

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
GENERAL WASTEWATER DISPOSAL PERMIT FOR
HYDROSTATIC TEST WASTEWATER SUBJECT TO ODEQ JURISDICTION
GENERAL PERMIT NO. OKG27**

GENERAL PROVISIONS

As provided by Title 27A O.S. §2-6-201 *et seq.*, as amended, and the Rules of the Department of Environmental Quality (DEQ), operators of hydrostatic test projects on equipment, piping, and vessels subject to DEQ jurisdiction will be authorized to discharge hydrostatic test wastewater within the boundaries of the State of Oklahoma in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

This General Permit Number OKG27 (Permit) authorizes discharges resulting from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, refineries, petrochemical manufacturing plants, gas compressor stations, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

This Permit does not authorize discharges resulting from the hydrostatic testing of existing equipment, piping, and vessels associated with the processing and storage of any chemicals and raw materials other than natural gas, oil, petroleum, and petrochemical projects. Such discharges will require individual discharge permits.

This Permit does not authorize discharges resulting from the hydrostatic testing of natural gas, oil, petroleum or petroleum product pipelines located outside facilities subject to DEQ jurisdiction. Such pipelines are subject to the jurisdiction of the Oklahoma Corporation Commission (OCC); discharge permitting authority remains with U.S. Environmental Protection Agency.

This Permit shall not cover those facilities discharging greater than one million gallons per day (1 MGD) of hydrostatic test wastewater. In addition, this Permit does not allow discharges of hydrostatic test wastewater to the following waters: Outstanding Resource Waters (OAC 785:45-5-25(c)(1)); Appendix B Waters (OAC 785:45-5-25(c)(2)); High Quality Waters (OAC 785:45-5-25(c)(3)); Sensitive Public and Private Water Supplies (OAC 785:45-5-25(c)(4)); and receiving streams included in Oklahoma's 303(d) List of impaired water bodies caused by pH, oil and grease, or turbidity for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 6.5 – 9.0 standard units for pH, 15 mg/l for oil and grease, or 45 mg/l for total suspended solids are required. Those facilities shall apply for coverage under an individual discharge permit in accordance with requirements to obtain a permit contained in OAC 252:606.

For all facilities applying for coverage under this Permit, the DEQ will determine whether the point of discharge is located in surface waters designated sensitive by the U.S. Fish and Wildlife Service (USFWS). If the proposed discharge point for a new facility is located in a sensitive water, the facility will not be eligible for an Authorization to discharge under this Permit. If the facility is an existing facility and the point of discharge is located in surface waters designated sensitive for endangered species by the USFWS, the facility is not eligible for coverage under this Permit if there has been a change in the location of the discharge point or an increase in the volume of the discharge.

Hydrostatic test projects that are currently permitted by the DEQ through individual wastewater discharge permits may apply for coverage under this Permit no later than 180 days prior to the expiration of their current individual permits as long as the limits contained in the general permit are the same or more stringent than those established in the individual permits. These currently permitted facilities may also elect to continue coverage under their individual permits. New hydrostatic test projects shall apply for and receive an authorization to discharge hydrostatic test wastewater prior to commencing discharge. Owners or operators within the scope of this Permit

who fail to make a written request to the DEQ are not authorized to discharge hydrostatic test wastewater under this Permit.

The written request for an Authorization shall include the legal name and address of the owner or operator; the general project location; the legal description of the project location; the legal description down to ten (10) acres of each proposed outfall, latitude and longitude (using North America Datum 1983) of each proposed outfall; the name of the receiving water into which the discharge will be made; the anticipated date of the discharge; the estimated duration of the discharge; the estimated volume (in gallons) being discharged; the type of wastewater treatment before discharge (e.g., filtration, sedimentation, etc.); the source of the fill water used in the test, the type and size of the equipment, piping or vessels to be tested; whether the equipment, piping, and/or vessels being tested are new or existing and if they are existing, the raw material or product contained in the equipment, piping, and/or vessels prior to the test; along with any other information specified in the application form.

Effluent limitations contained in Part I hereof will apply to discharges of treated wastewater which has been generated from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, refineries, petrochemical manufacturing plants, gas compressor stations, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels. At no time shall the effluent cause a violation of Oklahoma's Water Quality Standards (OWQS) in the receiving stream.

The permittee shall comply with all provisions of this Permit and any Authorization issued pursuant to it.

Issuance of this Permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal of wastewater, except with respect to the permittee's legal responsibility under 27A O.S. §2-6-201 *et seq.* and DEQ Rules to obtain an Authorization under this Permit.

This Permit supersedes permit OKG27 that became effective March 23, 2010 and expires at midnight on March 22, 2015.

This Permit shall become effective on April 1, 2015.

This Permit and any Authorizations issued under it shall expire at midnight, on March 31, 2020.

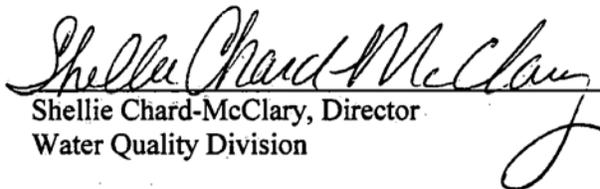
This is to certify that the wastewater discharges set forth in this Permit comply with the requirements of Oklahoma's Water Quality Standards, as amended, provided the permittee does not exceed the effluent limitations set forth in this permit.

Issued this 23rd day of March, 2015.

For Oklahoma Department of Environmental Quality



Carol Paden, P.E., Manager
Industrial Permits Section
Water Quality Division



Shellie Chard-McClary, Director
Water Quality Division

PART I
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from all outfalls as described in the Authorization. Wastewater discharges regulated by this Permit consist of discharges resulting from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, gas compressor stations, refineries, petrochemical manufacturing plants, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

Such discharges shall be limited and monitored by the permittee as specified in Tables 1 and 2 below. Monitoring requirements contained in Table 2 shall become effective in conjunction with the effluent limitations listed in Table 1.

