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November 21, 2005

BY HAND

Hon. Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Re: *Ingleside Energy Center LLC*, Docket No. CP05-13-000
San Patricio Pipeline LLC, Docket Nos. CP05-11-000
CP05-12-000
CP05-14-000

Dear Ms. Salas:

On July 22, 2005, the Federal Energy Regulatory Commission ("Commission") issued an "Order Granting Authority Under Section 3 of the Natural Gas Act and Issuing Certificates," in the captioned proceedings. The Order granted the authorizations requested by Ingleside Energy Center LLC ("IEC") and San Patricio Pipeline LLC ("SPP"), (collectively, "Ingleside San Patricio"), to site, construct and operate a liquefied natural gas terminal and associated pipeline facilities near Ingleside, Texas.

Environmental Condition No. 7, set forth in an Appendix to the Order, required Ingleside San Patricio to file at least 60 days before the start of construction an initial Implementation Plan for review and written approval by the Director of OEP ("Office of Energy Projects") describing how Ingleside San Patricio will implement the mitigation measures required by the Order. Construction of the IEC terminal will commence before construction of the SPP pipeline. Construction of the pipeline will not begin until approximately 16 months prior to the terminal commissioning.

This submission constitutes an initial Implementation Plan for IEC. This Implementation Plan is preliminary in nature and will require some supplementation, in the items in the Plan

which clearly indicate as much. IEC is not at the present time requesting approval for IEC's construction activities to commence, in light of the fact that this submission will require supplementation. IEC expects to do so in a subsequent filing and in the interim expects to continue working with the Commission's staff to ensure that it is able to complete the initial Implementation Plan at an early date.

This submission is not intended to be the initial Implementation Plan for SPP. That Plan will require further development. On November 8, 2005, the Director of OEP issued a letter order clarifying, in connection with Environmental Condition No. 25, the respective obligations of IEC and SPP and their obligations as separate entities, to obtain written notification from the Director of OEP that construction and/or implementation of conservation measures. SPP will file its initial Implementation Plan sometime in the year 2007 and no later than 90 days prior to its request to commence construction.

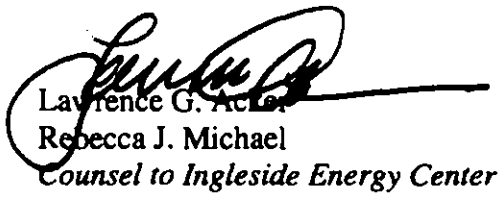
Exhibits 29, 34, 38, 38a, 39, 52, 54, 56 and 57 to the initial Implementation Plan contain Critical Energy Infrastructure Information as defined in Sections 388.112 and 388.113 of the Commission's regulations, 18 C.F.R. §§ 388.112-113 (2005).

In accordance with the Commission's rules and regulations, IEC respectfully requests confidential treatment for this material which should not be released to the public. Accordingly, IEC is submitting an original and two (2) copies of Critical Energy Infrastructure Information and an original and seven (7) copies of the public transmittal letter and IEC's initial Implementation Plan without the referenced exhibits for review by the Director of OEP.

The information being submitted has been marked as "Contains Critical Energy Infrastructure Information - Do Not Release." Questions regarding this request for confidential treatment should be directed to Lawrence G. Acker or Rebecca J. Michael, LeBoeuf, Lamb, Greene & MacRae, L.L.P., at 202-986-8000 or the letterhead address. Procedures for obtaining access to CEII may be found at 18 C.F.R. 388.113. Requests for access to CEII should be made to the Commission's CEII Coordinator. See Critical Energy Infrastructure Information, FERC Stats. and Regs. [Regs. Preambles] ¶ 31,140, *on reh'g*, FERC Stats. and Regs. [Regs. Preambles] ¶ 31,147 (2003); Section 388.112 of the Commission's regulations, 18 C.F.R. § 388.112 (2005); and Section 388.113 of the Commission's regulations, 18 C.F.R. § 388.113 (2005).

IEC respectfully requests that this submission be accepted for filing and that it be considered to be satisfactory compliance, on an interim basis, with IEC's current obligations.

Respectfully submitted,



Lawrence G. Acton
Rebecca J. Michael
Counsel to Ingleside Energy Center LLC and San Patricio Pipeline LLC

Enclosure

cc: Ms. Shannon Dunn

Occidental Petroleum Corporation
Ingleside Energy Center
Ingleside, Texas

18 November 2005
Rev P2

Ingleside Energy Center LLC
(Docket No. CP05-13-000)

San Patricio Pipeline LLC
(Docket Nos. CP05-11-000, CP05-12-000 & CP05-14-000)

IMPLEMENTATION PLAN

Introduction

This initial Implementation Plan outlines how Ingleside Energy Center LLC (Ingleside Energy Center) will comply with the Federal Energy Regulatory Commission's (FERC) mitigation measures and procedures specified in FERC's "ORDER GRANTING AUTHORITY UNDER SECTION 3 OF THE NATURAL GAS ACT AND ISSUING CERTIFICATES" issued July 22, 2005 (Order). This initial Implementation Plan is in conformance with the Order condition number 7. This Plan addresses each environmental condition or requirement listed in the Appendix to the Order. The conditions are listed in the sequence as shown in the Appendix.

