

REGIONAL GENERAL PERMIT (RGP) – 11

CONSTRUCTION AND OPERATION OF EXPLORATION AND PRODUCTION WELLS FOR OIL AND GAS

AUTHORIZED ACTIVITIES, LIMITATIONS AND CRITERIA

Work authorized by this RGP is limited to the discharge of dredged or fill material into waters of the United States (U.S.), including wetlands, and work in, or affecting navigable waters of the U.S., associated with the construction and operation of exploration and production wells for oil and gas and their supporting fills and structures. Expansion of existing facilities is included provided they were not previously approved under this general permit. Activities that may be authorized by this RGP include, but are not limited to:

1. **Well Sites**: The discharge of dredged and fill material associated with mechanized land clearing and leveling for the construction of drilling pads, pits (reserve, mud, brine, water), containment levees/berms, borrow areas, staging areas, equipment ramps, soil erosion and control measures, restoration actions associated with “frac-out” clean-up activities at the well site, and associated facilities are authorized. This RGP also covers the deposition of wood chips into waters of the U.S. for those circumstances in which wood chips are deposited in a manner that meets the definition of fill pursuant to 33 CFR 323. Total loss of waters of the United States is limited to an area of 2.5 acres, of which permanent losses cannot exceed 1 acre. The temporary loss of up to 1.5 acres must be restored on site upon completion of drilling termination and well installation. This period should not exceed 1 year unless written authorization is provided by USACE. These totals do not include losses for access roads and collection and distribution pipelines. However, both the size of the well site and the amount of dredged and fill material discharged into waters of the U.S. must be the minimum necessary to accomplish the work. A well site with multiple wells may be authorized provided the 2.5 and 1 acre limits are not exceeded.

Limitations associated with Well Sites include:

- Permittees shall avoid waters of the U.S., including wetlands, in selecting the location of well sites where practicable alternative sites exist.
- Well sites located in waters of the U.S. cannot occur where any feature of that well site is within 600 feet of any remaining feature of another well site (restored or unrestored) located in waters of the U.S. The measurement to determine this distance shall be between the closest points of the two features in question, e.g., two well sites
- Well sites located in waters of the U.S. cannot occur within 3,000 feet (1,320 feet in Louisiana) of the toe of any levee, dike, dam or other work built with Federal funds for flood control or water supply, or by any state or local government are not authorized without written approval from the appropriate agency. The measurement to determine this distance shall be between the closest points of the two features in question, e.g., a well site and a levee, a well site and a dam.
- Construction of water impoundments is not authorized except for stormwater control features (e.g., water supply for well operations).
- In cases where oil-based drilling muds are being used in the drilling operation, containerized mud systems must be used instead of open surface pits.
- In cases where water-based drilling muds are being used, permittees must use containerized mud systems, where practicable.

- All pits shall be suitably lined with an impervious material.
 - Containment levees must be constructed around drilling operations and borrow material used to construct drilling operation containment levees must be obtained from inside the levee if the material is suitable for such use.
 - Drilling Termination and Well Abandonment: Upon completion of drilling activity, a thorough and extensive cleanup operation shall be conducted, including removing from the drilling site to an upland disposal site all saltwater, drilling mud, brine, hydrocarbons, and any substances considered toxic under federal regulations. All pits shall be reclaimed. Only equipment and supplies necessary for operation of the well shall remain onsite. All pits shall be filled within 90 days following the termination of drilling. The disposal of drilling mud and control of accidental spills and discharges shall comply with all applicable federal and state regulations. The portion of the pad, and all other fills and structures, that are no longer needed for well operation and maintenance shall be removed and the area restored to preconstruction elevations, contours, and conditions and be protected against erosion by suitable means to the maximum extent practicable within 90 days following the termination of drilling, unless an alternative resolution is specifically identified by the permit applicant and authorized by the USACE. Wells shall be plugged and capped in accordance with state regulations prior to abandonment.
 - A compensatory mitigation plan (see Appendix D) for any permanent losses to waters of the U.S. over 0.1 acres caused by Well Sites must be included as part of the PCN (see Appendix E). Additionally, a Restoration plan for temporary losses to waters of the U.S. at a well site (in accordance with Appendix D) must be provided to the USACE as part of the PCN (see Appendix E).
2. **Access Roads:** The discharge of dredge and fill material into waters of the U.S. associated with the construction of access roads to facilities associated with well sites, production facilities and compressor stations associated with the construction and operation of exploration and production wells for oil and gas is authorized. There is no acreage limit of losses of waters of the U.S., including wetlands, caused by the construction of access roads and turn-arounds. However, they shall be minimized by such means as taking the shortest practicable route through waters of the U.S., utilizing existing roads, following previously disturbed areas to the maximum extent practicable, and limiting the width of ground disturbance in constructing access roads and turn-arounds to the minimum amount necessary.

Limitations associated with Access Roads include:

- The clearing of vegetation for access road rights-of-way in waters of the U.S. must be the minimum necessary and in no case shall exceed a width of 40 feet. In Louisiana, the maximum width is 35 feet.
- Turn-arounds up to 90 feet in diameter may be constructed in waters of the U.S. at one-mile intervals along access roads.
- Roads shall be designed to pass low flows and expected high flows and not interfere with the migration of aquatic organisms or create impoundments. All access roads raised above the existing ground elevation in waters of the U.S. must be suitably bridged or culverted to minimize adverse impacts to local drainage patterns. Roads shall not promote the drainage of waters of the U.S. or cause unnecessary impoundment of water. Bridges or culverts for roads in wetlands shall be spaced no further than 500 feet apart and placed at least at all surface drainages. Bridges and culverts shall be sized to adequately pass low flows and expected high flows.