Table 1. Effluent Limitations for All Outfalls

PARAMETERS	MASS LOADINGS (lbs/day unless otherwise specified)		CONCENTRATION/OTHER UNITS (mg/l unless otherwise specified)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Oil and Grease STORET: 00556	---	---	---	15
Total Suspended Solids STORET: 00530	---	---	---	45
Benzene ⁽¹⁾ STORET: 34030	---	---	---	0.050
BTEX, Total ⁽¹⁾ STORET: 34030	---	---	---	0.50
T P H Gasoline Range Organics (GRO) ⁽²⁾ STORET: 52300	---	---	---	1.0 ⁽³⁾
	Diesel Range Organics (DRO) ⁽²⁾ STORET: 52290	---	---	1.0 ⁽³⁾
Total Residual Chlorine (TRC) ⁽⁴⁾ STORET: 50060	---	---	---	No measurable ⁽⁵⁾
pH STORET: 00400	---		Between 6.5 - 9.0 standard units.	

⁽¹⁾ The Benzene and BTEX limits apply only to discharges of wastewater resulting from the hydrostatic testing of existing natural gas, oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

⁽²⁾ The GRO and DRO limits and monitoring requirements apply only to discharges of wastewater generated from the hydrostatic testing of existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

⁽³⁾ The daily maximum limit of 1 mg/l is the total combined amount allowed for GRO and DRO.

⁽⁴⁾ The TRC limit and monitoring requirement do not apply when the fill water is drawn from a surface waterbody and is not halogenated.

⁽⁵⁾ No measurable is defined as <0.1 mg/l instantaneous maximum.

Table 2. Monitoring Requirements

PARAMETERS	MEASUREMENT FREQUENCY ⁽¹⁾	SAMPLE TYPE
Flow	Daily	Estimate ⁽²⁾
Oil and Grease	1/Discharge Event	Composite ⁽³⁾
Total Suspended Solids	1/Discharge Event	Composite ⁽³⁾
Benzene	1/Discharge Event	Composite ⁽³⁾
BTEX, total	1/Discharge Event	Composite ⁽³⁾
Total Petroleum Hydrocarbons	1/Discharge Event	Composite ⁽³⁾
Total Residual Chlorine	4/Discharge Event	Grab ⁽⁴⁾
pH	4/Discharge Event	Grab ⁽⁵⁾

⁽¹⁾ When discharging.

⁽²⁾ Flow may be estimated by calculating the volume of wastewater that can be contained in the equipment, piping, or vessels being tested.

⁽³⁾ Composite samples shall consist of four (4) grab samples of equal volume, taken of the hydrostatic test wastewater being discharged as it leaves the equipment, piping, or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. All of the grab samples shall be combined into one composite sample at the end of the test period for analysis.

⁽⁴⁾ Grab samples shall be taken of the hydrostatic test water being discharged as it leaves the equipment, piping, or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. Each grab sample shall be tested individually, and the highest result reported.

⁽⁵⁾ Grab samples shall be taken of the hydrostatic test water being discharged as it leaves the equipment, piping, or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. Each grab sample shall be tested individually, and the lowest and highest results reported.

NOTES: See Parts II and III for additional requirements.

All hydrostatic test wastewater shall be free from any kind of welding scrap or other foreign material before being discharged into the receiving waters.

There shall be no discharge of visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of floating materials and suspended substances to the surface water of the State that may produce objectionable color. There shall be no offensive odor in the vicinity of the outfalls.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the outfall locations as described in the Authorization.

B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: None.

C. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III. E.4 of the permit. Monitoring results obtained during the previous month shall be summarized and reported on the Discharge Monitoring Report (DMR) forms due to the Oklahoma Department of Environmental Quality, Water Quality Division, Wastewater Compliance Tracking Section postmarked or received no later than the 15th day of the following month. If no discharge occurs during the reporting period, DMR forms stating "No Discharge" shall be submitted according to the above schedule.

**PART II
OTHER PERMIT REQUIREMENTS**

1. This Permit does not convey any exclusive privileges or authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations nor does it obviate the requirement to obtain permission from any landowners whose property will be affected by this Permit.

2. Reopener Clause

This Permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of State water quality criteria are determined, or when required by changes to the technology-based limits. Modification or revocation and/or reissuance of the permit shall follow regulations listed at 40 CFR 124.5.

3. Individual Permits

- a. Any permittee authorized by this Permit may request to be excluded from the coverage of this Permit by applying for an individual permit. The permittee shall submit the appropriate OPDES application forms together with the reasons supporting the request to the Water Quality Division.
- b. When an individual OPDES permit is issued to a permittee otherwise subject to this Permit, the applicability of this Permit to that owner or permittee is automatically terminated on the effective date of the individual permit.
- c. A hydrostatic test project excluded from coverage under this Permit solely because it already has an individual permit may request that its individual permit be converted to this Permit. Upon conversion from the individual permit, this Permit shall apply to the facility and the individual permit will be terminated.

4. Laboratory Certification

All laboratory analyses for the parameters specified in this permit must be performed by a laboratory certified by the Oklahoma Department of Environmental Quality for those parameters.

5. Analytical Requirements

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this Permit shall supersede these requirements as applicable.

6. Minimum Quantification Level (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the DMR calculations and reporting requirements.

POLLUTANT	MQL
Benzene	10 µg/L
BTEX, total	20 µg/L

<u>POLLUTANT</u>	<u>MQL</u>
Chlorine, total residual	0.1 mg/L
Oil and grease	5 mg/L

The permittee may develop an effluent and/or upstream specific method detection limit (MDL) in accordance with Appendix B to 40 CFR Part 136. For any pollutant for which the permittee determines an effluent and/or upstream specific MDL, the permittee shall send to the DEQ, Water Quality Division, Industrial Permits Section, a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent and/or upstream specific MDL was correctly calculated. An effluent and/or upstream specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

Upon written approval by the Industrial Permits Section, the effluent and/or upstream specific MQL may be utilized by the permittee for all future DMR calculations and reporting requirements.