Conditions in the Order referring to LNG terminal are addressed herein. Construction of the pipeline will not begin until approximately 16 months prior to the terminal commissioning. Pipeline-specific measures and procedures will be provided at a later date in a separate initial Implementation Plan for the San Patricio Pipeline.

Ingleside Energy Center's responses to the environmental condition or requirement listed in the Appendix to the Order, and associated plans, will be addressed with each condition. Reference will be made to any exhibits included as a response to the conditions. Exhibits are numbered according to the condition number in the Order. Responses include both conditions that have been satisfied and those that Ingleside Energy Center and its Engineer, Procure & Construct (EPC) Contractor will develop as a part of the detailed design. The LNG Terminal EPC Contractor is expected to be selected and awarded a contract in early 2006. Ingleside Energy Center will update the initial Implementation Plan with the details developed in conjunction with the EPC Contractor prior to the project milestones listed in the conditions.

CRITICAL ENERGY INFRASTRUCTURE INFORMATION HAS BEEN REMOVED

LIST OF EXHIBITS

LIST OF EXHIBITS

Condition 1

Ingleside San Patricio shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in this Environmental Impact Statement (EIS), unless modified by this Order. Ingleside San Patricio must:

a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);

b. justify each modification relative to site-specific conditions;

c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and

d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

Condition 1 Compliance Statement

Ingleside Energy Center will fully comply with the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the Final Environmental Impact Statement (FEIS), unless modified by the Order or subsequent orders of the Commission, under delegated authority or otherwise. Specifically Ingleside Energy Center will:

a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);

b. justify each modification relative to site-specific conditions;

c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and

d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

Condition 2

For pipeline facilities, the Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Project. This authority shall allow:

a. the modification of conditions of the Commission's Order; and

b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.

Condition 2 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan no later than 90 days prior to construction of the pipeline.

Condition 3

For LNG facilities, the Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property, and the environment during construction and operation of the Project. This authority shall include:

a. stop-work authority and authority to cease operation; and

b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of this Order.

Condition 3 Compliance Statement

Ingleside Energy Center recognizes the authority of the director of OEP to take all steps necessary to ensure the protection of life, health, property, and the environment during construction and operation of the Project. This authority will include:

a. stop-work authority and authority to cease operation; and

b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of this Order.

Ingleside Energy Center will train and require all Ingleside Energy Center personnel as well as all EPC Contractor and sub-contractor personnel to recognize the authority of OEP and to respond immediately to any actions the director of OEP will deem necessary to implement, including stop-work authority.

Condition 4

Prior to any construction, Ingleside San Patricio shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and EPC Contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

Condition 4 Compliance Statement

See Exhibit 4 for a draft of the affirmative statement, to be signed and certified by a senior company official. Upon acceptance of this draft statement by the Director of the OEP, Ingleside Energy Center will file the signed and certified copy with the Secretary prior to any construction at the terminal.

Condition 5

The authorized facility locations shall be as shown in this EIS, as supplemented by filed alignment sheets, and shall include all of the staff's recommended facility locations. **As soon as they are available, and before the start of construction,** Ingleside San Patricio shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Condition 5 Compliance Statement

Ingleside Energy Center will file, with the Secretary, all changes determined during detailed design, or all other phase of the work for any changes from the previous filing to the terminal facilities. Ingleside Energy Center will include and comply with all of the staff's recommended changes to the terminal facilities. Ingleside Energy Center will file as soon as they are available, and before the start of construction, detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All submittals will reference locations designated on these alignment maps/sheets.

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 6

Ingleside San Patricio shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.

This requirement does not apply to extra workspace allowed by the *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan), minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

a. implementation of cultural resources mitigation measures;

b. implementation of endangered, threatened, or special concern species mitigation measures;

c. recommendations by state regulatory authorities; and

d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

Condition 6 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 7

At least 60 days before the start of construction, Ingleside San Patricio shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Ingleside San Patricio will implement the mitigation measures required by this Order. Ingleside San Patricio must file revisions to the plan as schedules change. The plan shall identify:

a. how Ingleside San Patricio will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;

b. the number of environmental inspectors assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;

c. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;

d. the training and instructions Ingleside San Patricio will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);

e. the company personnel (if known) and the specific portion of Ingleside San Patricio's organization having responsibility for compliance;

f. the procedures (including use of contract penalties) Ingleside San Patricio will follow if noncompliance occurs; and

g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

   (1) the completion of all required surveys and reports;

   (2) the mitigation training of on-site personnel;

   (3) the start of construction; and

   (4) the start and completion of restoration.