- Roadside borrow ditches shall not be continuous; each section of ditch shall be no longer than 300 feet and shall be separated from adjacent sections of ditch by at least 50 feet of unexcavated ground.
 - A compensatory mitigation plan (see Appendix D) for any permanent losses to waters of the U.S. over 0.1 acres caused by Access Roads must be included as part of the PCN (see Appendix E).
3. **Production Facilities and Compressor Stations:** The discharge of dredged and fill material associated with mechanized land clearing and leveling and for the construction of production facilities and compressor stations including, but not limited to, building pads, compressor facilities, parking areas, and storage facilities. Losses to waters of the United States are limited to an area of 1.0 acre, not including areas for well sites, access roads and pipelines.

Limitations associated with Production Facilities and Compressor Stations include:

- Production facilities shall be located outside of wetlands whenever practicable to minimize adverse impacts to the aquatic environment, provide easier access to these facilities, reduce flood damage, and lessen the potential for contaminating surface water.
 - Production facilities to be located in wetlands should be centrally located to service as many wells as practicable.
 - Storage and production equipment shall be properly diked/bermed to contain spills and leakage.
 - A compensatory mitigation plan (see Appendix D) for any permanent losses to waters of the U.S. over 0.1 acres caused by Production Facilities and Compressor Stations must be included as part of the PCN (see Appendix E).
4. **Collection, Distribution and Water Supply Pipelines:** The discharge of dredged or fill material associated with the mechanized land clearing as well as the sidecasting of excavated materials and backfilling associated with the installation of collection and distribution pipelines placed for the construction and operation of exploration and production wells for oil and gas.

Limitations associated with Collection and Distribution Pipelines include:

- Material resulting from trench excavation may be temporarily sidecast into waters of the U.S. for up to three months provided that the material is not placed in a manner that will allow it to be dispersed by currents or other forces. The District Engineer may extend the period of side-casting to a period not to exceed 180 days, where appropriate. In wetlands, the top 6 to 12 inches of a trench should generally be backfilled with topsoil from the trench.
5. **Water Supply Intakes:** The discharge of dredged or fill material associated with the construction of temporary and permanent intakes placed into waters of the U.S. to supply water to proposed development, production and operation of wells authorized under the provisions of this RGP.
- Dredge and fill material to be placed for the construction and operation of a water supply intake is not to exceed 50 cubic yards below the ordinary high water mark of waters of the U.S.
 - Withdrawals of water are to be the minimum necessary for the development, production and/or operation of wells identified in the RGP PCN application.

CRITERIA APPLICABLE TO ALL ACTIONS

Adverse impacts to waters of the U.S., including wetlands, shall be avoided and minimized to the extent practicable through the use of alternatives that have less adverse impact on the aquatic environment. Projects shall be designed and operated to pass low flows and expected high flows, to not interfere with the migration of aquatic organisms, avoid the creation of impoundments, and maintain the preconstruction conditions to the extent practicable.

All fills and structures above the existing ground elevation in waters of the U.S. shall be constructed and placed so as to minimize adverse impacts to local hydrology. Projects shall not promote the drainage of waters of the U.S. or cause unnecessary impoundment of water. Intakes are to be operated in a manner that avoids and minimizes withdrawals during important hydrologic periods as relevant to the particular waterbody.

Best management practices shall be used to the maximum extent practicable to minimize the discharge of pollutants and sediment in stormwater runoff to protect water quality. All soil-disturbing activities shall be conducted in a manner that will minimize the extent and duration of exposure of unprotected soils. Appropriate erosion and siltation controls shall be used and maintained in effective operating condition during and after construction until all exposed soil is permanently stabilized. Measures to control erosion and run-off, such as berms, silt screens, sedimentation basins, revegetation, mulching, and similar means, shall be implemented. All damage resulting from erosion and/or sedimentation shall be repaired.

Stream channelization is not allowed under this RGP. For the purpose of this RGP, stream channelization includes, but is not limited to, narrowing the channel width, shortening the channel length, restricting channel access to its floodplain, constraining the channel's ability to migrate, or hardening the channel that causes more than minimal effects. Realignment of streams that do not result in stream channelization conditions is allowed under this RGP only if no practicable alternative exists. Appropriate geomorphological criteria for the site specific conditions must be included with any channel relocation design. Those projects proposing stream realignment of more than 300 linear feet require a PCN (see Appendix E) and a compensatory mitigation plan or restoration plan, whichever is applicable.

This RGP shall become effective on the date of the signature of the District Engineers, or their authorized representative(s), and will automatically expire five years from that date unless the permit is modified, revoked, or extended before that date. Verifications by the USACE that an activity is authorized by this RGP are valid until the expiration date of this RGP unless this RGP is modified, revoked, or extended before that date. Activities that have been verified by the USACE as authorized under this RGP, and have commenced, i.e. are under construction, or are under contract to commence, by the verification expiration date, will remain authorized provided the activity is completed within twelve months of the date of expiration, modification, or revocation of the RGP, or by another date determined by the USACE for the specific case, whichever is later, unless discretionary authority is exercised on a case-by-case basis to modify, suspend, or revoke the authorization.