7. The discharge of hydrostatic test wastewater to which treatment chemicals, corrosion inhibitors, Sodium Bisulfite in excess of the amount needed for dechlorination, or biocides have been added is prohibited. This prohibition does not prohibit the use of fill water whose source is a municipal or rural drinking water supply, except where the permittee has added additional treatment chemicals, corrosion inhibitors, biocides, or other chemicals with the exception of Sodium Bisulfite.
8. The discharge of precleaning wastes is prohibited. Precleaning waste means the waste generated from activities such as washing the equipment, piping, or vessels with water or a detergent solution prior to the hydrostatic test and/or pre-pigging the equipment, piping, or vessels prior to the hydrostatic test.
9. There shall be no impingement or entrainment of fish when drawing water from a surface waterbody.
10. There shall be no discharge of any wastewater except those resulting from hydrostatic testing of equipment, piping, or vessels within the scope of this Permit, unless such discharge is authorized through a separate individual or general OPDES discharge permit.
11. The permittee shall take such steps as are necessary to prevent or minimize flooding, stream channel scouring or erosion of materials and soils into surface waters caused by the discharge.
12. There shall be no discharge of hydrostatic test wastewater that contains polychlorinated biphenyl compounds.
13. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a State-approved industrial waste disposal site or to a company for recycling.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

- a. Name and address of company hauling waste.
- b. The type and amount of waste hauled.
- c. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the DEQ's staff for review.

14. Laws and Rules Applicable

The DEQ Rules, as amended, are applicable to and are incorporated by reference into this Permit and any Authorizations under it. The permittee is hereby given notice that this Permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions, and requirements and all amendments of the laws of the State of Oklahoma, the Department of Environmental Quality Rules, and Oklahoma's Water Quality Standards. The absence of any express reference within this Permit to any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this Permit of the permittee. By DEQ approval, grant, and issuance of this Permit, permittee acknowledges responsibility to obtain correct and current copies of applicable DEQ Rules (as amended), provided, however, that permittee further acknowledges that any and all amendments thereto shall become a part of this Permit.

FACT SHEET

FOR THE RENEWAL OF THE GENERAL WASTEWATER DISPOSAL PERMIT FOR DISCHARGES FROM HYDROSTATIC TESTING OF EQUIPMENT, PIPING, AND VESSELS SUBJECT TO THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) JURISDICTION TO DISCHARGE TO WATERS OF WATERS OF THE UNITED STATES UNER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM (OPDES)

DEQ Permit No.: OKG27

Applicant: Operators of facilities discharging wastewaters resulting from the hydrostatic testing of equipment, piping, and vessels subject to DEQ jurisdiction

Prepared and Issued by: Industrial Permits Section
Water Quality Division
Department of Environmental Quality
707 N. Robinson Ave.
P.O. Box 1677
Oklahoma City, OK 73101-1677

Date Prepared: July 17, 2014

Permit Action: Renewal of a general permit for the discharge of wastewater resulting from hydrostatic testing projects subject to DEQ jurisdiction.

I. SCOPE OF PERMIT

This General Permit Number OKG27 (Permit) authorizes discharges resulting from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, refineries, petrochemical manufacturing plants, gas compressor stations, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels. This Permit supersedes permit OKG27 that became effective on March 23, 2010 and expires at midnight on March 22, 2015.

This Permit does not authorize discharges resulting from the hydrostatic testing of existing equipment, piping, and vessels associated with the processing and storage of any chemicals and raw materials other than natural gas, oil, petroleum, and petrochemical projects. Such discharges will require individual discharge permits.

This Permit does not authorize discharges resulting from the hydrostatic testing of natural gas, oil, petroleum, or petroleum product pipelines located outside facilities subject to DEQ jurisdiction. Such pipelines are subject to the jurisdiction of the Oklahoma Corporation Commission (OCC); discharge permitting authority remains with U.S. Environmental Protection Agency.

This Permit shall not cover those facilities discharging greater than one million gallons per day (1 MGD) of hydrostatic test wastewater. In addition, this Permit does not allow discharges of hydrostatic test wastewater to the following waters: Outstanding Resource Waters (OAC 785:45-5-25(c)(1)); Appendix B Waters (OAC 785:45-5-25(c)(2)); High Quality Waters (OAC 785:45-5-25(c)(3)); Sensitive Public and Private Water Supplies (OAC 785:45-5-25(c)(4)); and receiving streams included in Oklahoma's 303(d) List of impaired water bodies caused by pH, oil and grease, or turbidity for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 6.5 – 9.0 standard units for pH, 15 mg/l for oil and grease, or 45 mg/l for total suspended solids are required. Those facilities shall apply for coverage under an individual discharge permit in accordance with requirements to obtain a permit contained in OAC 252:606.

For all facilities applying for coverage under this Permit, the DEQ will determine whether the point of discharge is located in surface waters designated sensitive by the U.S. Fish and Wildlife Service (USFWS). If the facility is a new facility and the discharge is to a sensitive water, the facility will not be eligible for an Authorization under this Permit. If the facility is an existing facility and the point of discharge is located in surface waters designated sensitive for endangered species by the USFWS, the facility is not eligible for coverage under this Permit if there has been a change in the location of the discharge point or an increase in the volume of the discharge. Otherwise, there are no restrictions in who may obtain coverage due to endangered species considerations.

Discharges of hydrostatic test wastewater to which the permittee has added corrosion inhibitors, antifreeze compounds, biocides, Sodium Bisulfite in excess of the amount needed for dechlorination, or other treatment chemicals are prohibited under this Permit. Such discharges will require individual discharge permits.

This Permit does not authorize discharges of precleaning wastewater. Precleaning wastewater means wastewater generated from activities such as washing the equipment, piping, or vessels with water or a detergent solution prior to the hydrostatic test and/or prepigging the equipment, piping, or vessels prior to the hydrostatic test. Such wastewater may contain any of a wide variety of toxic pollutants that are removed from the equipment, piping, or vessels during the precleaning operation.

Hydrostatic test projects that are currently permitted by the DEQ through individual wastewater discharge permits may apply for coverage under this Permit no later than 180 days prior to the expiration of their current individual permits, or they may elect to continue coverage under their individual permits. Hydrostatic test projects that are not currently permitted by the DEQ may apply for coverage under this Permit or an individual permit. Facilities that seek coverage under this Permit shall apply for and receive an authorization to discharge hydrostatic test water prior to commencing discharge.

This Permit does not authorize the use of surface impoundments and/or underground tanks that are regulated in the Oklahoma Administrative Code (OAC) 252:616. Facilities that use surface impoundments and/or underground tanks for the recycle and/or treatment of hydrostatic test wastewater are excluded from coverage under this Permit and required to apply for individual permits. The DEQ will consider the applications of these facilities on a case-by-case basis.

This Permit shall have a five (5) year term. All Authorizations issued under this Permit shall expire on the expiration date of this Permit.