Condition 7 Compliance Statement

Ingleside Energy Center has prepared this initial Implementation Plan. Ingleside Energy Center has made implementation of all conditions identified in the Order, as well as those conditions made by all other regulatory bodies, federal, state and local, a contractual requirement for the EPC Contractor to include in the final design and construction of the terminal. In addition, these conditions have been included in the Invitation to bid for the EPC contract and have been defined as the documentation on which the contract with the EPC Contractor will be based.

7.a The EPC Contractor will be required by contract to provide detailed design, construction and performance of the terminal facilities in total compliance with environmental permit conditions and with all environmental conditions set forth in the FEIS and the Order. The EPC Contractor is required to identify the procedures and means to remedy unsatisfactory performance or non-compliance as identified in condition 7f (see below).

7.b Ingleside Energy Center will employ an environmental inspector with the title Project Health Environmental and Safety Manager (Project HES Manager) that will supervisor the activities of all environmental inspectors on site. The EPC Contractor will be required by contract to provide sufficient environmental inspectors for each shift supplemented by additional specialized environmental inspectors or biologists for specialized work areas. The number of inspectors will vary as the construction requirments dictate.

Specialized work areas will include but are not limited to Marine aspects related to dredging operations and pile driving operations, Water Quality related to dredge disposal and construction run-off and biologist for land based construction activities. These environmental inspectors will report directly to the Project HES Manager. All environmental inspectors and the Project HES Manager will have the right to immediately institute corrections and to shut down construction activities until proper corrections can be made.

Ingleside Energy Center in conjunction with the EPC Contractor will develop an organizational chart to identify all the required environmental inspectors. The EPC Contractor will be required to include a schedule showing when each specialized environmental inspector will be required on site. A preliminary organization chart is included in Exhibit 7.

7.c All project corporate management; project engineering design & construction supervisors; Project HES Manager; environmental and construction inspectors; design support personnel; operations and maintenance personnel; EPC Contractor management, project engineering design & construction supervisors, environmental inspectors, inspectors and foreman will have copies of or direct

Condition 7 Compliance Statement (cont.)

access to the Environmental Compliance Manuals, permit binders and all design documentation and drawings. Additional copies will be kept in the construction field offices and will be included as a part of environmental training. All jobsite personnel will be informed of where these documents reside and how to access them.

7.d The Project HES Manager will implement continuous training, including regular refresher training for all Ingleside Energy Center and EPC Contractor project supervisors and environmental inspectors on the environmental conditions in the environmental permits and from the FEIS and Order. OEP staff will be informed of the training dates and locations and will be invited to observe or participate in the training sessions.

Ingleside Energy Center will provide the EPC Contractor with the specific environmental training requirments, procedures and training material.

The EPC Contractor will be required by contract to prepare training manuals and a schedule for training personnel. Using the supervisors and environmental inspectors, the EPC Contractor will be required to train all contractor's and subcontractor's personnel, including regular refresher training, on these environmental conditions including the procedures and means to remedy or report unsatisfactory performance or non-compliance. OEP staff will be informed of the training dates and locations and will be invited to observe or participate in the training sessions.

All project personnnel will be required to complete appropriate training prior to assuming project related duties. Documentation will be maintained for personnel training and their area of work.

The Ingleside Energy Center Project HES Manager will oversee compliance with all training requirements.

7.e Ingleside Energy Center and the EPC Contractor's personnel responsible for compliance on environmental issues will be identified by name, position and contact information. Initially, the Ingleside Energy Center project director John F. Scarf, and as yet to be named, Project HES Manager and Site construction manager along with the EPC Contractors project manager, environmental inspectors and site construction manager will have primary responsibility to oversee compliance with all environmental permit and conditions of the Order.

Condition 7 Compliance Statement (cont.)

7.f The EPC Contractor is required by contract to prepare a procedure for identifying, documenting and correcting all potential environmental non-compliance and all identified non-compliance. The environmental inspectors will be responsible for addressing and documenting non-compliance issues identified by the environmental inspector or any personnel on the construction site.

The environmental inspector will immediately report non-compliance issues to the Project HES Manager and EPC Contractor's project manager; and will with the Project HES Manager assume full responsibility for avoiding or correcting the non-compliance, including implementing a complete work stoppage in the affected area if necessary. The environmental inspector will, after notifying the Project HES Manager and the EPC Contractor's project site manager, prepare a written report of the potential or actual non-compliance. The report will include remediation recommendations and steps already taken to resolve the non-compliance. Upon completion of remedial or corrective action as witnessed and approved by the Project HES Manager, the environmental inspector will provide a follow-up report to the Project HES Manager detailing the non-compliance and all actions taken to resolve the non-compliance.