It is the permit applicant's responsibility to ensure that all authorized structures and activities continue to meet the terms and conditions set forth herein; failure to abide by them will constitute a violation of the Clean Water Act and/or the Rivers and Harbors Act of 1899. Projects outside the scope of this RGP may be considered for authorization by individual permit.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:
FOR THE DISTRICT ENGINEERS

_____21 January 2019_____

Kenneth N. Reed
Colonel, U.S. Army
District Commander
Fort Worth District

Christopher A. Hussin
Colonel, U.S. Army
District Commander
Tulsa District

Larry D. Caswell Jr.
Lt. Colonel, U.S. Army
District Commander
Albuquerque District

Attachments:

Appendix A – General Conditions

Appendix B – Corps Districts in Texas

Appendix C – Navigable Waters of the U.S. in Fort Worth, Albuquerque, and Tulsa Districts Where the RGP is Applicable

Appendix D – Compensatory Mitigation and Restoration Plans

Appendix E – Preconstruction Notification Requirement and Review Procedures

Appendix F – 401 Water Quality Certifications from Railroad Commission of Texas and Louisiana
Department of Environmental Quality

APPENDIX A

GENERAL CONDITIONS

1. In verifying authorization under this regional general permit (RGP), the Department of the Army will rely in part on the information provided by any permittee. If, subsequent to verifying authorization, such information proves to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part.
2. Permittees shall ensure that all structures and activities authorized by this RGP comply with all terms and conditions herein. Failure to abide by such conditions invalidates the authorization and may result in a violation of the law, requiring restoration of the site or other remedial action.
3. This RGP is not an approval of the design features of any authorized project or an implication that such project is adequate for the intended purpose: a Department of the Army permit merely expresses the consent of the Federal Government to conduct the proposed work insofar as public rights are concerned.
4. This RGP does not grant any property rights or exclusive privileges; does not authorize any injury to the property or rights of others; and does not authorize any damage to private property, invasion of private rights, or any infringement of federal, state or local laws or regulations. This RGP does not relieve the permittee from the requirement to obtain a local permit from the jurisdiction within which the project is located.
5. This RGP may be modified or suspended in whole or in part if it is determined that the individual or cumulative impacts of work that would be authorized using this procedure are contrary to the public interest. The authorization for individual projects may also be summarily modified, suspended, or revoked, in whole or in part, upon a finding by the District Engineer that such action would be in the public interest.
6. Modification, suspension or revocation of the District Engineer's authorization shall not be the basis for any claim for damages against the United States.
7. This RGP does not authorize interference with any existing or proposed federal project, and does not entitle the permittee to compensation for damage or injury to the structures or activities authorized herein that may result from existing or future operations undertaken by the U.S. in the public interest.
8. Permittees shall coordinate all construction activities in federally-maintained channels and/or waterways for required setback distances with the USACE prior to application for a permit.
9. Permittees are responsible for compliance with all terms and conditions of this RGP for all activities within the Department of the Army permit area of a project authorized by this RGP, including those taken on behalf of the permittee by other entities such as contractors and subcontractors. Permittees assume all liabilities associated with fills and impacts that are incurred by individuals and/or organizations working under contracts with the permittee. Before beginning the work authorized herein, or directing a contractor to perform such work, permittees shall ensure that all parties read, understand and comply with the terms and conditions of this permit. The USACE strongly encourages preconstruction meetings for all construction activities of the project.

10. Permittees shall allow the District Engineer, and/or his authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the activity is being performed in accordance with the terms and conditions of this RGP.
11. No attempt shall be made by permittees to prevent the full and free public use of any navigable water of the U.S.
12. Permittees shall not cause any unreasonable interference with navigation.
13. Permittees understand and agree that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army, or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
14. Permittees shall mark structures and fills, particularly in navigable waters of the U.S., when appropriate, so that their presence will be known to boaters.
15. Permittees shall mark intake structures and other fills and structures in navigable waters, when appropriate, so that boaters will notice their presence.
16. Permittees shall make every reasonable effort to conduct the activities in a manner that will minimize any adverse impact of the work on water quality, fish and wildlife, and the natural environment, including adverse impacts to migratory waterfowl breeding areas, spawning areas, and trees, particularly hard-mast-producing trees such as oaks and hickories.
17. Permittees shall normally maintain existing buffers around waters of the U.S. and create and/or expand buffers around waters of the U.S. when practicable. Compensatory mitigation plans for projects in, or near, streams, other open waters, or wetlands shall normally include provisions for the establishment, maintenance, and legal protection, e.g. conservation easements, deed restrictions, of vegetated buffers to those waters.
18. Permittees must evaluate the effect that the proposed work would have on historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP) prior to the initiation of work. Historic properties include prehistoric and historic archeological sites, and areas or structures of cultural interest that occur in the permit area. If a known historic property would be encountered, the permittee shall notify the USACE and shall not conduct any work in the permit area that would affect the property until the requirements of 33 CFR Part 325, Appendix C, and 36 CFR Part 800 have been satisfied. If a previously unknown historic property is encountered during work authorized by this RGP, the permittee shall immediately notify the USACE and avoid further impact to the site until the USACE has verified that the requirements of 33 CFR Part 325, Appendix C, and 36 CFR Part 800 have been satisfied.
19. Activities that are likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Endangered Species Act (ESA), or that are likely to destroy or adversely modify the critical habitat of such species are not authorized. Permittees shall notify the District Engineer if any federally-listed threatened or endangered species or critical habitat may be affected by, or is in the vicinity of, the project and shall not begin work until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized.