II. APPLICANT ACTIVITY

Hydrostatic testing is the practice of using water to pressure test equipment, piping, and vessels prior to putting them into service. Hydrostatic testing may be necessary as the result of either new construction or repairs to existing facilities. Discharges of hydrostatic test water may originate from a wide variety of facilities, including but not limited to gathering or transmission pipelines, natural gas liquid extraction plants, natural gas processing plants, gas compressor stations, refineries, or petrochemical manufacturing plants.

III. RECEIVING WATERBODY INFORMATION

Facilities covered by this Permit will be discharging to various waters of the State. These waters will have varying beneficial uses as designated by the Oklahoma Water Quality Standards (OWQS). This Permit will cover discharges to waters of the State with any of the following designated beneficial uses as listed in OAC 785, Chapter 45.

- Public and Private Water Supplies (OAC 785:45-5-10);
- Emergency Public and Private Water Supplies (OAC 785:45-5-11);
- Fish and Wildlife Propagation (OAC 785:45-5-12);
- Agriculture/Livestock and Irrigation (OAC 785:45-5-13);
- Primary Body Contact Recreation (OAC 785:45-5-16);
- Secondary Body Contact Recreation (OAC 785:45-5-17);
- Navigation (OAC 785:45-5-18);
- Aesthetics (OAC 785:45-5-19); and
- Fish Consumption (OAC 785-45-20).

This Permit will not regulate discharges to waters of the State designated with any of the following limitations:

- Outstanding Resource Waters (OAC 785:45-5-25(c)(1));
- Appendix B Waters (OAC 785:45-5-25(c)(2));
- High Quality Waters (OAC 785:45-5-25(c)(3)); or
- Sensitive Public and Private Water Supplies (OAC 785:45-5-25(c)(4)).

Facilities proposing to discharge to receiving waters with these additional limitations shall apply for coverage under individual discharge permits in accordance with requirements to obtain permits contained in OAC 252:606. Depending on the additional limitations applicable, facilities located along these receiving waters may be prohibited from any new point source discharge in accordance with Oklahoma's implementation policies for the antidegradation policy statement (OAC 2785:45-5-25).

IV. DISCHARGE INFORMATION

A. DISCHARGE LOCATION

For each proposed outfall, the discharge location shall be specified in the application and the Authorization to discharge under this Permit. The discharge locations shall be specified to within ten (10) acres by use of legal description and specified by latitudes and longitudes.

B. DISCHARGE DESCRIPTION

Wastewater discharges regulated by this Permit are discharges resulting from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, gas compressor stations, refineries, petrochemical manufacturing plants, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

Existing equipment, piping, and vessels associated with processing and storage of any chemicals and raw materials other than natural gas, oil, petroleum, and petrochemical product will not be regulated by this Permit, but shall instead apply for coverage under an individual permit.

C. WASTEWATER CHARACTERISTICS

1. Fill Water

Fill water used in hydrostatic testing may come from a variety of sources, such as surface waters, wells, and municipal or rural drinking water supplies. When the hydrostatic test wastewater is discharged back into the same waterbody from which it was taken, the pollutants of concern will be those added to the fill water during the hydrostatic test. Where the fill water is discharged into a different waterbody, the pollutants of concern will not only be the pollutants added during the pipeline test, but also those contained in the fill water prior to the test. When the fill water is obtained from a municipal or a rural drinking water supply, residual chlorine may also be a pollutant of concern. Only when residual chlorine is a pollutant of concern is the use of Sodium Bisulfite authorized under this permit, and then only in the amount necessary to dechlorinate the fill water.

When the fill water is drawn from a surface waterbody, the hydrostatic test wastewater must be discharged back into the same waterbody from which the fill water was taken to be eligible for coverage under this Permit.

2. Nature of Hydrostatic Test Wastewater

Hydrostatic testing is generally performed by sealing the equipment, piping, or vessel to be tested; filling it up with water; and pressurizing the tested piece of equipment to the desired level using a high pressure pump system for a desired period of time. In some cases, hydrostatic testing may be performed at atmospheric pressure. Following the test, the pressure is released and the equipment, piping, or vessel is drained by gravity flow, pumping, or air pressure. Hydrostatic test wastewater discharges are, therefore, batch discharges of short term duration. For these reasons, limits in this Permit will be expressed in terms of daily maximum concentrations, as allowed by 10 CFR 122.45(e) and (f).

3. Characteristics of Hydrostatic Test Wastewater

a. New Equipment, Piping, and Vessels

New equipment, piping, and vessels should be relatively free of pollutants that could be discharged along with the hydrostatic test water. Pollutants in the equipment, piping, or vessel prior to the hydrostatic test may include construction debris, suspended solids from soil and welding solids, lubricating oil, and pH.

b. Existing Natural Gas Equipment, Piping, and Vessels

Sources of contamination in hydrostatic test water discharged from existing natural gas equipment, piping and vessels may include hydrocarbon condensates and residues left by the natural gas. Large molecular weight petrochemicals tend to deposit on the internal equipment, piping, and vessel walls due to retrograde gas condensation. Hydrocarbons typically found in gas condensates which may contaminate the test water include benzene, toluene, and xylenes, with benzene being the dominant component. Scale, compressor engine oil, and organic and inorganic corrosion inhibitors can also be found in existing natural gas equipment, piping, and vessels.

Discharges of precleaning wastewater and discharges of hydrostatic test water to which the permittee has added corrosion inhibitors, antifreeze compounds, biocides, Sodium Bisulfite in excess of the amount needed for dechlorination, or other treatment chemicals are prohibited under this Permit.

Pollutants that have the potential to be discharged in hydrostatic test wastewater from existing natural gas equipment, piping, and vessels authorized under this Permit are total suspended solids, oil and grease, benzene, and other BTEX constituents.

c. Existing Oil, Petroleum, Petroleum Product or Petrochemical Equipment, Piping, and Vessels

Sources of contamination in hydrostatic test water discharged from existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels include hydrocarbon condensates, distillates, and residues. These condensates, distillates, and residues may contain benzene, other BTEX constituents, as well as other medium to high molecular weight petrochemicals. Scale, compressor engine oil, and organic and inorganic corrosion inhibitors can also be found in oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

Discharges of precleaning wastewater and discharges of hydrostatic test water to which the permittee has added corrosion inhibitors, antifreeze compounds, biocides, Sodium Bisulfite in excess of the amount needed for dechlorination, or other treatment chemicals are prohibited under this Permit.

