

**Final NPDES General Permit for Discharges from New and Existing Sources in the Coastal and Stripper Subcategories of the Oil and Gas Extraction Point Source Category to the Coastal Waters of Texas (Permit No. TXG330000)**

**Agency:** United States Environmental Protection Agency

**Action:** Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed on the Federal Register of March 27, 2012.

**Date:** July 30, 2012

**Significant Changes from Proposed Permit**

1. Changed pH limitation range from 6.0 – 9.0 s.u. to 6.5 – 9.0 s.u. for discharges of formation test fluids; and
2. Deleted enterococci effluent limitation and applied fecal coliform limitation only to oyster waterbodies.

**State Certifications**

By letter dated June 12, 2012, the Railroad Commission of Texas (RRC) provided certification of the permit under section 401 of the CWA and confirmed consistency with the Texas Coastal Management Program.

**Other Regulatory Requirements**

A. National Environmental Policy Act

EPA's regulations at 40 CFR Part 6, Subpart F, which implement the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C., 4331, et seq., provide the procedures for carrying out the NEPA environmental review process for the issuance of new source NPDES permits. The purpose of this review process is to determine if any significant environmental impacts are anticipated by issuance of NPDES permits authorizing discharges from new sources. EPA prepared an environmental assessment (EA) in accordance with 40 CFR 6.604 when the previous permit was drafted. EPA completed a supplemental information report (SIR) and determined, based on information available, that there will be no significant impact as the result of reissuing this permit. The final SIR is available on EPA's website <http://www.epa.gov/region6/water/npdes/genpermit/index.htm>.

B. Endangered Species Act (ESA)

When EPA proposed the NPDES general permit for the Coastal Seas of Texas in 2000, EPA determined that authorization of the discharges was not likely to adversely affect listed threatened or endangered species. The U.S. Fish and Wildlife Service (FWS) concurred that the re-issuance of permit No TXG330000 would have no adverse effect on any federally listed

threatened or endangered species or designated critical habitat that were under the FWS' jurisdiction. The National Marine Fisheries Service (NMFS) also concurred in a letter dated May 1, 2001, with EPA's determination (Ref: I/SER12001100372). During the 2007 permit reissuance process, EPA Region 6 determined that the renewal action had "no effect" upon the previous 2000 consultation. Furthermore, when EPA reissued General Permit TXG260000, effective February 8, 2012, EPA determined that authorization of the discharges is not likely to adversely affect any listed threatened or endangered species. EPA received the concurrence letter dated July 15, 2011, from FWS (Consultation No. 21410-2004-I-0051), and a letter dated January 3, 2012, from NMFS (Ref. No. I/SER/2011/00705). The ESA consultation has evaluated effects on the species which may appear in the action area of the coastal permit TXG330000.

EPA determined that the reissuance of the permit may affect, but is unlikely to have adverse effects on the federally listed species and has been working with both FWS and NMFS on ESA section 7 consultations, respectively. This final permit reissuance does not relax any expired permit conditions that may adversely affect the water quality of the Texas coastal waters, rather it will be more protective by adding toxicity requirement for produced water discharges, more stringent limitations and monitoring requirements to protect impaired waters and new requirements for fish/shellfish impingement/entrainment control measures. Because this permit renewal provides more protections than the expired permit and EPA expects concurrence with its determination from both FWS and NMFS, EPA is reissuing the permit prior to the completion of ESA section 7 consultations. If, either FWS or NMFS does not concur with EPA's finding, EPA may modify the permit to reflect outcome of ESA consultation.

#### C. Magnuson-Stevens Fishery Conservation and Management Act

The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act set forth a new mandate to identify and protect important marine and anadromous fisheries habitats. The purpose of addressing habitat in this act is to further the goal of maintaining sustainable fisheries. Guidance and procedures for implementing these amendments are contained in National Marine Fisheries Service regulations (50 CFR 600.805 - 600.930). These regulations specify that any Federal agency that authorizes or proposes to authorize an activity which would adversely affect an Essential Fish Habitat is subject to the consultation provisions of the Magnuson-Stevens Act. The Texas Coastal Subcategory areas covered by this general permit include Essential Fish Habitat designated under the Magnuson-Stevens Act.

