee shall utilize the Mysidopsis bahia (Mysid shrimp) acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012.

b) Menidia beryllina (Inland Silverside minnow) acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012.

c) The NOEC (No Observed Effect Concentration) is defined as the greatest effluent

dilution which does not result in lethality that is statistically different from the control (0% effluent) at the 95% confidence level.

d) If the effluent fails the survival endpoint at the critical dilution, the permittee shall be considered in violation of this permit limit. Also, when the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the critical dilution, the monitoring frequency for the affected species will increase to monthly until such time as compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months. After compliance is demonstrated for three consecutive months, the permittee may return to the testing frequency in use at the time of the initial test failure. During the period the permittee is out of compliance, test results shall be reported on the annual DMR that includes this period.

e) This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

f) Test Acceptance
The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

a) Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.

ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the Mysid shrimp survival test and the Inland Silverside minnow survival test.

iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for the Mysid shrimp survival test and the Inland Silverside minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

g) Statistical Interpretation
For the Mysid shrimp survival test and the Inland Silverside minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the NOEC as described in EPA-821-R-02-012 or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 4.f above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in item (i) below.

h) The permittee shall prepare a full report of the results of all tests conducted pursuant to

this section in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA-821-R-02-012, or the latest update thereof, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part II.C.3 of this permit. The permittee shall submit full reports only upon the specific request of the Agency.

i) In accordance with Part II.D.4 of this permit, the permittee shall report on the DMR for the reporting period whether the lowest Whole Effluent Lethality values determined for either species passed the 30-Day Average Minimum and 48-Hour Minimum NOEC.

4. ACUTE TOXICITY TESTING REQUIREMENTS FOR PRODUCED WATER (24-HOUR ACUTE LC-50 MARINE LIMITS)

a) The permittee shall utilize the Mysidopsis bahia (Mysid shrimp) acute static nonrenewal 24-hour toxicity test using EPA/600/4-90/027F, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b) The permittee shall utilize the Menidia beryllina (Inland Silverside minnow) acute static nonrenewal 24-hour definitive toxicity test using EPA/600/4-90/027F, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

c) If any other test conducted under biomonitoring requirements elsewhere in this permit includes the 100% effluent concentration in the dilution series, the mean survival results at 24 hours from that test, for each species, may be submitted to fulfill the requirements of this section. See item i.2 of this section for acceptable test substitutions. The >50% survival in 100% effluent for a 24 hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted for compliance with the minimum testing frequency.

d) The permittee shall test the effluent for lethality in accordance with the provisions of this section. Such testing will determine if an effluent sample meets the Texas Surface Water Quality Standard listed at 30 TAC §307.6(e)(2)(B) of greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

e) The permittee shall submit the results of these tests on the Discharge Monitoring Report (DMR) due at the end of the reporting period.

f) In addition to an appropriate control (0% effluent), a 100% effluent concentration shall be used in the toxicity tests.

g) This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

h) REQUIRED TOXICITY TESTING CONDITIONS

1. Control/Dilution Water

Control and/or dilution water used in the test shall normally consist of a standard, synthetic, reconstituted seawater. If the permittee is utilizing the results of a 48-hour acute test to satisfy these 24-hour acute biomonitoring requirements in accordance with Item c above, the permittee may use receiving water as the control and dilution water if the control meets the requirements of Item h.2.

2. Control Survival

If more than 10% of the test organisms in any control die within 24 hours, that test including the control and all effluent dilution(s) shall be repeated with all results from both tests reported as per Item i.2 of this section.

3. Repeat Test

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied. A repeat test shall be conducted within the required reporting period of any test determined to be invalid, in accordance with this section.

4. Samples and Composites

The samples shall be collected at a point following the last treatment unit.

One flow-weighted composite sample representative of normal operating flows will be collected from each outfall, and a discrete test will be run on each composite sample.

Samples shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage. The toxicity tests must be initiated within 36 hours after collection of the composite sample. The composite sample must be collected such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

i) REPORTING

1. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation section of EPA/600/4-90/027F for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART II.D.4 of this permit. The permittee shall submit the information contained in any full report upon the specific request of the Environmental Protection Agency.

2. The permittee shall report the following results of each toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART II.D.4 of this permit.

i. Menidia beryllina (Inland Silverside minnow)

Enter the following codes on the DMR for Parameter No. TIE6B:

"0" if mean survival at 24 hrs. is greater than 50% in 100% effluent;

"1" if the mean survival at 24 hrs. is less than or equal to 50% in 100% effluent.