Pollutants that have the potential to be discharged in hydrostatic test wastewater from existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels authorized under this Permit are total suspended solids, oil and grease, benzene, other BTEX constituents, and total petroleum hydrocarbons.

d. Other Existing Equipment, Piping, and Vessels

Existing equipment, piping, and vessels associated with the processing and storage of any chemicals and raw materials other than natural gas, oil, petroleum, and petrochemical projects (e.g., for organic chemicals, inorganic chemicals, etc.) have the potential to contain a wide range of toxic pollutants that cannot be adequately controlled through this general permit. Individual permits will therefore be required for these hydrostatic test water discharges to assure that water quality standards are not violated and beneficial uses of the receiving waters are maintained.

V. RATIONALE FOR DETERMINING DISCHARGE PERMIT LIMITS

The following sections set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft general permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44 and Oklahoma Pollutant Discharge Elimination Act (OPDES), OAC 252:606-5, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR 122.44 and reasons why they are applicable or an explanation of how the alternative effluent limitations were developed.

In accordance with regulations promulgated at 40 CFR 122.44(d), the draft permit limits are based on the more stringent of technology-based limitations or applicable water quality-based limitations.

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS**1. General**

Regulations promulgated at 40 CFR 122.44(a) require technology-based effluent limitations to be placed in OPDES permits based on effluent limitation guidelines where applicable, on Best Professional Judgment (BPJ) of the permit writer in the absence of guidelines, or on a combination of the two.

2. Applicable Effluent Limitation Guidelines (ELGs)

Technology-based ELGs have not been promulgated for this category of discharge.

3. Best Professional Judgment-based Limitations

Since ELGs have not been developed for this category of discharge, the DEQ has developed this Permit on a case-specific basis under authority of the Clean Water Act (CWA) and State laws. Since hydrostatic test water discharges are batch discharges of short term duration, limits in this Permit will be expressed in terms of daily maximum concentration rather than in term of mass limitations, as allowed by 40 CFR 122.45(e) and (f). The rationale employed to develop the BPJ-based limitations covered by this Permit and applied to all outfalls is as follows:

a. pH

The daily minimum and daily maximum permit limits of 6.5 and 9.0 standard units are BPJ based on previously issued general permit OKG27 and hydrostatic test general permits developed by other states. These limits apply to all hydrostatic test water discharges authorized under this Permit.

b. Total Suspended Solids

The permit limit of 45 mg/l daily maximum for total suspended solids is BPJ based on the characteristics of hydrostatic test wastewater discussed previously in section IV.C, previously issued general permit OKG27, and hydrostatic test general permits developed by other states. This limit applies to all hydrostatic test water discharges authorized under this Permit.

c. Oil and Grease

The permit limit of 15 mg/l daily maximum for oil and grease is BPJ based on the characteristics of hydrostatic test wastewater discussed previously in section IV.C, previously issued general permit OKG27, and hydrostatic test general permits developed by other states. This limit applies to all hydrostatic test water discharges authorized under this Permit.

d. Benzene

The permit limit of 50 µg/l daily maximum for benzene is BPJ based on the characteristics of hydrostatic test wastewater discussed previously in section IV.C, previously issued general permit OKG27, and hydrostatic test permits developed by other states. This limit applies to discharges of wastewater generated from hydrostatic tests of existing natural gas, oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

e. BTEX

The permit limit of 0.5 mg/l daily maximum for BTEX (benzene, toluene, ethylbenzene, and xylenes) is BPJ based on the characteristics of hydrostatic test wastewater discussed previously in section IV.C, previously issued general permit OKG27, and hydrostatic test permits developed by other states. This limit applies to discharges of wastewater generated from hydrostatic tests of existing natural gas, oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

f. Total petroleum hydrocarbons (Gasoline Range Organics [GRO] and Diesel Range Organics [DRO])

The daily maximum permit limit of 1.0 mg/l for total petroleum hydrocarbons (TPH) is based on the characteristics of hydrostatic test wastewater discussed previously in section IV.C, previously issued general permit OKG27, and hydrostatic test permits developed by other states. This limit applies to discharges of wastewater resulting from hydrostatic tests of existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

B. WATER QUALITY-BASED EFFLUENT LIMITATIONS AND CONDITIONS**1. General Comments**

Section 101 of the Clean Water Act (CWA) states that "... it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." A permit containing technology-based permit limitations alone may not adequately protect the quality of a specific receiving stream. Thus, additional water quality-based effluent limitations and/or conditions are considered in the draft permit using narrative and numerical standards contained in the OWQS, as amended (OAC 785:45), and implementation criteria contained in OACs 785:46 and 252:690, promulgated by the Oklahoma Water Resources Board (OWRB) and the DEQ, respectively. This is to ensure that no point-source discharge results in instream aquatic toxicity, a violation of applicable narrative or numerical State water quality standards, or aquatic bioaccumulation which threatens human health.

2. Water Quality Standards Requirements

The narrative and numerical stream standards are provided in OWQS, as amended.

Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s) or where reasonable potential to violate water quality standards is determined to exist, the DEQ may determine that the facility is no longer eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

a. Public and Private Water Supplies (OAC 785:45-5-10)

Based on the prohibition of discharging hydrostatic test wastewater to which treatment chemicals, corrosion inhibitors, or biocides have been added and the prohibition of discharging precleaning wastewater as stated in Part I of this fact sheet, the hydrostatic test wastewater which will be discharged through the proposed outfalls should not contain substances listed in Raw Water Numerical Criteria (785:45-5-10(1)) and Water Column Criteria to protect for the Consumption of Fish Flesh and Water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria. Thus, additional permit action is not necessary for this beneficial use.

Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is no longer eligible for coverage under this general permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

b. Emergency Public and Private Water Supplies (OAC 785:45-5-11)

Emergency public and private water supply use is determined in accordance with OAC 785:45-5-11(a), which states that during emergencies, those waters designated Emergency Public and Private Water Supplies may be put to use. Wastewater discharged through the proposed outfalls should not affect this designated beneficial use. Thus, additional permit action is not necessary.

c. Fish and Wildlife Propagation (OAC 785:45-5-12)**(1) Dissolved Oxygen**

OAC 785:45-5-12(f)(1) requires that where DO-demanding substances are present in an effluent at significant levels, a waste load allocation must be established according to certain seasonal criteria dependent on the receiving water's aquatic community subcategory.