The Project HES Manager will then include these reports in his weekly status report filed with the Secretary.

7.g The EPC Contractor is required by contract to supply a detailed project schedule. This schedule will include all activities of the engineering and construction process. The schedule will include the following information:

(1) the completion of all required surveys and reports;

(2) the mitigation training of on-site personnel;

(3) the start of construction; and

(4) the start and completion of restoration.

Ingleside Energy Center will supply the schedule identifying the specific points listed above, at least 60 days prior to the start of construction.

Condition 8

Ingleside San Patricio shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Project and restoration of the right-of-way. **Prior to construction of the pipeline**, Ingleside San Patricio shall mail the complaint procedures to each landowner whose property would be crossed by the Project.

In addition, Ingleside San Patricio shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:

(1) the date of the call;

(2) the identification number from the certificated alignment sheets of the affected property;

(3) the description of the problem/concern; and

(4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

Condition 8 Compliance Statement

To comply with environmental condition 8 of the Commission's July 22, 2005 Order, Ingleside Energy Center developed an environmental complaint resolution procedure that provides landowners with clear and simple directions for identifying and resolving environmental mitigation problems or concerns during construction of the Project. Prior to construction, Ingleside Energy Center will mail the environmental complaint resolution procedure to landowners whose property is within ½ mile of the LNG terminal site. A copy of the letter to affected landowners and the environmental complaint resolution procedure is included as Exhibit 8. Please note that phone numbers and e-mail addresses will be provided in the environmental complaint resolution procedure once they are finalized. In addition, Ingleside Energy Center will place a notice in the Corpus Christi Caller-Times notifying citizens of the City of Ingleside and the City of Ingleside-on-the-Bay that copies of the environmental complaint resolution procedure will be available at the Ingleside Public Library and on the Project's website at: http://www.inglesideenergycenter.com/. This notice will run for three days, one week prior to the start of construction.

Condition 8 Compliance Statement (cont.)

In its letter to affected landowners, Ingleside Energy Center has:

(1) provided a local contact that the landowner should call first with their environmental problems or concerns; the letter indicates how soon a landowner can expect a response;

(2) instructed the landowners that, if they are not satisfied with the response, that they should call the Ingleside Energy Centers Hotline; the letter indicates how soon a landowner should expect a response; and

(3) instruct the landowners that, if they are still not satisfied with the response from Ingleside Energy Center Hotline, they should contact the Federal Energy Regulatory Commission's Enforcement Hotline at (888) 889-8030.

In addition, if any such landowner environmental problems or concerns are raised during construction of the Project. Ingleside Energy Center will include in its weekly status report a copy of a table that contains the following information for each environmental problem or concern:

a. the date of the call;

b. the identification number from the certificated alignment sheets of the affected property;

c. the description of the environmental problem or concern; and

d. an explanation of how and when the environmental problem or concern was resolved, will be resolved, or why it has not been resolved.

A copy of the weekly landowner environmental resolution report is included as Attachment 8-B.

Condition 9

Ingleside San Patricio shall employ a team of environmental inspectors. The environmental inspectors shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 7 above) and any other authorizing document;

c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;

d. a full-time position, separate from all other activity inspectors;

e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and

f. responsible for maintaining status reports.

Condition 9 Compliance Statement

Ingleside Energy Center will employ a Project HES Manager who will supervise all environmental inspectors on site. The Project HES Manager will coordinate with all regulatory agencies to provide compliance with the environmental conditions. The EPC Contractor will be required by contract to provide environmental inspectors and specialized environmental inspectors for specific areas of work. Specialized areas include but are not limited to Marine for dredging operations and pile driving operations, Water Quality for dredge disposal and construction run-off and biologist for land based construction activities. These environmental inspectors will report directly to the Project HES Manager. A preliminary organization chart is included in Exhibit 7.

The Project HES Manager, in conjunction with the required environmental inspectors will:

a. Monitor and ensure compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;

b. Be responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 7 above) and any other authorizing document;

Condition 9 Compliance Statement (cont.)

c. Be empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;

d. The Project HES Manager will be a full-time position, separate from all other activity inspectors;

e. Be responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and

f. The Project HES Manager will maintain a daily environmental inspection report compiled from the individual reports from each environmental inspector. The Project HES Manager will prepare a weekly status report to be filed with FERC.

The Project HES Manager will coordinate the resolution of all environmental concerns identified.

The Project HES Manager will be responsible for confirming completion of all environmental training requirements and regular refresher training.