In cases of test substitution (See 24 HOUR ACUTE TEST SUBSTITUTIONS, Item 1.a, above), mean survival results in 100% effluent from the 48 hr. acute or 7 day chronic Menidia beryllina or Cyprinodon variegatus tests, determined at 24 hrs., shall be reported on the DMR under Parameter No. TIE6B.

ii. Mysidopsis bahia (Mysid shrimp)

Enter the following codes on the DMR for Parameter No. TIE3E:

"0" if mean survival at 24 hrs. is greater than 50% in 100% effluent;

"1" if the mean survival at 24 hrs. is less than or equal to 50% in 100% effluent.

In cases of test substitution (See 24-HOUR ACUTE TEST SUBSTITUTIONS, Item 1.a, above), mean survival results in 100% effluent from the 7 day chronic Mysidopsis bahia tests, determined at 24 hrs., shall be reported on the DMR under Parameter No. TIE3E.

j. TOTAL DISSOLVED SOLIDS EXEMPTION

The requirement to comply with 30 TAC 307.6.(e)(2)(B) may be exempted upon proof that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g. metals) form a salt compound. Upon approval from EPA, testing may be done using an ion-adjustment protocol, alternate species testing, or single species testing in accordance with the implementation guidance for the Texas Water Quality Standards.

PART II. STANDARD CONDITIONS FOR NPDES PERMITS

Section A. General Conditions

1. Introduction

In accordance with the provisions of 40 CFR Part 122.41, *et. seq.*, this permit incorporates by reference ALL conditions and requirements applicable to NPDES permits set forth in the Clean Water Act, as amended, as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action or for requiring a

permittee to apply and obtain an individual NPDES permit.

3. Toxic Pollutants

a. Notwithstanding Part II.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. Duty to Reapply

Operators who have submitted a notice of intent to be authorized to discharge by this permit need not submit a notice of intent to be authorized to discharge by a subsequent permit even in advance of permit expiration.

5. Permit Flexibility

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. Criminal and Civil Liability

Except as provided in permit conditions on "Bypas" and "Upset", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the permit may subject the permittee to criminal enforcement pursuant to 18 U.S.C. section 1001.

9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State Law or regulation under authority preserved by section 510 of the Act.

11. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Section B. Proper Operation and Maintenance

1. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3. Proper Operation and Maintenance

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.B.4.b and 4.c.

b. Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part II.D.7.

c. Prohibition of Bypass

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Part II.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part II.B.4.c(1).

5. Upset Conditions

a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part II.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required by Part II.D.7; and,

(4) The permittee complied with any remedial measures required by Part II.B.2.

c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. Any substance specifically listed within this permit may be discharged in accordance with specified conditions, terms, or limitations.

Section C. Monitoring and Records

1. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

The operator shall maintain records at development and production facilities for 3 years, wherever practicable and at a specific shore-based site whenever not practicable. The operator is responsible for maintaining records at exploratory facilities while they are discharging under the operators control and at a specific shore-based site for the remainder of the 3-year retention

period.

4. Record Contents

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) and time(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

5. Monitoring Procedures

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to ensure accuracy of measurements and shall maintain appropriate records of such activities.

c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Section D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part II.D.10.a.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and to incorporate such requirements as may be necessary under the Act.

4. Discharge Monitoring Reports and Other Reports

The operator of each lease block shall be responsible for submitting monitoring results for all facilities within each lease block. The monitoring results for the facilities (platform, drilling ship, or semisubmersible) within the particular lease block shall be summarized on the annual Discharge Monitoring Report for that lease block.

Monitoring results obtained during the previous 12 months shall be summarized and reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). In addition, the highest monthly average for all activity within each lease block shall be reported. The highest daily maximum sample taken during the reporting period shall be reported as the daily maximum concentration.

If any category of waste (discharge) is not applicable for all facilities within the lease block, due to the type of operations (e.g., drilling, production) no reporting is required; however, "no discharge" must be recorded for those categories on the DMR. If all facilities within a lease block have had no activity during the reporting period then "no activity" must be written on the DMR. Operators may list a summary of all lease blocks where there is no activity on one DMR. All pages of the DMR must be signed and certified as required by Part II.D.11 and returned when due.

5. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified.