Based on the prohibition of discharging hydrostatic test wastewater to which treatment chemicals, corrosion inhibitors, Sodium Bisulfite in excess of the amount needed for dechlorination, or biocides have been added and the prohibitions on discharging precleaning wastewater as described in Part I of this fact sheet, discharges of hydrostatic test wastewater are not expected to contain oxygen demanding substances at levels which would have reasonable potential to violate numerical criteria. Therefore, no permit limit or monitoring requirement is imposed for this criteria.

Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is not eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional BOD, or COD, or DO specific limits or testing requirements as necessary to maintain the beneficial uses of the receiving stream.

(2) Temperature

According to OAC 785:45-5-12(f)(2)(A), at no time shall heat be added to any surface water in excess of the amount that will raise the temperature of the receiving water more than 2.8°C at the edge of the mixing zone. However, OAC 785:46-11-1(c) applies a specific antidegradation maximum limit of 52°C to all waters of the State including privately owned cooling water reservoirs.

Since heat is not added to the hydrostatic test water being discharged and all discharges should essentially be at ambient temperature, there is no reasonable potential to violate temperature criteria. Therefore, no permit limit or monitoring requirement for temperature is necessary.

(3) pH

OAC 785:45-5-12(f)(3) states, "The pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." Therefore, permit limitations of 6.5 to 9.0 standard units for pH are placed in this Permit.

(4) Oil and Grease

According to OAC 785:45-5-12(f)(4), "All waters having the designated beneficial use of any subcategory of fish and wildlife propagation shall be maintained free of oil and grease to prevent a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses or which cause deleterious effects to the biota."

Therefore, a narrative prohibition to the effect that "there shall be no discharge of visible sheen of oil or globules of oil or grease on or in the water" and "oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses" will be included in the draft permit. In addition, the technology-based limit of 15 mg/l for oil and grease should help ensure that the narrative criteria are maintained.

(5) Biological Criteria

Hydrostatic tests of equipment, piping, and vessels are not expected to add any amounts of bacteria to the fill water. Fill water that is obtained from surface waters may contain significant amounts of bacteria. Thus, the resulting hydrostatic test wastewater is required to be discharged back into the same waterbody from which the fill water was drawn to be eligible for coverage under this Permit.

When the fill water is obtained from rural or municipal drinking water supplies, the resulting discharges are not expected to contain bacteria at levels that would cause concern.

Therefore, no permit limit or monitoring requirement for biological criteria is imposed on the Permit. Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is not eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional specific limits or testing requirements as necessary to maintain the beneficial uses of the receiving stream.

(6) Toxicity from Halogenated Oxidants

OAC 785:46-3-1(c) states "Toxicity from halogens (e.g. chlorine, bromine and bromo-chloro compounds) will be controlled by dehalogenation rather than WET testing. However, use of dehalogenation shall not exempt an effluent from the WET testing requirements of this Subchapter." Chapter 2, Part III of the CPP implements this narrative criterion as follows: "The requirement of OAC 785:46-3-1(c) for dehalogenation is typically implemented as "no measurable amount in the effluent." "No measurable amount" is defined by the DEQ to be less than 0.1 mg/l. The Permit establishes an instantaneous daily maximum limitation of <0.1 mg/l for total residual chlorine. This limit will apply to all discharges of hydrostatic test wastewater, except when the fill water is drawn from a surface waterbody and is not halogenated.

(7) Ammonia Toxicity

Hydrostatic test wastewater is not expected to contain ammonia at significant levels that would cause concern. Therefore, no permit limit or monitoring requirements are necessary.

(8) Toxic Substances

Based on (1) the nature of the wastewater, (2) the prohibition of discharging hydrostatic test wastewater to which treatment chemicals, corrosion inhibitors, or biocides have been added, (3) the prohibitions on discharging precleaning wastewater as described in Part I of this fact sheet, and (4) the limits imposed for benzene, BTEX, GRO, DRO, and TRC, the wastewater which will be discharged through the proposed outfalls should not contain substances listed in Toxic Substances (785:45-5-12(f)(6)) at levels which would have reasonable potential to violate numerical criteria. Thus, additional permit action for toxic substances is not necessary for this beneficial use.

Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is not eligible for coverage under this General Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

(9) Turbidity

The Permit includes a daily maximum limit of 45 mg/l for total suspended solids. This limit on total suspended solids should adequately control turbidity in the discharges of the hydrostatic test water.

d. Agriculture/Livestock and Irrigation (OAC 785:45-5-13)

Based on the nature of the hydrostatic test water as described in part IV.C of this fact sheet, wastewater discharged through the proposed outfalls should not result in significant increases in levels of chloride, sulfate, or total dissolved solids at levels which would have reasonable potential to violate numerical criteria. Thus, additional permit action is not necessary for this beneficial use.

Where actual or potential exceedance of state water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is no longer eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

e. Primary Body Contact Recreation (OAC 785:45-5-16)

Hydrostatic tests of equipment, piping, and vessels are not expected to add any amounts of bacteria to the fill water. Fill water that is obtained from surface waters may contain significant amounts of bacteria. Thus, the resulting hydrostatic test wastewater is required to be discharged back into the same waterbody from which the fill water was drawn to be eligible for coverage under this Permit. When the fill water is obtained from rural or municipal drinking water supplies, the resulting discharges are not expected to contain bacteria at levels that would cause concern. Therefore, no permit action is necessary for this beneficial use.

f. Secondary Body Contact Recreation (OAC 785:45-5-17)

In accordance with OAC 785:45-5-17(d), which states that "Waters so designated shall be maintained to be free from human pathogens in numbers which may produce adverse health effects in humans." Hydrostatic tests of equipment, piping, and vessels are not expected to add any amounts of bacteria to the fill water. When the fill water is obtained from a surface waterbody, the resulting hydrostatic test wastewater may only be discharged back into the same waterbody from which the fill water was drawn to be eligible for coverage under this Permit. When the fill water is obtained from rural or municipal drinking water supplies, the resulting discharges are not expected to contain bacteria at levels that would cause concern.