20. Materials to be placed into waters of the U.S. are restricted to clean native soils and concrete, sand, gravel, rock, other coarse aggregate, and other suitable material that are free of toxic pollutants in toxic quantities.
21. Permittees are not authorized to discharge dredged or fill material into waters of the U.S. for purposes of disposal into, or reclamation of, an aquatic area, such as a wetland.
22. Permittees need to apply for and receive coverage under the appropriate Louisiana Pollution Discharge Elimination System permit from the Louisiana Department of Environmental Quality for discharges of drilling muds, drill cuttings, and produced brine into waters of the State of Louisiana.
23. Permittees shall place all heavy equipment working in wetlands on mats, or take other appropriate measures to minimize soil disturbance.
24. Permittees shall use and maintain appropriate erosion and siltation controls in effective operating condition during construction, and permanently stabilize all exposed soil at the earliest practicable date using native vegetation to the maximum extent practicable. Permittees shall remove all excess material and temporary fill and structures placed in waters of the U.S., including wetlands, to upland areas and stabilize all exposed slopes and stream banks immediately upon completion of construction. Permittees shall return all areas affected by temporary fills and/or structures to preconstruction conditions or better, including revegetation with native vegetation. All material removed must be placed at least 100 feet from any water of the U.S., including wetlands, and adequately contained to prevent the return to any water of the U.S., including wetlands. All soil-disturbing activities shall be conducted in a manner that will minimize the extent and duration of exposure of unprotected soils. Measures to control erosion and run-off, such as berms, silt screens, sedimentation basins, revegetation, mulching, composting, and similar means, shall be taken as necessary. Damage resulting from sedimentation and/or erosion shall be repaired.
25. Permittees shall ensure that projects have no more than minimal adverse impacts on public water supply intakes.
26. Permittees shall not significantly disrupt the movement of those species of aquatic life indigenous to the water body or those species that normally migrate through the project area.
27. Permittees shall not permanently restrict or impede the passage of normal or expected high flows unless the primary purpose of the activity is to temporarily impound water or for authorized detention ponds for stormwater management.
28. Stream channelization is not allowed under this RGP. For the purpose of this RGP, stream channelization includes, but is not limited to, narrowing the channel width, shortening the channel length, restricting channel access to its floodplain, constraining the channel's ability to migrate, or hardening the channel that causes more than minimal effects. Realignment of streams that do not result in stream channelization conditions is allowed under this RGP only if no practicable alternative exists. Appropriate geomorphological criteria for the site specific conditions must be included with any channel relocation design.
29. Permittees shall design facilities to be stable against the forces of flowing water, wave action, and the wake of passing vessels.
30. Permittees shall properly maintain all structures and fills to ensure public safety.

31. Permittees shall not use a jet barge or similar equipment for trench excavation.
32. Permittees shall conduct dredging and excavation activities with land based equipment rather than from the water body whenever practicable.
33. Permittees may transfer the permit to a new landowner by submitting a letter to the appropriate Corps District Office to validate the transfer. A copy of the RGP 11 verification letter must be attached to the request and must contain the following language:

“When the structures or work authorized by this RGP are still in existence at the time the property is transferred, the terms and conditions of this RGP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this RGP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

34. This permit does not authorize work in a park, wildlife management area, refuge, sanctuary, or similar area administered by a federal, state or local agency without that agency's approval.
35. Permittees must comply with Federal Emergency Management Agency (FEMA), or FEMA-approved local floodplain development requirements in the placement of any permanent above-grade fills in waters of the U.S., including wetlands, within the 100-year floodplain. The 100-year floodplain will be identified through FEMA’s Flood Insurance Rate Maps or FEMA-approved local floodplain maps. A permanent above-grade fill is a discharge of dredged or fill material into waters of the U.S., including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the water body to dry land.
36. To satisfy Railroad Commission of Texas (RRC) water quality certification requirements for all projects to which Section 401 water quality certification by the RRC applies, the permittee must demonstrate that activities that are not water dependent do not have a practicable alternative and may not consider compensatory mitigation an alternative.

a. Erosion Control

Disturbed areas must be stabilized to prevent the introduction of sediment to adjacent wetlands or water bodies during wet weather conditions (erosion). *At least one* of the following best management practices (BMPs) must be maintained and remain in place until the area has been stabilized.

- Temporary Vegetation
- Blankets/Matting
- Mulch
- Sod

b. Post-Construction TSS Control

After construction has been completed and the site is stabilized, total suspended solids (TSS) loadings shall be controlled by *at least one* of the following BMPs.

- Retention/Irrigation
- Extended Detention Basin
- Vegetative Filter Strips
- Constructed Wetlands
- Wet Basins

c. Sedimentation Control

The project area must be isolated from adjacent wetlands and water bodies by the use of BMPs to confine sediment. *At least one* of the following BMPs must be maintained and remain in place until project completion.

- Sand Bag Berm
- Silt Fence
- Triangular Filter Dike
- Rock Berm
- Hay Bale Dike

Dredged material shall be placed in such a manner that prevents sediment runoff into water in the state, including wetlands. Water bodies can be isolated by the use of one or more of the required BMPs identified for sedimentation control. These BMPs must be maintained and remain in place until the dredged material is stabilized.

Hydraulically dredged material shall be disposed of in contained disposal areas. Effluent from contained disposal areas shall not exceed a TSS concentration of 300 mg/l.