7. Twenty-Four Hour Reporting

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,

(3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit; and,

(2) Any upset which exceeds any effluent limitation in the permit.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts II.D.4 and D.7 at the time monitoring reports are submitted. The reports shall contain the information listed at Part II.D.7.

9. Other Information

Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, he shall promptly submit such facts or information.

10. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred microgram per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony; or

(3) The level established by the Director.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 ug/l);

(2) One milligram per liter (1 mg/l) for antimony; or

(3) The level established by the Director.

11. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations ; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this election, a principal executive officer of a Federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Director.

c. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. Availability of Reports

Except for applications, effluent data, permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

Section E. Penalties for Violations of Permit Conditions

1. Criminal

a. Negligent Violations

The Act provides that any person who negligently violates permit conditions implementing section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less $2,500 nor more then $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b. Knowing Violations

The Act provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318 or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. Knowing Endangerment

The Act provides that any person who knowingly violates permit conditions implementing sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both.

d. False Statements

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See section 309.c.4 of the Clean Water Act)

2. Civil Penalties

The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed $25,000 per day for each violation.

3. Administrative Penalties

The Act provides that any person who violates a permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. Class I Penalty

Not to exceed $10,000 per violation nor shall the maximum amount exceed $25,000.

b. Class II penalty

Not to exceed $10,000 per day for each day during which the violation continues nor shall the maximum amount exceed $125,000.

Section F. Additional General Permit Conditions

1. When the Regional Administrator May Require Application for an Individual NPDES Permit.

The Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:

(a) The discharge(s) is a significant contributor of pollution;

(b) The discharger is not in compliance with the conditions of this permit;

(c) A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point sources;

(d) Effluent limitations guidelines are promulgated for point sources covered by this permit;

(e) A Water Quality Management Plan containing requirements applicable to such point source is approved;

(f) The point source(s) covered by this permit no longer:

(1) Involve the same or substantially similar types of operations;

(2) Discharge the same types of wastes;

(3) Require the same effluent limitations or operating conditions;

(4) Require the same or similar monitoring; and

(5) In the opinion of the Regional Administrator, are more appropriately controlled under an individual permit than under a general permit.

(g) The bioaccumulation monitoring results show concentrations of the listed pollutants in excess of levels safe for human consumption.

The Director may require any operator authorized by this permit to apply for an individual NPDES permit only if the operator has been notified in writing that a permit application is required.

2. When an Individual NPDES Permit may be Requested

(a) Any operator authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit.

(b) When an individual NPDES permit is issued to an operator otherwise subject to this general permit, the applicability of this permit to the owner or operator is automatically terminated on the effective date of this individual permit.

(c) A source excluded from coverage under this general permit solely because it already has an individual permit may request that its individual permit be revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source.

3. Permit Reopener Clause

If applicable new or revised effluent limitations guidelines or New Source Performance Standards covering the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR 435) are promulgated in accordance with sections 301(b), 304(b)(2), and 307(a)(2), and the new or revised effluent limitations guidelines or New Source Performance Standards are more stringent than any effluent limitations in this permit or control a pollutant not limited in this permit, the permit may, at the Director's discretion, be modified to conform to the new or revised effluent limitations guidelines.

Notwithstanding the above, if an offshore oil and gas extraction point source discharge facility is subject to the ten year protection period for new source performance standards under the Clean Water Act section 306(d), this reopener clause may not be used to modify the permit to conform to more stringent new source performance standards or technology based standards developed under section 301(b)(2) during the ten year period specified in 40 CFR Part 122.29(d).

The Director may modify this permit upon meeting the conditions set forth in this reopener clause.

Section G. Definitions

All definitions contained in section 502 of the Act shall apply to this permit and are incorporated herein by references. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. "Act" means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.

2. "Administrator" means the Administrator of the U.S. Environmental Protection Agency.

3. "Annual Average" means the average of all discharges sampled and/or measured during a calendar year in which daily discharges are sampled and/or measured, divided by the number of discharges sampled and/or measured during such year.

4. "Applicable effluent standards and limitations" means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.

5. "Applicable water quality standards" means all water quality standards to which a discharge is subject under the Act.

6. "Areas of Biological Concern" means a portion of the territorial seas identified by EPA, in consultation with the Department of Interior as containing potentially productive or unique biological communities or as being potentially sensitive to discharges associated with oil and gas activities.

7. "Blow-Out Preventer Control Fluid" means fluid used to actuate the hydraulic equipment on the blow-out preventer or subsea production wellhead assembly.