Therefore, no permit action is necessary for this beneficial use.

g. Navigation (OAC 785:45-5-18)

Navigation use is determined in accordance with OAC 785:45-5-18, which states that this beneficial use is generally more dependent upon quantity than quality of water. Thus, no permit action is necessary for this beneficial use.

h. Aesthetics (OAC 785:45-5-19)

◆ **General**

Aesthetics use is determined in accordance with OAC 785:45-5-19(a), which states that "the surface waters of the State must be free from floating materials and suspended substances that produce objectionable color and turbidity." The proposed effluent limit of 45 mg/l daily maximum for total suspended solids should maintain the narrative water quality criteria for turbidity. In addition, a narrative requirement has been established in the Permit to prohibit the discharge of floating solids or visible foam in other than trace amounts.

In accordance with OAC 785:45-5-19(b), the water must be free from noxious odors and tastes, from materials that settle to form objectionable deposits, and discharges that produce undesirable effects or are a nuisance to aquatic life. A narrative requirement will be placed in the Permit to prevent any offensive odor in the vicinity of the proposed outfalls.

In accordance with OAC 785:45-5-19(c)(1), surface waters of the State shall be virtually free from all coloring materials which produce an aesthetically unpleasant appearance. A narrative requirement will be placed in the Permit to prohibit objectionable color in discharges.

◆ Nutrients

Hydrostatic tests of equipment, piping, and vessels are not expected to add nutrients to the fill water. Fill water that is obtained from surface waters may contain significant amounts of nutrients. Thus, the resulting hydrostatic test wastewater is required to be discharged back into the same waterbody from which the fill water was drawn to be eligible for coverage under this Permit.

When the fill water is obtained from rural or municipal drinking water supplies, the resulting discharges are not expected to contain nutrients at levels that would cause concern.

Therefore, no nutrient limitations or reporting requirements are established in the Permit.

i. Fish Consumption (OAC 785:45-5-20)

In accordance with OAC 785:45-5-20(a), "surface waters of the state shall be maintained so that toxicity does not inhibit ingestion of fish and shellfish by humans." Based on (1) the nature of the wastewater as described in part IV.C of this fact sheet, (2) the prohibition of discharging hydrostatic test wastewater to which treatment chemicals, corrosion inhibitors, or biocides have been added, (3) the prohibitions on discharging precleaning wastewater as described in Part I of this fact sheet, and (4) the limits imposed for benzene, BTEX, GRO, DRO, and TRC, the wastewater which will be discharged through the proposed outfalls should not contain pollutants at levels which would require fish consumption water quality limits or monitoring. Thus, additional permit action is not necessary for this beneficial use.

Where actual or potential exceedance of State water quality criteria is determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is not eligible for coverage under this general permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits as necessary to maintain the beneficial uses of the receiving stream.

VI. ENDANGERED SPECIES

For new facilities applying for coverage under this Permit, the DEQ will determine whether the point of discharge is located in surface waters designated as sensitive waters by the U.S. Fish and Wildlife Service (USFWS). If the proposed discharge point for a new facility is located in a sensitive water, the facility will not be eligible for an Authorization under this General Permit. For existing facilities applying for coverage under this Permit where the point of discharge is located in surface waters designated sensitive for endangered species by the USFWS and there have been no changes in the discharge volume or the point of discharge, review by the USFWS is not required, per the memorandum of agreement between the USFWS and the DEQ.

VII. 303(D) LIST AND ANTIDegradation EVALUATION

This general permit shall not cover those facilities discharging to receiving streams included in Oklahoma's 303(d) List of impaired water bodies caused by pH, oil and grease, or turbidity for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 6.5 - 9.0 standard units for pH, 15 mg/l for oil and grease, or 45 mg/l for total suspended solids are required. Those facilities shall apply for coverage under an individual discharge permit in accordance with requirements to obtain a permit contained in OAC 252:606.

VIII. NON-DISCHARGE REQUIREMENTS**A. SURFACE IMPOUNDMENTS AND SUBSURFACE TANKS**

The use of surface impoundments and/or subsurface tanks for treatment and/or disposal of hydrostatic test wastewater

is not standard industrial practice for this type of operation, and thus is not included in this general permit. If one or more surface impoundments and/or subsurface tanks are to be used, the applicant must apply for an individual permit.

B. LAND APPLICATION

The use of land application for disposal of hydrostatic test wastewater is not allowed by this Permit.

IX. DRAFT PERMIT LIMITS AND OTHER REQUIREMENTS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The following limitations listed in Table 1 will apply to discharges resulting from the hydrostatic testing of the following types of equipment, piping, and vessels associated with processing at or located in natural gas liquid extraction plants, natural gas processing plants, refineries, petrochemical manufacturing plants, gas compressor stations, or other facilities subject to DEQ jurisdiction: (1) new equipment, piping, and vessels; (2) existing natural gas equipment, piping, and vessels; and (3) existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

Table 1. Effluent Limitations
(concentrations are in mg/l, unless otherwise specified)

Parameters	Technology/BPJ Basis		Water Quality Basis		Previous Permit		Draft Permit	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow	---	---	---	---	Report MGD	Report MGD	Report MGD	Report MGD
Oil and Grease	---	15	---	---	---	15	---	15
Total Suspended Solids	---	45	---	---	---	45	---	45
Benzene ⁽¹⁾	---	0.05	---	---	---	0.05	---	0.05
BTEX, total ⁽¹⁾	---	0.5	---	---	---	0.5	---	0.5
T P H	Gasoline Range Organics (GRO) ⁽²⁾	1.0 ⁽³⁾	---	---	---	1.0 ⁽³⁾	---	1.0 ⁽³⁾
	Diesel Range Organic (DRO) ⁽²⁾	1.0 ⁽³⁾	---	---	---	1.0 ⁽³⁾	---	1.0 ⁽³⁾
Total Residual Chlorine (TRC) ⁽⁴⁾	---	---	---	< 0.1	---	< 0.1	---	< 0.1
pH	Between 6.5 – 9.0 s.u.		Between 6.5 – 9.0 s.u.		Between 6.5 – 9.0 s.u.		Between 6.5 – 9.0 s.u.	

