

US EPA ARCHIVE DOCUMENT

Toups, Brad

From: Graham Donaldson <Graham.Donaldson@erm.com>
Sent: Friday, June 13, 2014 3:58 PM
To: Robinson, Jeffrey; Toups, Brad
Cc: Matthias.Pastl@voestalpine.com
Subject: FW: NMFS ESA Section 7 Response: 2 GHG Permits
Attachments: Batch of 2 GHG Permits_SEROfinal.pdf

You two were not listed in the email.

Thanks

Graham

From: Adam Brame - NOAA Federal [mailto:adam.brame@noaa.gov]
Sent: Friday, June 13, 2014 4:52 PM
To: Dumauual, Alfred; stenger.wren@epa.gov; Nicholas.A.Laskowski@usace.army.mil
Cc: Matthias.Pastl@voestalpine.com; Graham Donaldson; Clay Fischer; Elizabeth Yarbrough - NOAA Affiliate
Subject: NMFS ESA Section 7 Response: 2 GHG Permits

Please see concurrence letter attached.
Hard copy will be sent upon request.

Thank you.

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Adam Brame
National Marine Fisheries Service
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Protected Resources Division
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UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

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St. Petersburg, Florida 33701-5505

<http://sero.nmfs.noaa.gov>

F/SER/31:AB

Ms. Wren Stenger
Director, Multimedia Planning and Permitting Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Mr. Nicholas Laskowski
Supervisor/Technical Expert
U.S. Army Corps of Engineers, Galveston District
5151 Flynn Parkway, Suite 306
Corpus Christi, Texas 74811-4318

Ref.: EPA Issuance of Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) Permits for
2 projects in San Patricio and Nueces Counties, Texas
U.S. Army Corp of Engineers Issuance of Permit SWG-2013-00247

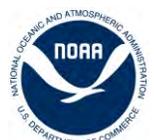
Dear Ms. Stenger and Mr. Laskowski:

This letter responds to your emails received between February 20 and May 2, 2014, requesting National Marine Fisheries Service (NMFS) concurrence with your determinations pursuant to Section 7 of the Endangered Species Act (ESA). The United States Environmental Protection Agency (EPA), Region VI, intends to issue Greenhouse Gas PSD permits to voelstalpine and M&G Resins USA (M&G) for the construction of their respective facilities in Texas (Table 1). In addition, the USACE intends to issue a permit (SWG-2013-00247) to M&G for the installation of a water intake and effluent discharge outfall associated with the construction of their facility, while voelstalpine already holds a USACE permit for their intake and discharge structures. You determined the actions may affect, but are not likely to adversely affect, green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles. NMFS's determination regarding the effects of the proposed actions is based on the descriptions of the actions in this informal consultation. Any changes to the proposed actions may negate the findings of the present consultation and may require reinitiation of consultation with NMFS.

The Federal Clean Air Act (FCAA), implemented by EPA, and the Texas Clean Air Act (TCAA) require that air quality concentration limits be established that are designed to protect public health, welfare, and the environment. EPA has established National Ambient Air Quality Standards (NAAQS) that are maximum concentration limits for specific pollutants in ambient air over a specific averaging time established in federal regulation (40 CFR 50). EPA has established NAAQS for 6 principal air pollutants, also referred to as criteria air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter less than 2.5 microns (PM_{2.5}), particulate matter less than 10 microns (PM₁₀), and sulfur dioxide (SO₂).

The FCAA also establishes that geographic areas be classified as either having ambient concentrations above or below the established NAAQS. A geographic area with an ambient air concentration for a criteria pollutant equal to or less than the primary standard is an attainment area. A geographic area with an ambient air concentration greater than the primary standard is a nonattainment area. The FCAA requires the EPA to establish regulations to prevent significant deterioration of air quality in attainment

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areas. The EPA established two measures to assure that existing good air quality in attainment areas is not adversely affected by increased air emissions. The first measure is the prevention of significant deterioration (PSD) increment, which limits the increase in the ambient air concentration in an attainment area to an amount (the PSD increment) that assures the total ambient concentration in an attainment area continues to be below the NAAQS. The second measure is the significant impact level (SIL). The SIL is a *de minimis* threshold applied to individual facilities that apply for a permit to emit a regulated pollutant in an area that meets the NAAQS. The state and EPA must determine if emissions from that facility will cause the air quality to worsen. The SIL is a measure of whether a source may cause or contribute to a violation of PSD increment or the NAAQS — in other words, the SIL is a sign of significant deterioration of air quality.