8. "Boiler Blowdown" means discharges from boilers necessary to minimize solids build-up in the boilers, including vents from boilers and other heating systems.

9. "Bulk Discharge" any discharge of a discrete volume or mass of effluent from a pit tank or similar container that occurs on a one-time, infrequent or irregular basis.

10. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

11. “Chronic Toxicity” means lethal or sublethal effect (survival or growth) to a test organism.

12. "Completion Fluids" means salt solutions, weighted brines, polymers and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production. These fluids move into the formation and return to the surface as a slug with the produced water. Drilling muds remaining in the wellbore during logging, casing, and cementing operations or during temporary abandonment of the well are not considered completion fluids and are regulated by drilling fluids requirements.

13. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.

14. "Daily Average" (also known as monthly average) discharge limitations means the highest allowable average of daily discharge(s) over a calendar month, calculated as the sum of all daily discharge(s) measured during a calendar month divided by the number of daily discharge(s) measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all daily discharge(s) of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

$$\frac{C_1F_1 + C_2F_2 + ... + C_nF_n}{F_1 + F_2 + ... + F_n.}$$

15. "Daily Maximum" discharge limitations means the highest allowable "daily discharge" during the calendar month.

16. "Desalinization Unit Discharge" means wastewater associated with the process of creating freshwater from seawater.

17. "Deck Drainage" means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities covered under this permit.

18. "Development Drilling" means the drilling of wells required to efficiently produce a hydrocarbon formation or formations.

19. "Development Facility" means any fixed or mobile structure that is engaged in the drilling of productive wells.

20. "Diatomaceous Earth Filter Media" means filter media used to filter seawater or other authorized completion fluids and subsequently washed from the filter.

21. "Diesel Oil" means the grade of distillate fuel oil, as specified in the American Society for Testing and Materials Standard Specification D975-81, that is typically used as the continuous phase in conventional oil-based drilling fluids.

22. "Director" means the Director of the Water Quality Protection Division of EPA Region 6.

23. "Domestic Waste" means material discharged from galleys, sinks, showers, safety showers, eye wash stations, hand washing stations, fish cleaning stations, and laundries.

24. "Drill Cuttings" means particles generated by drilling into the subsurface geological formations including cured cement carried to the surface with the drilling fluid.

25. "Drilling Fluids" means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. A water-based drilling fluid is the conventional drilling mud in which water is the continuous phase and the suspending medium for solids, whether or not oil is present. An oil based drilling fluids has diesel oil, mineral oil, or some other oil as its continuous phase with water as the dispersed phase.

26. "Environmental Protection Agency" (EPA) means the U.S. Environmental Protection Agency.

27. "Excess Cement Slurry" means the excess mixed cement, including additives and wastes from equipment washdown, after a cementing operation.

28. "Exploratory Facility" means any fixed or mobile structure that is engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs.

29. "Fecal Coliform Bacteria Sample" consists of one effluent grab portion collected during a 24-hour period at peak loads.

30. "Grab sample" means an individual sample collected in less than 15 minutes.

31. "Garbage" means all kinds of food waste, wastes generated in living areas on the facility, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the facility and liable to be disposed of continuously or periodically, except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78

32. "Graywater" means drainage from dishwater, shower, laundry, bath, and washbasin drains and does not include drainage from toilets, urinals, hospitals, and cargo spaces.

33. "Inverse Emulsion Drilling Fluids" means an oil-based drilling fluid which also contains a large amount of water.

34. "Live bottom areas" means those areas which contain biological assemblages consisting of such sessile invertebrates as seas fans, sea whips, hydroids, anemones, ascideians sponges, bryozoans, seagrasses, or corals living upon and attached to naturally occurring hard or rocky formations with fishes and other fauna.

35. "Maintenance waste" means materials collected while maintaining and operating the facility, including, but not limited to, soot, machinery deposits, scraped paint, deck sweepings, wiping wastes, and rags.

36. "Maximum Hourly Rate" means the greatest number of barrels of drilling fluids discharged within one hour, expressed as barrels per hour.

37. "Muds, Cuttings, and Cement at the Seafloor" means discharges that occur at the seafloor prior to installation of the marine riser and during marine riser disconnect, well abandonment and plugging operations.

38. "National Pollutant Discharge Elimination System" (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under section 307, 318, 402, and 405 of the Act.