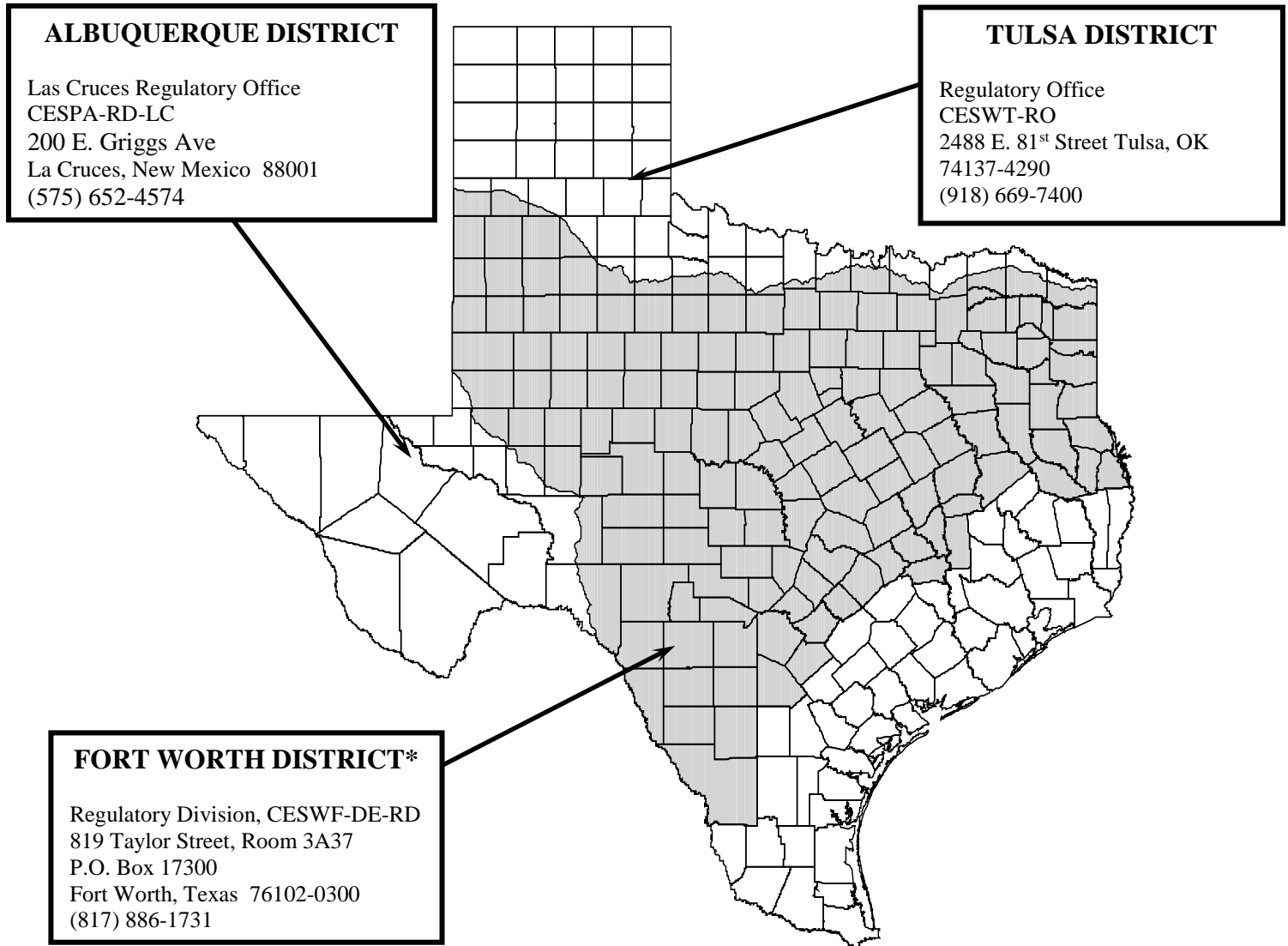
d. Contaminated Dredged Material

If contaminated dredge material that was not anticipated or provided for in the permit application is encountered during dredging, operations shall cease immediately. Pursuant to Chapter 26 of the Texas Water Code, the individual operating or responsible for the dredging operations shall notify the Railroad Commission of Texas' 24-hour emergency number at (844) 773-0305 (toll free) or (512) 463-6785 as soon as possible, and not later than 24 hours after the discovery of the material. The applicant shall also notify the Corps that activities have been temporarily halted. Contaminated dredge material shall be remediated or disposed of in accordance with RRC rules. Dredging activities shall not be resumed until authorized in writing by the RRC.

Contaminated dredge material is defined as dredge material which has been chemically, physically, or biologically altered by man-made or man-induced contaminants which include, but are not limited to solid waste, hazardous waste and hazardous waste constituent as those terms are defined by 30 TAC Chapter 335, Pollutants as defined by Texas Water Code 26.001 and Hazardous Substances as defined in the Texas Health and Safety Code, 361.003.

APPENDIX B

CORPS DISTRICTS IN TEXAS WHERE RGP 11 IS APPLICABLE



* Includes Sabine River watershed in Sabine, De Soto, and Caddo Parishes in Louisiana

APPENDIX C

NAVIGABLE WATERS OF THE U.S.

For purposes of Section 10 of the Rivers and Harbors Act of 1899, the following sections of rivers, including their lakes and other impoundments, are considered to be navigable waters of the U.S. that fall within the jurisdiction of the Fort Worth, Albuquerque, and Tulsa districts of the U.S. Army Corps of Engineers in the states of Texas and Louisiana.

ANGELINA RIVER:	From the Sam Rayburn Dam in Jasper County upstream to U. S. Highway 59 in Nacogdoches and Angelina counties and all U. S. Army Corps of Engineers lands associated with B. A. Steinhagen Lake in Tyler and Jasper counties, Texas.
BIG CYPRESS BAYOU:	From the Texas-Louisiana state line in Marion County, Texas, upstream to Ellison Creek Reservoir in Morris County, Texas.
BRAZOS RIVER:	From the point of intersection of Grimes, Washington, and Waller counties upstream to Whitney Dam in Hill and Bosque counties, Texas.
COLORADO RIVER:	From the Bastrop-Fayette County line upstream to Longhorn Dam in Travis County, Texas.
NECHES RIVER:	U. S. Army Corps of Engineers lands associated with B. A. Steinhagen Lake in Jasper and Tyler counties, Texas.
RED RIVER:	From Denison Dam on Lake Texoma upstream to Warrens Bend which is 7.25 miles northeast of Marysville, Texas, and from the U. S. Highway 71 bridge north of Texarkana, Texas, to the Oklahoma-Arkansas Border.
RIO GRANDE:	From the Zapata-Webb county line upstream to the point of intersection of the Texas-New Mexico state line and Mexico.
SABINE RIVER:	From the point of intersection of the Sabine-Vernon parish line in Louisiana with Newton County, Texas upstream to the Sabine River-Big Sandy Creek confluence in Upshur County, Texas.
SULPHUR RIVER:	From the Texas-Arkansas state line upstream to Wright Patman Dam in Cass and Bowie counties, Texas.
TRINITY RIVER:	From the point of intersection of Houston, Madison, and Walker counties upstream to Riverside Drive in Fort Worth, Tarrant County, Texas.