In order to obtain a PSD permit for criteria pollutants, an applicant is required to demonstrate that the emissions from a proposed project will be below either the SIL or the PSD increment for each pollutant. The applicant must further assure that the existing air quality after the permit is issued will remain below the NAAQS established to protect public welfare and the environment. This demonstration is performed using a computer model which simulates the dispersion of the emitted pollutants into the atmosphere and predicts ground level concentrations.

Currently, the Texas Commission on Environmental Quality (TCEQ) has been delegated authority for the issuance of the PSD permits for criteria pollutants, whereas the EPA retains authority for permitting major sources of GHGs. As required by state regulations at 30 TAC §116.111(a)(2)(c), new or modified facilities must apply best available control technology (BACT), with consideration given to the technical practicability and economic reasonableness of reducing or eliminating the emissions from the facility, thus minimizing the impact of emissions on the ambient air.

Regarding wastewater discharges from the proposed facilities, point source discharge permitting authority under the Federal Clean Water Act (CWA) has been delegated to Texas. Texas issues Texas Pollutant Discharge Elimination System (TPDES) permits in accordance with Texas Surface Water Quality Standards for Marine Life (30 TAC 307) which set limitations on effluents to be protective of marine organisms per the guidance in Section 304(a) of the CWA (see 40 CFR 131). Further, TPDES permits are subject to permit requirements for acute and chronic biomonitoring to demonstrate that the wastewater discharges are not toxic to marine organisms.

Table 1. Projects included in this batched consultation

Project Number	Applicant	Project Location	NMFS Project Number
1	voelstalpine	Gregory, San Patricio, and Nueces Counties, Texas	SER-2014-13287
2	M&G Resins USA	Corpus Christi, Nueces County, Texas	SER-2014-13555

1. voelstalpine

The applicant, voelstalpine, proposes to construct and operate a direct-reduced iron (DRI) production facility to be located just south of Gregory in San Patricio and Nueces Counties, Texas. The DRI facility will utilize a natural gas based process to produce hot-briquette iron, a superior form of DRI, from iron ore and iron oxide pellets. The applicant intends to ship the product to Austria for steel production, resulting in approximately 75 vessel trips per year. The facility will include a wharf along the waterfront to accommodate the necessary vessels. Construction is expected to begin in early 2014 with in-water work requiring approximately four months for completion.

The proposed facility will be located on a 478-acre-parcel of land leased from the Port of Corpus Christi Authority (POCCA), at approximately 27.8858°N, 97.2815°W (North American Datum 1983). This property abuts the La Quinta Channel in Corpus Christi Bay to the south, and is approximately 18 navigable miles west of Aransas Pass (Figure 1). The adjacent waters vary from 0-13 feet (ft) in depth, while the substrate consists of mud, sand, and shell. Approximately 2.41 acres (ac) of low-density shoal grass are located in the project area. The action area is defined to extend to a maximum of 1.5 miles from the proposed project site boundary based on dispersion modeling of the air pollutants that will be emitted as a result of the action.

The USACE previously authorized the POCCA to conduct dredge and fill work within the action area, under permit SWG-2001-02261. Under this permit, the POCCA is hydraulically dredging 12.4 ac of bay bottom in La Quinta Channel to a depth of -45 ft and filling 5.9 ac of waterfront. The dredge and fill activities will utilize a hydraulic dredge, which, outside of extreme cold events, are not known to cause adverse effects to protected sea turtles. Sea turtles are highly mobile and can easily avoid interactions with this type of machinery. Because the dredge and fill project has been previously permitted and is currently underway, NMFS will not further consider any potential effects associated with this action in this consultation.