39. "New Source" means any facility or activity that meets the definition of "new source" under 40 CFR 122.2 and meets the criteria for determination of new sources under 40 CFR 122.29(b) applied consistently with all of the following definitions:

    (a) The term "water area" as used in the term "site" in 40 CFR 122.29 and 122.2 shall mean the water area and ocean floor beneath any exploratory, development, or production facility where such facility is conducting its exploratory, development, or production activities.

    (b) The term "significant site preparation work" as used in 40 CFR 122.29 shall mean the process of surveying, clearing, or preparing an area of the ocean floor for the purpose of constructing or placing a development or production facility on or over the site.

40. "Operational waste" means all cargo associated waste, maintenance waste, cargo residues, and ashes and clinkers from incinerators and coal burning boilers.

41. "Packer Fluid" means low solids fluids between the packer, production string and well casing. They are considered to be workover fluids.

42. "Priority Pollutants" means those chemicals or elements identified by EPA, pursuant to section 307 of the Clean Water Act and 40 CFR 401.15.

43. "Produced Sand" means slurried particles used in hydraulic fracturing, the accumulated formation sands, and scale particles generated during production. Produced sand also includes desander discharge from produced water waste stream and blowdown of water phase from the produced water treating system.

44. "Produced Water" means the water (brine) brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process.

45. "Production Facility" means any fixed or mobile structure that is either engaged in well completion or used for active recovery of hydrocarbons from producing formations.

46. "Sanitary Waste" means human body waste discharged from toilets and urinals.

47. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

48. "Sheen" means a silvery or metallic sheen, gloss, or increased reflectivity, visual color or iridescence on the water surface.

49. "Source Water and Sand" means water from non-hydrocarbon bearing formations for the purpose of pressure maintenance or secondary recovery including the entrained solids.

50. "Spotting" means the process of adding a lubricant (spot) downhole to free stuck pipe.

51. "Territorial Seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

52. "Trace Amounts" means that if materials added downhole as well treatment, completion, or workover fluids do not contain priority pollutants then the discharge is assumed not to contain priority pollutants, except possibly in trace amounts.

53. "Uncontaminated Ballast/Bilge Water" means seawater added or removed to maintain proper draft.

54. "Uncontaminated Freshwater" means freshwater which is discharged without the addition of chemicals; included are (1) discharges of excess freshwater that permit the continuous operation of fire control and utility lift pumps, (2) excess freshwater from pressure maintenance and secondary recovery projects, (3) water released during training and testing of personnel in fire protection, and (4) water used to pressure test new piping.

55. "Uncontaminated Seawater" means seawater which is returned to the sea without the addition of chemicals. Included are (1) discharges of excess seawater which permit the continuous operation of fire control and utility lift pumps (2) excess seawater from pressure maintenance and secondary recovery projects (3) water released during the training and testing of personnel in fire protection (4) seawater used to pressure test piping, and (5) once through noncontact cooling water which has not been treated with biocides.

56. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

57. "Well Treatment Fluids" mean any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled. These fluids move into the formation and return to the surface as a slug with the produced water. Stimulation fluids include substances such as acids, solvents, and propping agents.

58. "Workover Fluids" mean salt solutions, weighted brines, polymers, and other specialty additives used in a producing well to allow safe repair and maintenance or abandonment procedures. High solids drilling fluids used during workover operations are not considered workover fluids by definition and therefore discharge is prohibited. Packer fluids, low solids fluids between the packer, production string and well casing, are considered to be workover fluids and must meet only the effluent requirements imposed on workover fluids.

59. The term "MGD" shall mean million gallons per day.

60. The term "mg/l" shall mean milligrams per liter or parts per million (ppm).

61. The term "ug/l" shall mean micrograms per liter or parts per billion (ppb).

Appendix A

Table 1: Produced Water Critical Dilutions

Table 1-A: Critical Dilution (Percent Effluent) for Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 0 Meters to 4 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
0 to 500	0.33	0.33	0.33	0.33	0.33	0.33
501 to 1000	0.7	0.7	0.7	0.7	0.7	0.7
1001 to 2000	1.4	1.3	1.3	1.3	1.3	1.3
2001 to 3000	2.0	1.9	1.9	1.8	1.8	1.8
3001 to 4000	2.5	2.4	2.3	2.3	2.3	2.3
4001 to 5000	2.8	2.8	2.8	2.7	2.6	2.7
5001 to 6000	3.3	3.2	3.2	3.0	3.0	3.0
6001 to 7000	3.6	3.6	3.5	3.3	3.4	3.4
7001 to 8000	3.9	3.9	3.8	3.8	3.7	3.5
8001 to 9000	4.0	4.3	4.3	4.0	4.1	3.8
9001 to 10,000	4.3	4.6	4.6	4.4	4.3	4.1
10,001 to 15,000	4.9	5.9	5.7	5.7	5.6	5.3
15,001 to 20,000	5.4	7.1	7.0	6.8	6.7	6.4
20,001 to 25,000	5.5	7.8	8.1	7.5	7.3	7.4