All environmental inspectors and the Project HES Manager will have the right to immediately institute corrections and/or to shutdown construction activities until proper corrections can be made.

Condition 10

San Patricio Pipeline shall file updated status reports prepared by the environmental inspectors with the Secretary on a weekly basis **until all construction and restoration activities are complete.** On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

a. the current construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;

b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspectors during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

c. corrective actions implemented in response to all instances of noncompliance, and their cost;

d. the effectiveness of all corrective actions implemented;

e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and

f. copies of any correspondence received by Ingleside San Patricio from other federal, state or local permitting agencies concerning instances of noncompliance, and Ingleside San Patricio's response.

Condition 10 Compliance Statement

As will be detailed in a separate Implementation Plan filed at least 90 days prior to construction of the pipeline. San Patricio Pipeline will file updated status reports prepared by the environmental inspectors on a weekly basis until all construction and restoration activities are complete.

Condition 11

Ingleside San Patricio must receive written authorization from the Director of OEP **before commencing service of the Project**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.

Condition 11 Compliance Statement

Ingleside Energy Center will notify the Director of OEP of the intention to commence operation of the LNG terminal and requesting that a determination be made that restoration of the areas affected by the terminal and pipeline project have been in accordance with the conditions outlined in the FEIS and the Order. Ingleside Energy Center and San Patricio Pipeline will not commence operation of their respective LNG terminal and pipeline facilities until a written authorization from the Director of OEP has been received.

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 12

Within 30 days of placing the certificated facilities in service, Ingleside San Patricio shall file an affirmative statement with the Secretary, certified by a senior company official:

a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or

b. identifying which of the certificate conditions Ingleside San Patricio has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

Condition 12 Compliance Statement

Ingleside Energy Center will file an affirmative statement with the Secretary, certified by a senior company official, within 30 day of placing the certificated terminal facilities in service. The affirmative statement will state:

a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or

b. identify which of the certificate conditions Ingleside Energy Center has complied with or will comply with. This statement will also identify any areas affected by the Project where compliance measures are not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

Condition 13

Ingleside San Patricio shall include in its Dredge Disposal Plan the final placement location, the routes of dredge slurry pipes and access roads, and the location/design of outfall structures. This plan shall be filed with the Secretary **prior to the start of dredging operations**. *FEIS section 2.4.1.2*

Condition 13 Compliance Statement

The EPC Contractor will be required to prepare a Dredge Disposal Plan specifically identifying the details for the final placement location of dredge material, the routes of dredge slurry pipes and access roads, and the location/design of outfall structures. Ingleside Energy Center will incorporate the EPC Contractor's Dredge Disposal Plan, Reynolds Metals contractual requirements for dredge disposal and requirements of the COE dredge permits into a final Dredge Disposal Plan to be filed with the Secretary prior to the start of dredging operations. COE 404/10 permits are pending. By contract, the EPC Contractor is required to prepare his plan as follows:

Dewatering Control and Dredge Disposal Plan

Description and Scope

The EPC Contractor will prepare a Dewatering Control and Dredge Disposal Plan that describes the features and practices to monitor and control the transport and disposal of dredged materials, and resulting dewatering discharges of suspended solids. The EPC Contractor will incorporate and implement all final permit requirements in the COE Section 10 and Section 404 permits.

Dewatering Control and Dredge Disposal Plan Contents/Outline

The Dewatering Control and Dredge Disposal Plan will describe how the dredge cutter-head will transport the excavated material via pipeline to the Dredged Material Placement Areas (DMPA). The method by which the water/solid mixture is discharged and how the water will be routed through one or more settling basins to remove the suspended solids will be described. Once the suspended solids have reached an acceptable level, a description of how the water will be discharged back to the area of active excavation or the open harbor will be described.

Condition 13 Compliance Statement (cont.)

Dewatering Control and Dredge Disposal Plan Development

The EPC Contractor will provide detailed data and information for the Dewatering Control and Dredge Disposal Plan. The detailed data and information will include:

- the location and design of the DMPA including one or more settling basins;
- the proposed pipeline route from the berth area to the DMPA;
- the expected discharge volume from the dredge;
- the ratio of solids to water in the discharge;
- the discharge of clarified water to the area of active dredging or open.

Condition 14

Ingleside San Patricio shall file with the Secretary details of its coordination with the City of Port Aransas, and other local, state, or federal government entities, regarding its planned or potential assistance with ongoing or future shoreline protection efforts **prior to construction of the LNG terminal.** *EIS section 4.2.3*

Condition 14 Compliance Statement

In Resource Report No. 7, paragraph 7.3.2.4, Ingleside Energy Center described the efforts that had been taken to stabilize the shoreline along Port Aransas and stated that the intention of the stakeholders was to seek additional funding and matching grants to address the remaining 6,000 feet. Subsequently, news reports have indicated that there was substantial funding provided for in the Energy Policy Act of 2005 for shoreline erosion protection and other environmental enhancements, in particular for the Texas Gulf Coast region. In these articles, Texas Land Commissioner Jerry Patterson indicated that he would like to see some of the funding used to deal with erosion in Port Aransas.