⁽¹⁾ The Benzene and BTEX limits apply only to discharges of wastewater resulting from the hydrostatic testing of existing natural gas, oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

⁽²⁾ The GRO and DRO limits and monitoring requirements apply only to discharges of wastewater generated from the hydrostatic testing of existing oil, petroleum, petroleum product or petrochemical equipment, piping, and vessels.

⁽³⁾ The daily maximum limit of 1 mg/l is the total combined amount allowed for GRO and DRO.

⁽⁴⁾ The TRC limit and monitoring requirement do not apply when the fill water is drawn from a surface waterbody and is not halogenated.

Monitoring requirements for the discharges of hydrostatic test wastewater listed in Table 2 shall become effective along with the effluent limitations listed in Table 1.

Table 2. Monitoring Requirements

Parameters	Measurement Frequency ⁽¹⁾	Sample Type
Flow	Daily	Estimate ⁽²⁾
Oil and Grease	1/Discharge Event	Composite ⁽³⁾
Total Suspended Solids	1/Discharge Event	Composite ⁽³⁾
Benzene	1/Discharge Event	Composite ⁽³⁾
BTEX, total	1/Discharge Event	Composite ⁽³⁾
Total Petroleum Hydrocarbons	1/Discharge Event	Composite ⁽³⁾
Total Residual Chlorine	4/Discharge Event	Grab ⁽⁴⁾
pH	4/Discharge Event	Grab ⁽⁵⁾

⁽¹⁾ When discharging.

⁽²⁾ Flow may be estimated by calculating the volume of wastewater that can be contained in the equipment, piping, or vessels being tested.

⁽³⁾ Composite samples shall consist of four (4) grab samples of equal volume, taken of the hydrostatic test wastewater being discharged as it leaves the equipment, piping or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. All of the grab samples shall be combined into one composite sample at the end of the test period for analysis.

⁽⁴⁾ Grab samples shall be taken of the hydrostatic test water being discharged as it leaves the equipment, piping, or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. Each grab sample shall be tested individually, and the highest result reported.

⁽⁵⁾ Grab samples shall be taken of the hydrostatic test water being discharged as it leaves the equipment, piping, or vessels being tested at the beginning and at the end of the discharge and two times during the discharge at evenly spaced time intervals. Each grab sample shall be tested individually, and the lowest and highest results reported.

Additional Requirements:

The discharge of hydrostatic test water to which treatment chemicals, corrosion inhibitors, Sodium Bisulfite in excess of the amount needed for dechlorination, or biocides have been added is prohibited. This prohibition does not prohibit the use of fill water whose source is a municipal or rural drinking water supply, except where the permittee has added additional treatment chemicals, corrosion inhibitors, biocides, or other chemicals with the exception of Sodium Bisulfite.

The discharge of precleaning wastes is prohibited. Precleaning waste means the waste generated from activities such as washing the equipment, piping, or vessels with water or a detergent solution prior to the hydrostatic test and/or pre-pigging the equipment, piping, or vessels prior to the hydrostatic test.

There shall be no impingement or entrainment of fish when drawing water from a surface waterbody.

All hydrostatic test water shall be free from any kind of welding scrap or other foreign material before being discharged into the receiving waters.

There shall be no discharge of any wastewaters except those resulting from hydrostatic testing of equipment, piping or vessels within the scope of this Permit, unless such discharge is authorized through a separate individual or general OPDES discharge permit.

The permittee shall take such steps as are necessary to prevent or minimize flooding, stream channel scouring or erosion of materials and soils into surface waters caused by the discharge.

There shall be no discharge of hydrostatic test wastewater that contains polychlorinated biphenyl compounds.

There shall be no discharge of visible sheen of oil or globules of oil or grease. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of floating materials and suspended substances to the surface water of the State that may produce objectionable color. There shall be no offensive odor in the vicinity of the outfalls.

B. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III.E.4 of the Permit. Monitoring results obtained during the previous month shall be summarized and reported on the Discharge Monitoring Report (DMR) forms postmarked no later than the 15th day of the following month. If no discharge occurs during the reporting period, DMR forms stating "No Discharge" shall be submitted according to the above schedule.

C. OTHER DISPOSAL METHODS

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a State approved industrial waste disposal site or to a company for recycling.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

- a. Name and address of company hauling waste.
- b. The type and amount of waste hauled.
- c. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the staff of the DEQ for inspection, review, and copying.

D. REOPENER CLAUSE

This general permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of state water quality criteria are determined to be the result of the permittee's discharge to the receiving water, or a Total Maximum Daily Load is established for the receiving waters, or when required by changes to technology based limits. Modification or revocation and/or reissuance of the permit shall follow regulations listed at 40 CFR 124.5.

X. SUMMARY OF CHANGES FROM PREVIOUS PERMIT

- ◆ Sodium Bisulfite is now approved for use under this permit only in the amount necessary to dechlorinate the fill water.
- ◆ The footnote for pH now correctly requires the maximum and minimum pH to be reported.
- ◆ Descriptions of the monitoring requirements have been changed to clarify the sampling procedure.

XI. ADMINISTRATIVE RECORD

The following sources were used to prepare this Permit and constitute a part of the administrative record of this Permit.

A. DEQ RECORDS

- General permit and fact sheet for hydrostatic test water discharges (OKG27).

B. CLEAN WATER ACT CITATIONS

- Section 301 and 402(a).

C. 40 CFR CITATIONS

- 40 CFR, in particular, Parts 122, 124, 136.

D. STATE LAW, STANDARDS, AND RULES AND REGULATIONS

- Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S., §2-6-201 et seq.
- OAC 252:606, Oklahoma Pollutant Discharge Elimination System Standards (DEQ)
- OAC 252:690, Water Quality Standards Implementation (DEQ)
- OAC 785:45, Oklahoma's Water Quality Standards (OWRB)
- OAC 785:46, Implementation of Oklahoma's Water Quality Standards (OWRB)
- Oklahoma Continuing Planning Process (CPP) Document

E. MISCELLANEOUS

- Integrated Report

XII. REVIEW BY OTHER AGENCIES AND FINAL DETERMINATION

A draft permit, fact sheet and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service upon publication of that notice. If comments are received from these agencies or other State or Federal agencies with jurisdiction over fish, wildlife, or public health, additional conditions may be included in accordance with regulations promulgated under 40 CFR 124.59.

The public notice describes the procedures for the formulation of final determinations.