Table 1-B: Critical Dilution (Percent Effluent) for Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 4 Meters to 6 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
0 to 500	0.2	0.2	0.2	0.2	0.2	0.2
501 to 1000	0.4	0.4	0.4	0.4	0.4	0.4
1001 to 2000	0.8	0.8	0.8	0.8	0.8	0.8
2001 to 3000	1.1	1.1	1.1	1.1	1.1	1.1
3001 to 4000	1.4	1.3	1.3	1.3	1.3	1.3
4001 to 5000	1.7	1.6	1.6	1.5	1.5	1.5
5001 to 6000	1.8	1.8	1.8	1.7	1.7	1.7
6001 to 7000	2.0	2.0	2.0	1.9	1.9	1.9
7001 to 8000	2.2	2.2	2.1	2.1	2.1	2.0
8001 to 9000	2.3	2.4	2.4	2.3	2.3	2.2
9001 to 10,000	2.4	2.6	2.5	2.5	2.4	2.4
10,001 to 15,000	2.9	3.3	3.2	3.2	3.2	3.1
15,001 to 20,000	3.2	3.9	3.8	3.8	3.8	3.6
20,001 to 25,000	3.1	4.2	4.3	4.4	4.1	4.1

Table 1-C: Critical Dilution (Percent Effluent) for Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 6 Meters to 9 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
0 to 500	0.15	0.15	0.15	0.15	0.15	0.15
501 to 1000	0.26	0.22	0.22	0.22	0.22	0.22
1001 to 2000	0.55	0.54	0.54	0.54	0.54	0.54
2001 to 3000	0.74	0.73	0.72	0.71	0.71	0.71
3001 to 4000	0.93	0.91	0.9	0.87	0.87	0.88
4001 to 5000	1.1	1.1	1.0	1.0	1.0	1.0
5001 to 6000	1.2	1.2	1.2	1.2	1.2	1.2
6001 to 7000	1.3	1.3	1.3	1.3	1.3	1.3
7001 to 8000	1.5	1.5	1.5	1.4	1.4	1.4
8001 to 9000	1.6	1.6	1.6	1.5	1.5	1.5
9001 to 10,000	1.6	1.7	1.7	1.6	1.6	1.6
10,001 to 15,000	2.0	2.2	2.1	2.1	2.1	2.1
15,001 to 20,000	2.3	2.6	2.6	2.5	2.5	2.4
20,001 to 25,000	2.3	2.9	2.8	2.8	2.8	2.7

Table 1-D: Critical Dilution (Percent Effluent) for Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 9 Meters to 12 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
0 to 500	0.15	0.15	0.15	0.15	0.15	0.15
501 to 1000	0.22	0.22	0.22	0.22	0.22	0.22
1001 to 2000	0.31	0.31	0.31	0.31	0.31	0.31
2001 to 3000	0.38	0.38	0.38	0.39	0.39	0.39
3001 to 4000	0.6	0.6	0.6	0.6	0.6	0.6
4001 to 5000	0.8	0.8	0.8	0.8	0.8	0.8
5001 to 6000	0.9	0.9	0.9	0.9	0.9	0.9
6001 to 7000	1.0	1.0	1.0	1.0	1.0	1.0
7001 to 8000	1.1	1.1	1.1	1.1	1.1	1.1
8001 to 9000	1.2	1.2	1.2	1.2	1.2	1.2
9001 to 10,000	1.3	1.3	1.3	1.3	1.3	1.3
10,001 to 15,000	1.4	1.4	1.4	1.4	1.4	1.4
15,001 to 20,000	1.5	1.7	1.7	1.6	1.6	1.6
20,001 to 25,000	1.6	1.9	1.9	1.8	1.8	1.7