APPENDIX D

COMPENSATORY MITIGATION AND RESTORATION PLANS FOR LOSSES OF WATERS OF THE U.S.

U.S. Army Corps of Engineers (USACE) evaluation of a project proposal submitted for authorization under this permit includes a determination of whether the applicant has taken sufficient measures to **mitigate** the project's likely adverse impacts to the aquatic ecosystem (See USACE Compensatory Mitigation for Losses of Aquatic Resources; Final Rule: Federal Register, Vol. 73, No. 70, Thursday, April 10, 2008, and USACE district website for more detailed information). Applicants should employ the following three-step sequence in mitigating likely adverse project impacts: 1) take appropriate and practicable measures to **avoid** potential adverse impacts to the aquatic ecosystem; 2) employ appropriate and practicable measures to **minimize** unavoidable adverse impacts to the aquatic ecosystem; and 3) undertake appropriate and practicable measures to **compensate** for adverse impacts to the aquatic ecosystem that cannot be reasonably avoided or minimized. **Compensatory mitigation**, then, is the restoration, enhancement, creation, or preservation of wetlands and other waters of the U.S. to compensate for adverse impacts to the aquatic ecosystem that cannot reasonably be avoided or minimized.

COMPENSATORY MITIGATION PLANS

Compensatory mitigation should replace those aquatic system functions that would be lost or impaired because of the proposed activity. The appropriate type and amount of compensatory mitigation depends on the nature and extent of the project's likely adverse impact on those functions performed by the aquatic area(s) that would be impacted. These functions include, but are not limited to, flood storage and conveyance; providing habitat for fish, aquatic organisms, and other wildlife, including endangered species; sediment and erosion control; groundwater recharge; nutrient removal; water supply; production of food, fiber, and timber; and recreation. Compensatory mitigation should also be commensurate with the scope and degree of the anticipated impacts and be practicable in terms of cost, existing technology, and logistics, in light of the overall project purpose.

In general, preference is given to the use of mitigation banks due to reduced risk and uncertainty commonly associated with permittee-responsible compensatory mitigation. For permittee-responsible compensatory mitigation, in-kind compensatory mitigation is preferable to out-of-kind and should occur as close to the location of the adverse impacts as practicable, generally in the same watershed. However, environmentally preferable out-of-kind and/or off-site compensatory mitigation may be acceptable. In some cases, it is appropriate to provide partial compensation at one location, such as the impact site, with the remainder occurring at an off-site location.

Normally, restoration or enhancement of wetland functions is preferable to wetland creation because the probability of successfully restoring or enhancing wetlands is greater than the probability of successfully creating new wetlands, and restoration and enhancement activities are less likely to impact upland and open water habitats. The preservation of existing wetlands is appropriate as compensatory mitigation only in exceptional situations.

Permittee-responsible compensatory mitigation plans submitted with PCNs must include, but not be limited to:

- a) a thorough description of the proposed mitigation area including baseline data documenting ecological condition;

- b) a description of all proposed work and structures such as grading, fills, excavation, plantings, and water level control structures;
- c) plan and cross-section drawings of pertinent work and structures;
- d) a statement explaining how adverse impacts to local hydrology will be minimized; and
- e) a proposal for monitoring the success of the proposed mitigation plan. Generally, monitoring should continue for at least five years after mitigation activities are completed, providing planting survival and ecological success requirements have been achieved.
- f) all plan elements in the SWF AOR should be consistent with the Fort Worth District mitigation guidelines and templates found at:
<https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation-Templates/>

To achieve long-term success of a mitigation plan, an appropriate real estate arrangement, such as a conservation easement, may be required. More information may be found at 33 CFR 332.4(c)(1-14).

RESTORATION PLANS

Restoration plans submitted with PCNs must propose to restore waters of the U.S. as close to pre-existing conditions as practicable. Restoration plans must include, but not be limited to, the following:

- a) a detailed description of all waters of the U.S. to be restored;
- b) a map showing the proposed configuration of waters of the U.S., including wetlands, to be restored;
- c) a detailed description of the waters of the U.S. to be restored, including wetlands. This includes the restored hydrology, soils, and vegetation; information such as removal of placed dredged and/or fill material and its disposal; planting of woody vegetation locations and species; channel cross sections, alignment, plan, profile and dimension; soil erosion and sediment control features; other actions or features to achieve restoration.

Notification of Completed Restoration Work: Permittees are required to notify USACE within 120 days of completing implementation of the waters of the U.S. restoration plan. Notifications must include, but not limited to, the following:

- a) a detailed description of restored waters of the U.S.;
- b) a map showing the configuration of the restored waters of the U.S., if different than what is contained in the approved restoration plan;
- c) discussion of how the restoration has been accomplished;
- d) a comparison of the post-construction conditions of the restoration area to the pre-construction conditions of the area;
- e) details of the restoration of waters of the U.S., including wetlands, after drilling termination, addressing hydrology, soils, and vegetation;
- f) a discussion about whether disturbed areas, such as borrow areas, road embankments, stream banks, road crossings, and temporary impact areas are revegetating adequately and not suffering erosion damage;
- g) photographs, as appropriate, to illustrate the information presented.

The permittee shall submit annual monitoring reports of the restored area for a period of 5 years or until the performance standards for the restoration plan have been met, whichever is shorter.