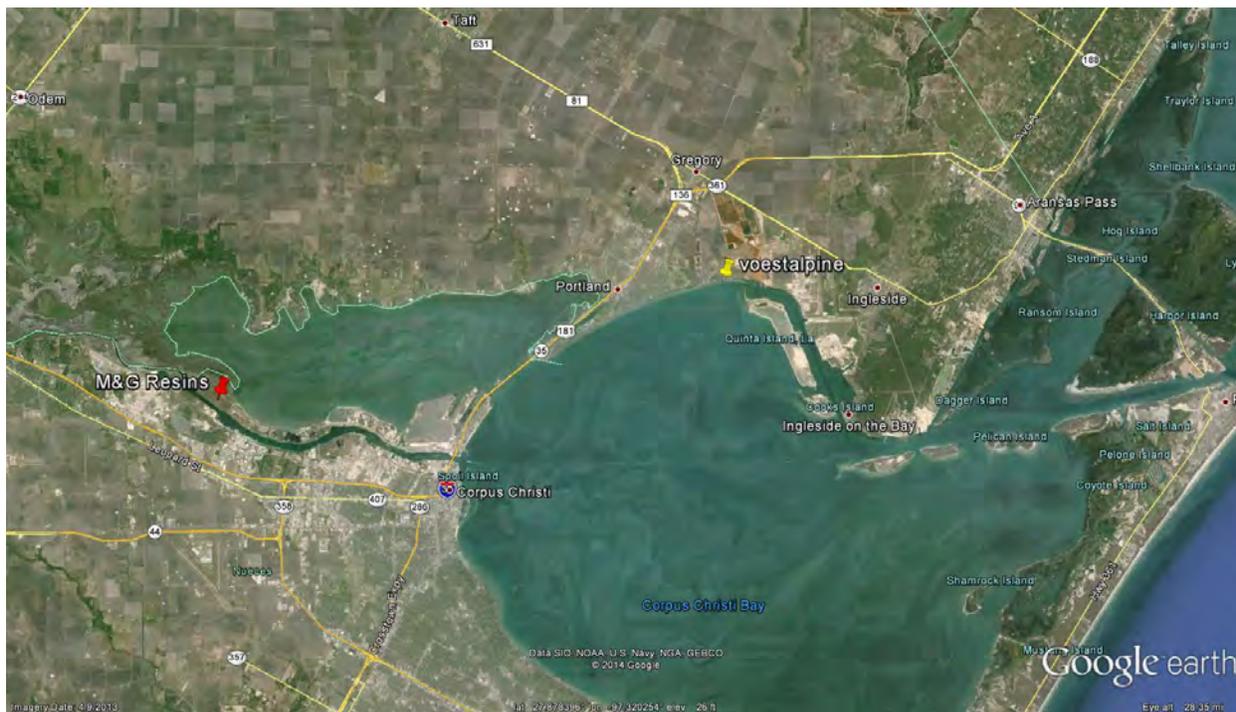


Figure 1. Image showing the locations of the voestalpine (yellow) and M&G Resins USA (red) properties around Corpus Christi Bay, Texas (©2014 Google, data SIO, NOAA, U.S. Navy, NGA, GEBCO)

San Patricio is designated “attainment” for the pollutants $PM_{2.5}$, PM_{10} , Pb, CO, SO_2 , NO_2 , and ozone because ambient concentrations of these pollutants are less than their respective NAAQS. Because of this, the facility would not be required to conduct a Non-attainment New Source Review; rather a PSD permit application will be appropriate.

Most construction associated with the project will occur in the uplands, though some aspects will occur in or within close proximity of the water. As part of the project, voestalpine proposes to construct a 1,020-ft-long wharf along the La Quinta Channel. To construct the wharf, the applicant will install approximately 175 steel piles (with combined sheet pile) and 330 concrete piles in the nearshore area

filled by the POCCA action. All piles will be installed over land. The wharf will also contain integrated water intake and outfall structures, which were considered and approved by the USACE under Nationwide Permit 7. The actual water intake and discharge will be regulated under a TPDES permit.

NMFS consulted on the USACE's Nationwide Permit Program and issued a jeopardy opinion to the USACE in February 2012. Since the consultation resulted in a jeopardy determination, any effects to protected species from projects sanctioned under the program are not authorized. To avoid unauthorized impacts to protected species, the USACE only permits projects under the Nationwide Program when they determine there will be no effects to protected species.