Table 1-E: Critical Dilution (Percent Effluent) for Lower Volume Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 12 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
>0 to 500	0.15	0.15	0.15	0.15	0.15	0.15
501 to 1000	0.22	0.22	0.22	0.22	0.22	0.22
1001 to 2000	0.31	0.31	0.31	0.31	0.31	0.31
2001 to 3000	0.38	0.38	0.39	0.39	0.39	0.39
3001 to 4000	0.44	0.44	0.45	0.45	0.45	0.45
4001 to 5000	0.49	0.49	0.5	0.5	0.5	0.5
5001 to 6000	0.53	0.54	0.54	0.54	0.54	0.54
6001 to 7000	0.58	0.58	0.58	0.58	0.58	0.58
7001 to 8000	0.72	0.71	0.70	0.62	0.62	0.62

Table 1-F: Critical Dilution (Percent Effluent) for Larger Volume Discharges with a Depth Difference Between the Discharge Pipe and the Sea Floor of Greater than 12 Meters

Discharge Rate	Pipe Diameter (inches)					
(bbl/day)	>0" to 5"	>5" to 7"	>7" to 9"	>9" to 11"	>11" to 15"	>15"
Depth Difference Greater than 12 Meters to 14 Meters						
7001 to 8,000	0.72	0.71	0.7	0.62	0.62	0.62
8001 to 9,000	0.83	0.83	0.82	0.8	0.8	0.77
9001 to 10,000	0.92	0.93	0.92	0.89	0.89	0.87
10,001 to 15,000	1.3	1.3	1.3	1.3	1.3	1.3
15,001 to 20,000	1.5	1.6	1.6	1.6	1.6	1.6
20,001 to 25,000	1.7	1.8	1.8	1.8	1.8	1.8
Depth Difference Greater than 14 Meters to 16 Meters						
7001 to 8,000	0.61	0.62	0.62	0.62	0.62	0.62
8001 to 9,000	0.64	0.65	0.65	0.65	0.65	0.65
9001 to 10,000	0.67	0.68	0.68	0.68	0.68	0.68
10,001 to 15,000	1.0	1.0	1.0	1.0	1.0	1.0
15,001 to 20,000	1.2	1.3	1.3	1.3	1.3	1.3
20,001 to 25,000	1.4	1.6	1.6	1.5	1.5	1.5
Depth Difference Greater than 16 Meters						
7001 to 8,000	0.6	0.6	0.6	0.6	0.6	0.6
8001 to 9000	0.63	0.63	0.63	0.63	0.63	0.64
9001 to 10,000	0.66	0.66	0.66	0.66	0.66	0.66
10,001 to 15,000	0.77	0.78	0.79	0.79	0.79	0.79
15,001 to 20,000	0.85	0.88	0.89	0.89	0.89	0.89
20,001 to 25,000	0.88	0.96	0.96	0.97	0.97	0.97

Table 1-G: Minimum Vertical Port Separation Distance to Avoid Interference

Port Flow Rate (bbl/day)	Minimum Separation Distance (m)
0 - 500	3.2
501 - 1000	4.0
1001 - 2000	5.0
2001 - 3000	5.8
3001 - 4000	6.4
4001 - 5000	6.8

Table 2-A: Critical Dilutions (Percent Effluent) for Toxicity Limitations for Seawater to which Treatment Chemicals have been Added

Depth Difference (Meters)	**Discharge Rate (bbl/day)**	**Pipe Diameter**		
		>0" to 2"	>2" to 4"	>4"
All	0 to 1,000	3.1	10.5	26.7
	>1,000 to 10,000	2.1	8.0	16.5
	> 10,000	2.1	7.0	13.3

Table 2-B: Critical Dilutions (Percent Effluent) for Toxicity Limitations for Freshwater to which Treatment Chemicals have been Added

Depth Difference (Meters)	Discharge Rate (bbl/day)	Pipe Diameter		
		>0" to 2"	>2" to 4"	>4"
All	0 to 1,000	5.1	29.0	32.5
	>1,000 to 10,000	2.8	15.4	37.4
	>10,000	2.5	12.0	27.8

