

MEMORANDUM FOR THE FILE

Subject: **SWG-2007-786**, South Texas Project Nuclear Operating Company (STP) Units 3 & 4, Preliminary Jurisdictional Determination, Wadsworth, Matagorda County, Texas

1. On 11-Apr-2008 a request for a jurisdictional delineation verification was received from Mr. Gregory Gibson, Regulatory Affairs Managers, of the South Texas Project (STP) Nuclear Operating Facility (Applicant). *A jurisdictional determination was previously issued under SWG-2007-786 on 19-March-2008. The previous JD determined that the project site did contain waters of the United States.* The original project site consisted of the areas to be affected by the construction of Units 3 and 4, which included approx. 1,000-acres of land and a small portion of the Mass Cooling Reservoir (MCR) where the water circulation pipes would be installed. The project site was later revised to 1406.5-acres on 13-May-2009. The project site is located on Farm-to-Market 521, approximately 8 miles west of Wadsworth, Matagorda County, Texas.
2. Included in the request was the wetland delineation report, site location map, project site map, GPS attribute data, site photographs, wetland delineation map and data sheets. A desk review of the enclosed exhibits and information prompted me to gather additional information including color infrared aerials from 2004 and 1995 and historical topographic maps for Blessing SE and Palacios NE quads from 1995, 1972, and 1952. Based upon the desk review it was determined that a site visit will be required to verify the exact extents of the waters on the project site.
3. On 2-Jun-2008 a site visit was conducted and in attendance were Mr. Sam Damico, Mr. Russell Kiesling, Ms. Sandy Hart with the STP and Mr. Kurtis Schlicht and Mr. Travis Wycoff of ENSR (Consultant). Upon arriving at the project site a briefing was held on the 12,000 acre project site including the 7,000 acre MCR. Following the briefing was a tour of the facility commenced including the drive around the MCR perimeter and inspection of the emergency spillway, water intake and exhaust structures.

MCR Comments from site visit

- The MCR is a concrete and impermeable clay lined water body did not contain any emergent hydrophytic vegetation.
- The MCR however does have a sand chimney and weep system that constantly seeps water. The primary purpose of the weeps is to reduce the pressure exerted on the berm to prevent a blowout.
- The MCR did contain a high number of fish mainly catfish.
- No fishing or other recreation was allowed.
- The emergency spill way does leak water and contributes to the flowing water in the existing swale that leads to the Colorado River.
- The primary sources of water for the MCR are precipitation and water piped in

from the Colorado River.

Comments from Site Verification

- The project site was not clearly demarcated in all areas. The consultants had a GPS with the delineation on it and were able to navigate to any area.
- Little Robbins Slough which is the primary tributary on the project site was actively flowing during the site visit and in many areas contained a some wetland vegetation.
- The lay down yard had several swales/French drains however; none of these areas were actively conveying water.
- The aquatic feature named S001 was previously mapped up to the north main entrance. No flow was present in this ditch.
- The wetlands along the western portion of the property were delineated correctly.
- The dark signatures immediately east of WET001 were checked and failed to have the hydrology needed to be wetlands.
- Several wetland areas on the project tract were missed. The Consultant utilized the 2004 infrared aerial instead of the 1995 infrared aerial for the wetland delineation map. This proved to be problematic because the 2004 was taken in the warmer months and failed to display the darker and potentially wetter areas that the 1995 did. Several of the darker signatures, indicative of cooler wetter areas, (which were previously missed by the consultant) were examined and were determined to meet the three criteria to be a wetland.

Prior to leaving the site, the additional work required to verify the project was conveyed including: to field check the dark signatures and collect a data sheet for each and to check the flow patterns of the aquatic features on the tract. Additionally; prior to leaving the site we received copies of the TCEQ and EPA Permits to Discharge Pollutants and several of the project plans and specs.