APPENDIX E

PRE-CONSTRUCTION NOTIFICATION (PCN) REQUIREMENT AND REVIEW PROCEDURES

For activities requiring a Preconstruction Notification (PCN), the prospective permittee shall not begin the activity until notified in writing by the USACE that the project meets the terms and conditions of the RGP, and any special conditions added by the USACE. In those cases involving PCN, the USACE will notify the permit applicant whether the proposed project meets or does not meet the terms and conditions of this RGP. The USACE will respond as promptly as practicable to all PCNs. For activities not requiring a PCN, the prospective permittee may commence construction when it can ensure that all terms and conditions of this RGP can be met. Prospective permittees must notify the USACE in accordance with the requirements of the PCN Submittal section below if the discharge or work:

1. occur within a Section 10 water;
2. cause the loss of greater than 1/10 acre of waters of the U.S. "Loss of waters of the U.S." is defined as waters of the U.S. that are filled or permanently adversely affected by flooding, excavation, or drainage as a result of the regulated activity;
3. result in permanent or temporary adverse effects to native dominated scrub shrub and/or forested wetlands (e.g., clearing of trees in forested wetland);
4. require stream realignment greater than 300 linear feet;
5. occur in the vicinity of any listed species or designated critical habitat of a species listed, or proposed for listing, as threatened or endangered in the Endangered Species Act that might be affected;
6. may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties.
7. occur within any of the following habitat types or specific areas:
 - a) wetlands, typically referred to as pitcher plant bogs, that are characterized by an organic surface soil layer and include vegetation such as pitcher plants (*Sarracenia spp.*), sundews (*Drosera spp.*), and sphagnum moss (*Sphagnum spp.*);
 - b) baldcypress-tupelo swamps: wetlands comprised predominantly of baldcypress trees (*Taxodium distichum*), and water tupelo trees (*Nyssa aquatica*), that are occasionally or regularly flooded by fresh water. Common associates include red maple (*Acer rubrum*), swamp privet (*Forestiera acuminata*), green ash (*Fraxinus pennsylvanica*) and water elm (*Planera aquatica*). Associated herbaceous species include lizard's tail (*Saururus cernuus*), water mermaid weed (*Proserpinaca spp.*), buttonbush (*Cephalanthus occidentalis*) and smartweed (*Polygonum spp.*). (Eyre, F. H. Forest Cover Types of the United States and Canada. 1980. Society of American Foresters, 5400 Grosvenor Lane, Washington, D.C. 20014. Library of Congress Catalog Card No. 80-54185);
 - c) the area of Caddo Lake within Texas that is designated as a "Wetland of International Importance" under the Ramsar Convention;
 - d) the Comal River, San Marcos River, Pecos River, Canadian River, and Lake Casa Blanca; or

- e) critical habitat for the Concho Water snake (*Nerodia hateri paucimaculata*) - including areas of the Concho and Colorado Rivers and Ivie (Stacy) Reservoir; Houston toad (*Bufo houstonensis*); Devils River minnow (*Dionda diabolis*) – the Devils River and San Felipe Creek Watersheds in Val Verde County, Texas; and or Leon Springs pupfish (*Cyprinodon bovinus*) – Leon Creek from the Diamond Y Spring to a point one mile northeast of the Texas Highway 18 crossing approximately 10 miles north of Fort Stockton, in Pecos County.
8. for any regulated activity where the applicant is proposing work that would result in the modification or alteration of any completed Corps of Engineer Federal project(s) that are either locally or federally maintained and for work that would occur within the conservation pool or flowage easement of any Corps of Engineers lake project. PCN's cannot be deemed complete until such time as the Corps has made a determination relative to 33 USC Section 408, 33 CFR Part 208, Section 208.10, 33 CFR Part 320, Section 320.4.
 9. involve the construction of an intake into waters of the United States or modify the operation of an existing water supply intake to provide water for the development, production and/or operation of wells in the Fort Worth District area of responsibility.
 10. occur at sites approved as compensatory mitigation sites (either permittee-responsible, mitigation bank and/or in-lieu fee) under Section 404 of the CWA and/or Section 10 of the RHA.

PCN SUBMITTALS

PCNs submitted to the USACE for verification of authorization under this RGP must be in writing and include a description of the project, proposed construction schedule, and the name, address and telephone number of a point of contact who can be reached during normal business hours. The information may be assembled and submitted in a format convenient to the applicant. All pages, including maps, drawings, figures, sheets, etc., must be on 8 ½ by 11-inch paper or fold easily to 8 ½ x 11-inch dimensions. The detail of the information should be commensurate with the size and environmental impact of the project. Early coordination with the USACE, well before a final PCN is submitted, is beneficial in many cases. The description of the project must include at least the following information:

1. The purpose of, and need for, the project and a description of the entire and complete project. This includes all features (e.g., well pad, staging areas, access roads, water intakes and/or water lines and ponds, distribution lines, etc.) needed for the project to function as intended and described in the need and purpose of the project.
3. A delineation, determination, and characterization of waters of the U.S., including wetlands, in the area that would be affected by the proposed work, and a description of the project's likely impact on the aquatic environment. Delineations of wetlands must be conducted using the "Corps of Engineers Wetland Delineation Manual", USACE Waterways Experiment Station Wetlands Research Program Technical Report Y-87-1, dated January 1987, including all supplemental guidance. The supplemental guidance may be obtained from your USACE district office. Determinations of waters of the U.S. must be conducted using regulations and guidance applicable at the time of the preconstruction notification (currently "U. S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook," dated June 5, 2007). Include the width and depth of the water body and the waterward distance of any structures from the existing shoreline.
4. A vicinity map, or maps, on copies of 7.5-minute U. S. Geological Survey (USGS) quadrangle maps, county maps, scaled aerial photographs, or other suitable maps, clearly showing the location of all temporary and permanent elements of the project, including the drilling pad, reserve and mud pit(s),

production and storage facilities, access road(s), pipeline(s), coffer dam(s), equipment ramp(s), borrow pit(s), disposal area(s), staging area(s), etc. The map(s) must show the project area in relation to nearby wells, access roads, highways and other roads, and other pertinent features. The distance to the nearest well site (restored or unrestored) must be shown on the map or provided in other discussions about the proposed activity. A ground survey is not required to obtain this map information. Identify all base maps, e.g. Fort Worth, Texas 7.5-minute USGS quadrangle, etc.