The project will require withdrawal of approximately 10.45 million gallons per day (MGD) of saline surface water that will be diverted via a cooling water intake structure (CWIS) located within an embayment in the steel sheetpile wall at the southern portion of the wharf. The CWIS will be comprised of multiple passive wedge wire screens with 3 mm slot openings that will each be mounted at the terminus of an 18-in-diameter vertical intake pipe extending down from the southern portion of the dock, from approximately -17 ft to -24 ft mean sea level (MSL). The CWIS design and operation will fall under the authority of section 316(b) of the Clean Water Act (40 CFR 122.21(r)). The majority of the seawater diversion will be utilized for non-contact cooling water in a heat exchanger loop with cooling towers and a filter backwash system. The remainder of the diversion will be routed to a desalination/reverse osmosis (RO) system that will produce 0.70 MGD of desalinated water recirculated to the industrial process water system. Approximately 8.49 MGD of return flow including cooling tower blowdown, filter backwash, reverse osmosis reject water, and industrial process water blowdown from a wastewater treatment unit would be discharged through a 36-in pipe at -32 ft MSL on the east side of dock. Preliminary CORMIX modeling for the discharge structure has been conducted to evaluate the dilution factor of the structure and assess the potential for any thermal impacts. The preliminary modeling indicates that the dilution factors vary with ambient density and current velocity conditions, with the least dilution occurring at slack tide. The wastewater may contain a variety of constituents of concern and characteristics that can adversely affect water quality. Further, the wastewater will have a salinity and temperature beyond the averages of Corpus Christi Bay, though preliminary modeling indicates that at a distance of 200 ft from the outfall (the mixing zone) the effluent will be diluted to be protective of resources within the water body.

2. M&G Resins USA

M&G Resins USA is proposing to construct a new plastic resin manufacturing plant at a site in Corpus Christi, Nueces County, Texas. The project site is located on the Joe Fulton International Trade Corridor along the north bank of the Viola Ship Channel at 27.8349 °N, 97.4967 °W. This parcel of land is currently undeveloped with the exception of a few storm culverts that convey freshwater runoff into the ship channel. The action area was defined to extend to a maximum of 1.12 miles from the proposed project construction area based on dispersion modeling of the air pollutants that will be emitted as a result of the action. The proposed facility will consist of a Polyethylene Terephthalate Unit, a Terephthalic Acid Unit, and a new heat and power utility plant. The utility plant will be owned and operated by the NRG Development Company. Additional infrastructure for the facility will include roads, a rail yard, a 1.6-mile-long pipeline corridor, a desalination plant, and both intake and outfall structures. Construction of the facility will be completed within 24 months, though all in-water work will be completed within 120 days.

The new facilities will require both the withdrawal of water from and the discharge of wastewater to the Corpus Christi Inner Harbor. The saline sea water will be processed by M&G to produce process and non-process water supplies for the M&G facility and for the on-site electric power generation plant. To obtain and discharge the water, M&G will dredge canals from the upland into the Viola Ship Channel for the installation of intake and outfall structures. M&G Resins USA has requested a general construction

permit from the USACE for this in-water work. All dredging will be conducted with a bucket-type excavator from land or a barge. Much of the required dredging will occur over what is currently upland. The applicant will dredge a 60-ft-wide canal to a depth of -15 ft MSL to connect the intake structure with the La Quinta Channel. The intake structure will contain a screen and the through-screen intake velocity will be restricted to 0.5 ft per second or less, to minimize potential impingement. The applicant will dredge a 5-ft-wide canal over 0.05 ac for the outfall. This outfall canal will be dredged to a depth of -25 ft MSL. A pipe will be placed in the outfall canal to transport treated wastewater to the ship channel where it will pass through a diffuser to mix with the receiving waters. An assessment of the aquatic life impacts that could be associated with the M&G discharge was performed using the TCEQ TEXTOX MENU No. 5 model for bays and estuaries. This model is used by the TCEQ to calculate water quality-based effluent limitations for TPDES permits. All discharged wastewater will be regulated by a TPDES permit issued by the State of Texas.

The M&G facility (which includes the PET Plant and the Utility Plant) triggers PSD review for GHG pollutants because the GHG emissions from the project will be more than 100,000 tons/year making the site a new major source. Therefore, the entire project is subject to PSD review for GHG pollutants.

NMFS Analysis

Based on life histories and habitat preferences of leatherback and hawksbill sea turtles, we do not believe that either species will occur in the project areas. Leatherback sea turtles are the most pelagic of the sea turtles and typically do not utilize shallow inshore waters. Hawksbill sea turtles are generally associated with reef habitats and are not expected to utilize inshore waters of Texas. The sites are not located in critical habitat or proposed critical habitat for any listed species; thus, no critical habitat will be affected.