Ingleside Energy Center will meet with the Texas Land Commission, Port of Corpus Christi and Port Aransas officials to confirm that this funding will in fact address the concerns. Regardless of these findings, which will be reported in subsequent Implementation Plan updates, Ingleside Energy will continue to participate as a member of the Port Industries of Corpus Christi Trade Association that provides advice and indirect funding of such matters through wharfage fees.

Condition 15

Ingleside San Patricio shall develop an Offshore Spill Prevention, Control and Countermeasures (SPCC) Plan to include procedures that would be implemented should spills of oil, gas, lubricants, or other hazardous materials occur during construction and operation of the marine terminal. In addition to addressing emergency spill response and clean-up procedures, this plan shall include a description of general spill prevention measures such as material handling practices, personnel training, and inspection. The offshore SPCC Plan shall be filed with the Secretary for review and approval by the Director of OEP **prior to the start of site preparation at the LNG terminal.** *EIS section 4.3.1*

Condition 15 Compliance Statement

Ingleside Energy Center will require, by contract, that the EPC Contractor provide an Offshore Spill Prevention, Control and Countermeasures Plan to cover all construction activities associated with the LNG terminal. The plan will address the topics listed in the outline included in Exhibit 15. Ingleside Energy Center will incorporate the EPC Contractor's plan into an overall plan to cover spills of oil, gas, lubricants, or other hazardous materials that occur during construction and operation of the marine terminal. This plan will be filed with the Secretary prior to the start of site preparation.

Condition 16

Ingleside San Patricio shall conduct post-construction surveys of seagrass beds adjacent to the areas that would be dredged and file a report that compares the results of the pre and post-construction seagrass surveys with the Secretary **within 90 days** of completing dredging and dredge material placement. If secondary impacts to these areas are observed, Ingleside San Patricio shall consult with resource and regulatory agencies to develop additional mitigation measures as necessary. *EIS section 4.4.1*

Condition 16 Compliance Statement

Ingleside Energy Center has conducted a preliminary seagrass bed survey as shown in Exhibit 16. Ingleside Energy Center will require by contract, that the EPC Contractor perform a post construction seagrass survey. The post construction seagrass survey will be filed with the Secretary within 90 days of completing the final dredging and dredge material placement.

If secondary impacts to these areas are observed, Ingleside Energy Center will consult with resource and regulatory agencies to develop additional mitigation measures as necessary. Ingleside Energy Center will implement these measures to avoid further impacts.

Condition 17

Ingleside San Patricio shall continue its consultation with the U.S. Army Corps of Engineers (COE), U.S. Environmental Protection Agency (EPA), U.S. Department of the Interior, Fish and Wildlife Service (FWS), Texas Parks and Wildlife Department (TPWD), the Texas General Land Office (TGLO), National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries), and the Coastal Bends Bays and Estuaries Program (CBBEP) to further develop its Wetland Mitigation Plan. Prior to construction of the LNG terminal, Ingleside San Patricio shall file its final plan with the Secretary for review and written approval by the Director of OEP. *EIS section 4.4.1*

Condition 17 Compliance Statement

Ingleside Energy Center will, with continuing consultation with the U.S. Army Corps of Engineers (COE), U.S. Environmental Protection Agency (EPA), U.S. Department of the Interior, Fish and Wildlife Service (FWS), Texas Parks and Wildlife Department (TPWD), the Texas General Land Office (TGLO), National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries), and the Coastal Bends Bays and Estuaries Program (CBBEP), finalize a Wetland Mitigation Plan. Ingleside Energy Center will file the final Wetland Mitigation Plan with the Secretary for review and written approval of the Director of OEP prior to the start of construction of the LNG terminal.

Condition 18

Ingleside San Patricio shall attempt to avoid the removal of mature trees along the pipeline right-of-way with a diameter at breast height greater than 12 inches. If such trees must be removed, Ingleside San Patricio shall prepare a mitigation plan, in consultation with the TPWD, and file the plan with the Secretary **prior to construction of the pipeline.** *EIS section 4.4.2*

Condition 18 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 19

Ingleside San Patricio shall consult with the TPWD and the Natural Resources Conservation Service (NRCS) to develop a seed mix that includes native grass species. Ingleside shall file the final seed mix specifications with the Secretary, **prior to construction of the pipeline.** *EIS section 4.4.2*

Condition 19 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 20

If an active migratory bird nest is found along the construction right-of-way, Ingleside San Patricio shall consult with the FWS to identify the most appropriate measure that shall be taken to avoid or minimize impacts. *EIS section 4.5.3.6*

Condition 20 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan after completion of the final routing and at least 90 days prior to construction of the pipeline.