5. Plan, profile, and cross-section views of all work (fills, excavations, structures, etc.), both permanent and temporary, in, or adjacent to, waters of the U.S., including wetlands, and a description of the proposed activities and structures, including the drilling pad, reserve and mud system (including the type of drilling fluid being used) and pit(s), production and storage facilities, access road(s), pipeline(s), coffer dam(s), equipment ramp(s), borrow pit(s), disposal area(s), staging area(s), and other project related areas within the USACE permit area(s). This is to include the acreage of wetlands and/or linear feet of stream to be adversely impacted by all project features. The permit area(s) includes all waters of the U.S. affected by activities associated with the project, as well as any additional area of non-waters of the U.S. in the immediate vicinity of, directly associated with, and/or affected by, activities in waters of the U.S. The USACE permit area(s) includes associated drilling pads, reserve and mud pits, production and storage facilities, access roads, pipelines, coffer dams, equipment ramps, borrow pits, disposal areas, staging areas, etc. in most cases where they are proposed associated with an exploration and/or production well. The description of the proposed access roads must include such information as the height, width, and length of the road, width of the cleared right-of-way, location of each crossing of a water of the U.S., size and spacing of culverts and bridges, and location and dimensions of roadside borrow ditches.

6. The volume of material proposed to be discharged into, and excavated from, waters of the U.S. and the proposed type and source of the material.

7. A written discussion of the alternatives considered and the rationale for selecting the proposed alternative. The PCN must also include documentation that the amount of area impacted is the minimum necessary to accomplish the project.

8. An assessment of the adverse and beneficial effects, both permanent and temporary, of the proposed work and documentation that the work would result in no more than a minimal adverse impact on the aquatic environment.

9. Documentation that the amount of area impacted is the minimum necessary to accomplish the project and, in cases where the activity would result in a change to pre-construction elevations and/or contours and/or drainage patterns, a description of the anticipated impacts of the changes, the reason(s) that the changes are necessary, and documentation that the changes would not result in more than minimal adverse impact on the aquatic environment.

10. A detailed mitigation plan presenting appropriate and practicable measures planned: a) to avoid and minimize adverse impacts to the aquatic environment, particularly associated with temporary elements of the proposed project, and b) to compensate for the remaining unavoidable adverse impacts to the aquatic environment. If compensatory mitigation for unavoidable adverse impacts to the aquatic environment is not proposed, the application must include documentation that the proposed work would have minimal adverse impact on the aquatic environment without compensatory mitigation, why compensatory mitigation would be inappropriate and/or impracticable, and that compensatory mitigation should not be required. The mitigation plan must include a description of proposed appropriate and practicable actions that would restore, enhance, protect, and/or replace the functions and values of the aquatic environment unavoidably lost in the permit area because of the proposed work. See Appendix D for more information.

11. A restoration plan for any temporary impacts to waters of the U.S. This plan may be included as part of the detailed mitigation plan (See Appendix D).

12. An assessment documenting whether any cultural resources, particularly those historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), would be affected by, or are in the vicinity of, the USACE permit area(s) for the proposed project (See Appendix A, General Condition 18).

13. An assessment documenting whether any species listed as endangered or threatened under the Endangered Species Act might be affected by, or found in the vicinity of, the USACE permit area(s) for the proposed project. Coordination with the FWS concerning the potential impact of the entire project on endangered and threatened species is encouraged. (See Appendix A, General Condition 19).

14. Any comments received from the Louisiana Department of Wildlife and Fisheries, P. O. Box 98000, Baton Rouge, Louisiana 70898-9000, (225) 765-2800 concerning the project prior to submitting the PCN.

15. The applicant should include any other relevant information, including information on hydrology and hydraulics. For actions that involve the construction of a new water intake and/or changes in operations to an existing water intake located in waters of the United States within the Fort Worth District Area of Responsibility, a completed Tier 1 Hydrologic Modeling Guideline (HMGs) checklist must be included with the PCN. The HMGs are located at: <http://www.swf.usace.army.mil/Missions/Regulatory/Stream-Information-Links/>

Address PCNs and inquiries concerning proposed activities to the appropriate district office (see Appendix B for boundaries of district offices):

Fort Worth District: Regulatory Division, U.S. Army Corps of Engineers, Fort Worth District, ATTN: CESWF-DE-RD, P.O. Box 17300, Fort Worth, TX 76102-0300, telephone: (817) 886-1731, website address: <https://www.swf.usace.army.mil/Missions/Regulatory/>

Albuquerque District: Las Cruces Regulatory Field Office, U.S. Army Corps of Engineers, Albuquerque District, ATTN: CESPARD-LC, 200 E. Griggs Ave., Las Cruces, NM, 88001, telephone: (575) 652-4574, website address: <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/>

Tulsa District: Regulatory Office, U. S. Army Corps of Engineers, Tulsa District, ATTN: CESWT-RO, 2488 E. 81st Street, Tulsa, OK 74128-4290, telephone: (918) 669-7400, website address: <https://www.swt.usace.army.mil/Missions/Regulatory/>

EVALUATION AND VERIFICATION PROCEDURES FOR PCNs

For all activities within the habitat types or areas listed in this Appendix, Section 7 a-e above, the USACE will coordinate with the resource agencies as specified in the Nationwide Permit (NWP) general condition on notification (currently General Condition 32(d), Federal Register, Vol. 82, No. 4, Friday January 6, 2017).

For activities in the State of Louisiana, the USACE will provide a copy of the PCN to the USFWS, Lafayette Ecological Services Office for a 10-calendar day review. The review period will commence on the date that the USFWS-Lafayette receives the PCN.