We believe green, Kemp's ridley, and loggerhead sea turtles may be present in the action areas and affected by the projects. The operation of these facilities may affect sea turtles through the discharge of wastewaters into the surrounding estuarine environments. All discharges will be treated and made through outfall structures that are regulated under TPDES permits. NMFS believes the proposed facilities will have no noticeable effects on sea turtles because the total discharges will be below levels authorized by the permits, which are considered to be protective of marine organisms per Section 304(a) of the CWA. Further, as discussed in the Biological Assessments, wastewater discharges have been modeled for each of the facilities and are not expected to result in the toxicity of the receiving waters. Therefore, NMFS believes any effects to sea turtles from discharges at the new outfalls will be insignificant.

The operation of these facilities may also affect sea turtles through the release of air pollutants from operational emissions. As each of the proposed facilities has the potential to emit at least one criteria pollutant in quantities greater than the major source thresholds, they are subject to PSD review. Applicants for each project provided air quality modeling to determine if, and to what extent, any emissions could impact the surrounding environment. In each case, models showed that emissions from the proposed facilities would not exceed SILs or PSD Increments for each of the criteria pollutants beyond the boundaries of their respective facilities. Therefore, no indirect air pollution emission impacts to surface waters, soils, or vegetation are expected from the projects. Consequently, no off-site indirect effects on listed species under NMFS's jurisdiction are expected.

In addition to the effects described above for both facilities, the construction and operation of the voelstalpine facility has the potential for two further effects. The construction of the facility will require the installation of steel and concrete piles. These installations will occur on land and NMFS does not expect noise associated with pile installation to extend into the surrounding waters at levels that could influence any protected species, as the land/water interface is an almost perfect reflector of acoustic waves. Therefore, any effects from pile driving noise will be insignificant. Further, the operation of the voelstalpine facility will increase vessel traffic in the area which could affect sea turtles if they were to be

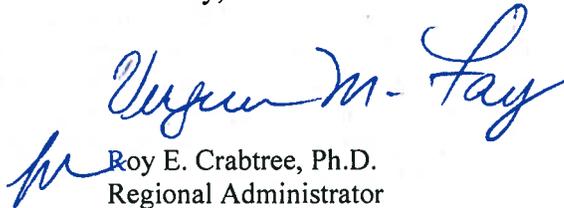
struck. Still, sea turtles are highly mobile and can readily avoid large, slow moving watercrafts, such as those expected to be associated with the facility. Therefore, any effects from vessel increases are discountable.

Sea turtles could be affected by dredging activities for the creation of the intake and outfall canals for the M&G Resins USA facility. NMFS believes this effect is discountable as it is highly unlikely a sea turtle will interact with a long-arm excavator. Sea turtles are mobile and can easily avoid slow-moving machinery. It is more likely that sea turtles will avoid the area during times of dredging, consequently limiting their availability to nearby resources. Given that this is a highly industrialized waterway, resources are expected to be minimal and any avoidance of the area will have only insignificant effects.

Finally, we concur with your project-effect determinations that the proposed actions are not likely to adversely affect green, loggerhead, and Kemp's ridley sea turtles. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

We have enclosed additional information for your review including NMFS's Public Consultation Tracking System to allow you to track the status of ESA consultations. If you have any questions, please contact Adam Brame, Consultation Biologist, at (727) 209-5958 or by email at Adam.Brame@noaa.gov. Thank you for your continued cooperation in the conservation of listed species.