Condition 21

Ingleside San Patricio shall provide training for all personnel involved in construction and operation of the LNG terminal on measures to avoid potential impacts to the West Indian manatee, **prior to site preparation at the LNG terminal.** This training shall include:

a. information advising that manatees may be found in La Quinta Channel;

b. materials, such as a poster, to assist in identifying the mammal;

c. instructions not to feed or water the animal; and

d. directions to call the Corpus Christi Ecological Services Field Office of the FWS in the event that a manatee is sighted in or near the Project area. *EIS section 4.6.1.1*

Condition 21 Compliance Statement

Ingleside Energy Center will train all personnel involved in construction and operation of the LNG terminal on measures to avoid potential impacts to the West Indian Manatee. A training plan outline has been developed and is included in Exhibit 21.

The Project HES Manager will make sure that this training is provided to all Ingleside Energy Center and EPC Contractor/subcontractor's personnel along with frequent refresher training that will include:

a. information advising that manatees may be found in La Quinta Channel;

b. materials, such as a poster, to assist in identifying the mammal;

c. instructions not to feed or water the animal; and

d. directions to call the Corpus Christi Ecological Services Field Office of the FWS in the event that a manatee is sighted in or near the Project area.

The Project HES Manager will make certain that Ingleside Energy Center and the EPC Contractor/subcontractor's project personnel comply with all requirements regarding reporting of sightings and avoidance of the West Indian Manatee.

Condition 22

During the wintering months (August through April) for piping plovers, Ingleside San Patricio shall have a biologist on-site during construction in tidal flats to assist employees in avoiding any impacts to piping plovers during construction of the LNG terminal. *EIS section 4.6.1.2*

Condition 22 Compliance Statement

The Project HES Manager will make certain that the EPC Contractor / subcontractors provide a qualified and appropriately trained biologist when any construction activities occur in the tidal flats during the winter months (August through April).

Condition 23

Any activities at the mitigation site shall be conducted outside of the piping plover wintering season (August through April) and during the summer months (May through July) when piping plovers are not present.

Condition 23 Compliance Statement

The Project HES Manager will make certain that any activities at the mitigation site will be conducted outside the piping plover wintering season of August through April and the summer months of May through July. The Project HES Manager will direct the EPC Contractor's environmental inspector and biologist not to allow any activities to occur within the mitigation site during the time when piping plovers are present.

Condition 24

Ingleside San Patricio shall prepare a plan, consistent with NOAA Fisheries recommendations, to minimize potential impacts on sea turtles and marine mammals from driving piles during construction of the marine terminal. The plan shall include measures to reduce sound transmission into the water (e.g., air bubble curtains, limitations on the type of hammer used, reductions in force applied to the pile) or a monitoring protocol to ensure listed species are not present in the zone of potential affect. The plan shall be approved by NOAA Fisheries, and filed with the Secretary for review and written approval by the Director of OEP **prior to construction of the LNG terminal**. *EIS section 4.6.1.3*

Condition 24 Compliance Statement

Ingleside Energy Center has developed a plan consistent with NOAA Fisheries recommendations to minimize potential impacts on sea turtles and marine mammals. Ingleside Energy Center will, by contract, require the EPC Contractor & sub-contractors to implement this plan to minimize potential impacts on sea turtles and marine mammals from noise due to pile driving activities. The contract requirement for the EPC Contractor is as follows:

> The NOAA Fisheries identified two Harm Avoidance Measures under Alternative One (NOAA Fisheries correspondence, Page 10 – see Exhibit 24) to reduce sound transmission into the water from pile driving activities.
>
> Ingleside Energy Center will use Alternative One requiring a bubble curtain to surround the piles being driven at all times. The bubble curtain system will be effective at reducing peak sound pressure levels to at least 175 dB re 1μPa rms outside of the bubble curtain.
>
> The EPC Contractor will identify the bubble curtain manufacturer's specifications for reducing peak sound pressure levels.

The Project HES Manager will be responsible for compliance with the approved plan.

Ingleside Energy Center will file the plan and approval documentation from NOAA with the Secretary upon receipt of NOAA approval.

Condition 25

Ingleside San Patricio shall not begin construction of the pipeline or LNG terminal until:

a. Ingleside San Patricio conducts a threatened and endangered species survey along portions of the construction right-of-way where access has been denied and files an amended field survey with the FWS and the Secretary;

b. the staff completes any necessary formal consultation with FWS and NOAA Fisheries, if required; and

c. Ingleside San Patricio has received written notification from the Director of OEP that construction and/or implementation of conservation measures may begin. *EIS section 4.6.3*

Condition 25 Compliance Statement

Ingleside Energy Center will not begin any construction on the LNG terminal until the FERC staff has completed any necessary formal consultations with FWS and NOAA Fisheries and until a written notification from the Director of OEP that construction and/or implementation of conservation measures may begin.