4. On 13-Jan-2009 a second site visit was conducted and in attendance were Mr. Stilicho and Mr. Wycoff (Consultants). The second site visit was to make a second attempt to verify the second version of the wetland delineation and determine the flow characteristics of the aquatic features on the tract. Based on the site visit we determined the following:

The majority of the wetland delineation map correctly identifies the aquatic resources on the tract with the following exceptions:

- i. S018 – has no flow
- ii. Found a wetland south of Wet 013
- iii. Found a wetland southeast of Wet 008 (signature on aerial)
- iv. Found surface connection between Wet 025 and a tributary
- v. Wet 024 has a continuous hydrologic connection to tributary
- vi. Most of the French drains do not have a OHWM or wetland vegetation
- vii. S004 is an erosional feature.
- viii. Additionally, only the main channel of Little Robbins Slough contained flowing water all other aquatic features were not flowing except the

aquatic feature directly north of the Essential Cooling Pond. Latter designated S023, S023 was actively flowing from the security fence to the security checkpoint.

5. On 22-Jan-2009 Mr. Kiesling was contacted and the two options for obtaining a jurisdictional determination; two types were discussed: Preliminary vs. Approved. After explaining the differences at some length Mr. Kiesling responded that he would have to get back to us. On 5-Feb-2009 we received a verbal acknowledgement that the Applicant wants to pursue a "Preliminary JD". An updated wetland delineation map was received indicating a slight modification on Tract A's boundary and the requested edits per the briefing on 13-Jan-2009. On 9-Feb-2009 we emailed the requested edits to the Applicant because several areas determined to be jurisdictional were not shown. The addition of these areas per our request created an issue for the Applicant due to the discharge of water by the plant into a water body that would be deemed jurisdictional. STP was concerned by calling this water body jurisdictional because they (STP) would be in violation of the Clean Water Act for discharging a pollutant in to a water of the United States with out the proper permit. On 26-Feb-2009 a meeting was held in the Jadwin building to discuss the next steps. In attendance at the meeting were Mr. Davidson and Mr. Laskowski with the Corps, Mr. Rich Gansliff, Ms. Hart, Mr. Kiesling, and Mr. Scott Head with STP and Mr. Schlicht with ENSR. During the meeting it was discussed that the Applicant wanted to separate the determination the MCR and the JD on the land. Therefore the project original project number **SWG-2007-786** is being split and considered as separate and complete projects. The land portion of the tract will maintain the **SWG-2007-786** number and the MCR has been assigned the number **SWG-2008-1351**.
6. On 11-May-2009 we received a summary a information of the flow characteristics of the aquatic feature (S023), via email. After a review of the information we determined that the limits of 404 jurisdiction ended somewhere between location 6 & 7 due to evidence that water existed at location 6 and no water existed at location 7 in the photographs. Based upon the best available information S023 is a water of the United States because it has relatively permanent flow up to the midpoint between location 6 & 7.
7. All aquatic features on the project site were assessed according to the Rapano's guidance "*Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States*" issued on 6-Jun-2007 and revised on 2-Dec-2008 and Regulatory Guidance Letter (RGL) 08-02 – *Jurisdictional Determinations*. Wetlands, under normal circumstances are predominated with hydrophytic vegetation, wetland hydrology, and wetland soils as defined by the Corps of Engineers 1987 Wetland Delineation Manual. All wetlands located on the project site have will be deemed jurisdictional upon the signature of the Preliminary Jurisdictional Determination Data Form RGL 08-02. All non-wetland aquatic features including ditches were reviewed. Ditches are not considered to be waters of the United States unless they convey a relatively permanent flow of water (e.g. 90 continuous days 50% of the years) per, Rapano's Guidance.

8. On 13-May-2009 the PJD form was signed by the Applicant agreeing that all aquatic resources on the project tract will be jurisdictional. We agree that the map dated 13-May-2009 is a reasonably depiction of all jurisdictional waters on the project site. It was determined that the 1406.5-acre project area contains 17.6 acres of wetlands and 24,639.1 linear feet of non-wetland waters. This determination will remain valid five (5) years from the date of the final letter or if new information warrants revision.



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