Sincerely,



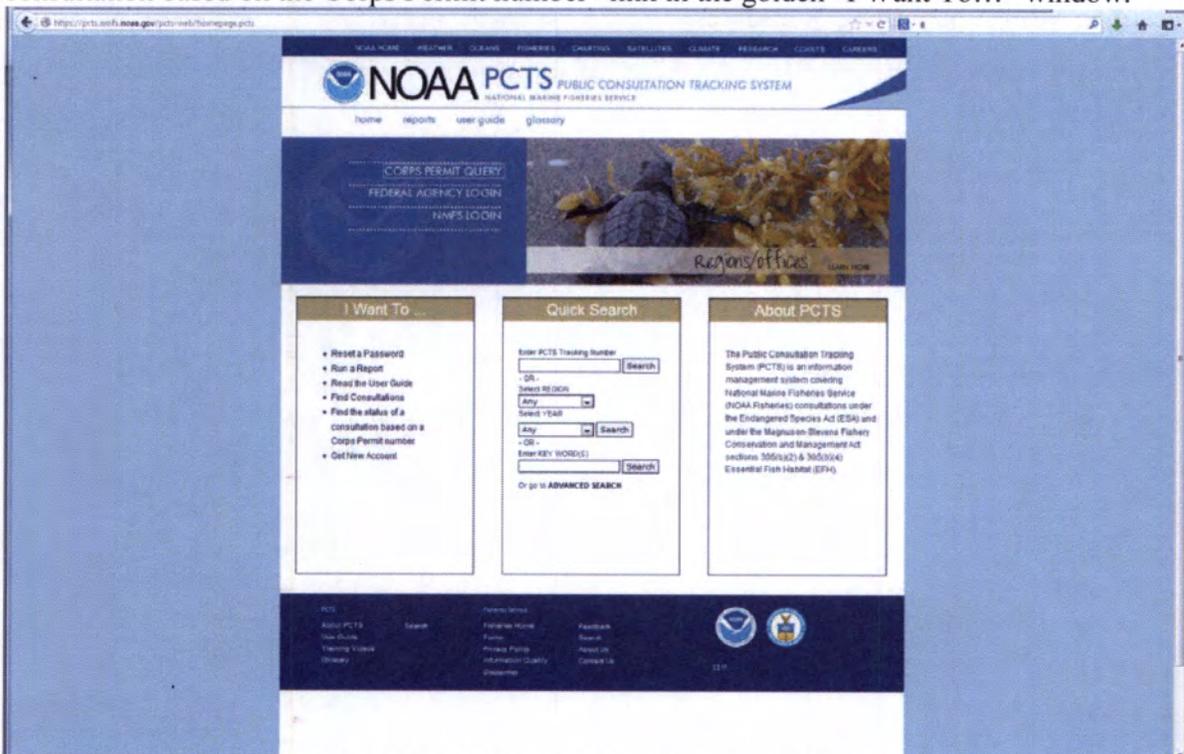
Roy E. Crabtree, Ph.D.
Regional Administrator

Enc.: 1. *PCTS Access and Additional Considerations for ESA Section 7 Consultations* (Revised June 11, 2013)

PCTS Access and Additional Considerations for ESA Section 7 Consultations (Revised 6-11-2013)

Public Consultation Tracking System (PCTS) Guidance: PCTS is a Web-based query system at <https://pcts.nmfs.noaa.gov/> that allows all federal agencies (e.g., U.S. Army Corps of Engineers - USACE), project managers, permit applicants, consultants, and the general public to find the current status of NMFS's Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations which are being conducted (or have been completed) pursuant to ESA Section 7 and the Magnuson-Stevens Fishery Conservation and Management Act's (MSA) Sections 305(b)2 and 305(b)(4). Basic information including access to documents is available to all.

The PCTS Home Page is shown below. For USACE-permitted projects, the easiest and quickest way to look up a project's status, or review completed ESA/EFH consultations, is to click on either the "Corps Permit Query" link (top left); or, below it, click the "Find the status of a consultation based on the Corps Permit number" link in the golden "I Want To..." window.



Then, from the "Corps District Office" list pick the appropriate USACE district. In the "Corps Permit #" box, type in the 9-digit USACE permit number identifier, with no hyphens or letters. Simply enter the year and the permit number, joined together, using preceding zeros if necessary after the year to obtain the necessary 9-digit (no more, no less) number. For example, the USACE Jacksonville District's issued permit number SAJ-2013-0235 (LP-CMW) must be typed in as 201300235 for PCTS to run a proper search and provide complete and accurate results. For querying permit applications submitted for ESA/EFH consultation by other USACE districts, the procedure is the same. For example, an inquiry on Mobile District's permit MVN201301412 is entered as 201301412 after selecting the Mobile District from the "Corps District Office" list. PCTS questions should be directed to Eric Hawk at Eric.Hawk@noaa.gov or (727) 551-5773.

EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to Section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA Section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA Section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.