Table 3. Effluent Limitations, Prohibitions and Monitoring Requirements

Discharge	Regulated & Monitored Discharged Parameter	Discharge Limitation/ Prohibition	Monitoring Requirement: Measurement Frequency	Monitoring Requirement: Sample Type/Method	Monitoring Requirement: Recorded Value(s)
Drilling Fluid.....	.....	No Discharge			
Drill Cuttings.....	.....	No Discharge			
Deck Drainage.....	Free Oil.....	No free oil.....	Once/day(*2).....	Visual sheen.....	Number of days sheen observed
Produced Water.....	Oil and grease.....	42 mg/l daily max., 29 mg/l monthly average	Once/month.....	Grab(*3).....	Daily max., monthly average
	Toxicity.....	7-day min. NOEC(*10) and monthly average min. NOEC(*10)	Once/Six Months..... (*9)	Grab.....	Lowest NOEC for either of the two species
		24-hour LC50 at 100% effluent	Once/Six Months (*9)	Grab.....	Lowest NOEC for either of the two species
	Flow (MGD).....	Monitor.....	Once/month.....	Estimate.....	Monthly Average
Produced Sand.....	.....	No Discharge			
Well treatment fluids(*4), completion fluids(*4), and workover fluids(*4) (includes packer fluids)	Free oil.....	No free oil.....	Once/day(*1).....	Static sheen.....	Number of days sheen observed
	Oil & Grease.....	42 mg/l daily max., 29 mg/l monthly avg.	Once/month.....	Grab(*3).....	Daily max., monthly average
Sanitary waste(*6) continuously manned by 10 or more persons	Residual chlorine(*7)	1 mg/l (minimum)	Once/month.....	Grab.....	Concentration
	Solids.....	No Floating Solids....	Once/day.....	Observation.....	Number of days solids observed
Sanitary waste(*6) continuously manned by 9 or fewer persons or intermittently by any number	Solids.....	No floating solids....	Once/day.....	Observation.....	Number of days solids observed
Domestic waste(*8)	Solids.....	No floating solids.... or foam	Once/day.....	Observation(*8).....	Number of days observed

Table 3. (Continued)

Discharge	Regulated & Monitored Discharged Parameter	Discharge Limitation/ Prohibition	Monitoring Requirement		
			Measurement Frequency	Sample Type/Method	Recorded Value(s)
Miscellaneous discharges: Desalinization unit discharge; blowout preventer fluid; uncontaminated ballast water; uncontaminated bilge water; uncontaminated freshwater; mud, cuttings and cement at seafloor; uncontaminated seawater; boiler blowdown; source water and sand; diatomaceous earth filter media; excess cement slurry	Free oil.....	No free oil.....	Once/week(*5).....	Visual sheen.....	Number of days sheen observed
Miscellaneous discharges of seawater and freshwater to which treatment chemicals have been added: excess seawater which permits the continuous operation of fire control and utility lift pumps, excess seawater from pressure maintenance and secondary recovery projects, water released during training of personnel in fire protection, seawater used to pressure test piping, ballast water, non-contact cooling water, desalinization unit discharge	Treatment chemicals	Most stringent of: EPA label registration, maximum manufacturers recommended dose, or 500 mg/l.			
	Free oil.....	No free oil.....	1/week.....	Visual sheen.....	Number of days sheen observed
	Toxicity.....	48-hour min. NOEC and monthly average minimum NOEC (*11)	Once per six months..	Grab..... .	Lowest NOEC observed for either of the two species

Footnotes

*1 When discharging.

*2 When discharging and facility is manned. Monitoring shall be accomplished during times when observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge.

*3 May be based on a single grab sample or the arithmetic average of four grab sample results collected in the 24 hr. period.

*4 No discharge of priority pollutants except in trace amounts. Information on the specific chemical composition shall be recorded but not reported unless requested by EPA.

*5 When discharging for cement at the seafloor and blowout preventer fluid. All other miscellaneous discharges: when discharging, discharge is authorized only during times when visual sheen observation is possible, unless the static sheen method is used. Uncontaminated seawater uncontaminated freshwater, source water and source sand, uncontaminated bilge water, and uncontaminated ballast water from platforms on automatic purge systems may be discharged without monitoring from platforms which are not manned.

*6 Any facility which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation, and test results maintained at the facility.

*7 Hach method CN-66 DPD approved. Minimum of 1 mg/l and maintained as close to this concentration as possible.

*8 Monitoring shall be accomplished during daylight by visual observation of the surface of the receiving water in the vicinity of sanitary and domestic waste outfalls. Observations shall be made following either the morning or midday meals at a time of maximum estimated discharge.

*9 If compliant for one full year (two consecutive six month periods) the monitoring frequency may be reduced to once per year.

*10 See Table 2, Appendix A.

*11 See Table 3, Appendix A.