The Region previously found that issuance of the general permit would be unlikely to adversely affect Essential Fish Habitat. EPA received written concurrence from NMFS on that determination by a letter dated January 10, 2007, on reissuance of the permit in 2007. Because there are no changes which make the permit less stringent through this action, EPA again finds that its issuance is unlikely to adversely affect Essential Fish Habitat. EPA is seeking concurrence with that decision from NMFS.

#### D. Historic Preservation Act

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

Commission concurred with EPA's determination on August 5, 2011.

E. 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). Because this permit authorizes limited discharges, the reporting time for discharges is less than that for permittees discharging under the Territorial Seas of Texas (TXG260000) or to Outer Continental Shelf (GMG290000) permits. Also, this reissued permit requires electronic reporting for discharge monitoring reports, so it will save some reporting time and paper mailing costs.

F. Regulatory Flexibility Act

The Regulatory Flexibility Act, 5 USC 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. This permit is not a "rule" subject to the Regulatory Flexibility Act. EPA prepared a regulatory flexibility analysis, however, on the promulgation of the Coastal Subcategory guidelines on which many of the permit's effluent limitations are based. That analysis shows that compliance with the permit requirements will not result in a significant impact on dischargers, including small businesses, covered by this permit. EPA Region 6, therefore, concludes that the permit being issued today will not have a significant impact on a substantial number of small entities.

**Response to Comments.**

EPA received comments from a citizen, Texas Commission of Environmental Quality (TCEQ), and the RRC. A summary of the comments received on the proposed permit and EPA's responses to those comments follows.

**Comment 1:** A citizen commented that the Texas Water Quality Standards (WQS) for pH in coastal waters appears to be 6.5 – 9.0 s.u., shouldn't this range be used for the pH limits in the permit instead of 6.0 – 9.0 s.u..

**Response:** Effluent limitation for pH was established for formation test fluids (FTFs) which may only be discharged to bays or estuaries where no chloride standards have been established. EPA does not have the site-specific FTFs' pH and alkaline data to demonstrate that discharges of FTFs at a pH range of 6.0 – 9.0 would comply with the 6.5 – 9.0 water quality standards for coastal waters established by the State 30 TAC 307.10, Appendix A, so a pH range of 6.5 – 9.0 s.u. limit is established in the final permit consistent with 40 CFR 122.4(d).

**Comment 2:** TCEQ commented that in the fact sheet, EPA requests comment on whether new discharges of produced water from stripper wells to impaired waters should be prohibited as a mechanism to avoid contributing to existing water quality impairments. TCEQ disagrees with establishing a discharge prohibition to *all* impaired waterbodies without sufficient information or

data to support the prohibition.

**Response:** The final permit only prohibits new discharges of produced water from stripper wells to waterbodies impaired by dissolved oxygen depletion. Stripper wells with existing discharges and those discharging or intending to start discharging to a waterbody that isn't listed as impaired for low dissolved oxygen would not be affected. This condition would only apply to stripper wells where both 1) the receiving water was listed by the State as impaired for low dissolved oxygen and 2) the stripper well had not discharged produced water as of the effective date of the permit, presumably because either a) it was not a stripper well at the time of permit issuance and had therefore been using an alternative disposal practice to comply with the coastal subcategory effluent limitation guideline prohibition on produced water discharges or b) had chosen to employ an alternative practice (likely the one that had to be used prior to qualifying as stripper well), which presumably would continue to be a disposal option.

In evaluating potential impacts, the EPA considered available oxygen demand data on produced waters from the outer continental shelf (OCS). The scarcity of data on produced water discharges in Texas coastal waters is largely attributable to the small number of stripper wells that actually discharge. The data available from the OCS did lead the EPA to conclude that produced waters do have the potential to exert a substantial oxygen demand, which would negatively impact dissolved oxygen in waters already impaired for low dissolved oxygen. Available data suggest that there is a reasonable potential for new discharges to cause or contribute to an excursion above the numeric water quality standard for dissolved oxygen, therefore, limits are required by 40 CFR 122.4(i). However, this conditional prohibition applies only to this general permit and operators of stripper wells discharging to waters impaired for low dissolved oxygen may apply for an individual permit where a site specific analysis based on their application data can be done and appropriate limits for protection of State water quality standards be developed to ensure consistency with 40 CFR 122.4(i).

The EPA expects this prohibition to apply to few, if any, dischargers. It seems that the new discharge prohibition condition will be insignificant to the existing or future operators based on the following facts: 1) historical information has indicated that probably no stripper wells have been discharging produced waters to the coastal waters of Texas under the authorization of this general permit, 2) no operators submitted any comments to this general permit renewal proposal indicating this prohibition would be a problem, and 3) no industrial representative participated in the public meeting and hearing held by EPA Region 6 to raise any concerns indicating this prohibition would be a problem.

**Comment 3:** TCEQ commented that EPA, based on offshore facility data, proposed no discharge of produced water to dissolved oxygen impaired waterbodies. TCEQ recommended that EPA Region 6 increase their data collection efforts prior to establishing assumptive blanket prohibitions in response to a lack of sufficient information on stripper well discharges.

**Response:** As discussed in response 2 above, EPA relied on data from offshore produced water discharges to determine reasonable potential for coastal water produced water discharges to have levels of high oxygen demand. Site-specific data for the development of limits to protect already-impaired waters are unavailable at this time, therefore, EPA determined prohibition of new

stripper well produced water discharge under this particular general permit was an appropriate control mechanism. Section 3.2 of Technical Support Document for Water Quality-based Toxics Control (March 1991) allows the regulatory authority to develop and impose permit limitations in the absence of site-specific data. The EPA would point out that prohibiting authorization for such discharges under this particular general permit does not rule out the possibility that such discharges could be authorized in a different permit.

**Comment 4:** TCEQ commented that fecal coliform is an acceptable alternative instream indicator of recreational suitability for high saline waters and therefore, should be the only limit (i.e., not both enterococci and fecal coliform) applied for discharges to oyster waters.

**Response:** Both enterococci and fecal coliform were used in the proposed permit to address the fact that both bacteria indicators are used by the Texas Water Quality Standards for waters affected by this permit, depending on the designated use of the water (see footnote 1 to 30 TAC 307.10, Appendix A: “The indicator bacteria for recreational suitability in saltwater is Enterococci. Fecal coliform is the indicator bacteria for oyster water use.”). However, based on TCEQ’s comment and a similar RRC comment (see Comment 6 below) and consistent with 40 CFR 124.53(e)(3), the final permit will require only fecal coliform for bacteria limits in oyster waters.

**Comment 5:** RRC had concerns about discharge restriction from new stripper wells. RRC also commented that stripper wells are located too far to discharge to those impaired waterbodies.

**Response:** It is EPA’s policy to restrict new source/new discharge to impaired waterbodies to assure compliance with 40 CFR 122.4(i). As RRC indicated, the new restriction may not affect any stripper well discharges due to the location. EPA has not received any comment from the oil and gas industry which may indicate that the new restriction does not affect any dischargers. Also see EPA’s responses to Comments 2 and 3 above.

**Comment 6:** RRC questioned why the proposed permit included bacterial limitations for both fecal coliform and Enterococci.

**Response:** See EPA’s response to Comment 4 above.

**Comment 7:** RRC questioned why the proposed permit includes requirements for cooling water intake structures (CWIS).

**Response 7:** The CWIS Phase III rule, published in Federal Register, Vol. 71, No. 116, applies to new facilities which are regulated by either Offshore or Coastal Subcategories of Oil and Gas Extraction Point Source Category Effluent Guidelines in 40 CFR 435.10 or 40 CFR 435.40. New oil or gas facility constructed after July 17, 2006, operating in the Texas coastal water and requiring an NPDES permit for any type of discharges, would be subject to applicable CWIS provisions.