San Patricio Pipeline will not begin construction of its pipeline facilities until these same consultations have been completed and notifications received.

Condition 26

If facilities are not constructed **within one year** from the date of issuance of the authorization from the Director of OEP that construction may begin, Ingleside San Patricio shall consult with the appropriate offices of FWS and NOAA Fisheries to verify that previous consultations and determinations of effect are still current. *EIS section 4.6.3*

Condition 26 Compliance Statement

If the terminal construction has not started within one year from the date of issuance of the authorization from the Director of OEP, Ingleside Energy Center will consult with the appropriate office of FWS and NOAA Fisheries to verify that previous consultations and determination of effect are still current.

Condition 27

Ingleside San Patricio shall not begin construction of any component of its LNG terminal **until** it files with the Secretary a copy of the consistency determination issued by the Railroad Commission of Texas. *EIS section 4.7.5*

Condition 27 Compliance Statement

Ingleside Energy Center has received the consistency determination issued by the Railroad Commission of Texas. The consistency determination is included as Exhibit 27.

Condition 28

Ingleside San Patricio shall **defer construction** and use of its proposed pipeline facilities, including related ancillary areas for staging, storage, and temporary work areas, and new or to-be-improved access roads, **until**:

a. Ingleside San Patricio files with the Secretary all additional required inventory and evaluation reports, and any necessary treatment plans;

b. Ingleside San Patricio files the State Historic Preservation Office (SHPO) comments on all cultural resources investigation reports and plans;

c. the Advisory Council on Historic Preservation (ACHP) has been given an opportunity to comment if any historic properties would be adversely effected by the Project; and

d. the Director of OEP reviews and approves all cultural resources reports and plans, and notifies Ingleside San Patricio in writing that it may proceed with treatment or construction.

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE." *EIS section 4.10.4*

Condition 28 Compliance Statement

San Patricio Pipeline will prepare and submit a separate Implementation Plan after *completion of the final routing and at least 90 days prior to construction of the pipeline.*

Condition 29

Ingleside San Patricio shall make all reasonable efforts to assure its predicted noise levels from the LNG terminal are not exceeded at the NSAs and file noise surveys showing this with the Secretary **no later than 60 days** after placing the LNG terminal in service. However, if the noise attributable to the operation of the LNG terminal exceeds 55 dBA L_{dn} at an NSA, Ingleside San Patricio shall file a report on what changes are needed and shall install additional noise controls to meet the level **within one year** of the in-service date. Ingleside San Patricio shall confirm compliance with these requirements by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. *EIS section 4.11.2.1*

Condition 29 Compliance Statement

Ingleside Energy Center will make all reasonable efforts to assure the noise levels attributed to the LNG terminal do not exceed the predicted levels at the Noise Sensitive Areas.

Ingleside Energy Center conducted a base-line noise survey at the plant boundaries and at the Noise Sensitive Areas (NSA's). The closest NSA is located at the corner of 8th Street and Avenue B in Ingleside and has a current noise level of 51.2 dBa. It should be noted that a preliminary study identified that the ambient noise at NSA 1[1] was 57.4 dBA.

Ingleside Energy Center has established noise performance guarantees with the EPC Contractor as a part of the EPC contract (See excerpt from the contract below). The EPC Contractor is required to meet the noise limit at Noise Sensitive Area 2 or take corrective actions. If the EPC Contractor fails to meet the noise requirements and is unable to make the corrective actions, Ingleside Energy Center will file a report on what changes are needed and will install additional noise controls to meet the level within one year of the in-service date.

The environmental noise emissions guarantee includes the contribution of all equipment and systems included in the EPC Contractor's scope of supply. The environmental noise emissions guarantee excludes the contribution of all non-facility background noise and all facility noise not associated with the normal operation of the facility.

Ingleside will file a post noise survey to the Secretary no later than 60 days after placing the LNG terminal into service. If additional noise controls are required, Ingleside Energy Center will file with the Secretary a second noise survey no later than 60 days after installing the additional noise controls.

[1] Main Street, on the south Side of Ingleside

Condition 29 Compliance Statement (cont.)

Excerpt from the EPC contract:

5.6 **"Plant Noise Limits**

Specific Performance Guarantee: The Plant noise levels will not exceed any of the requirements outlined in Sections 5.6.1 through 5.6.3 below as related to environmental noise levels, in-plant sound levels, and indoor sound levels.

Performance Guarantee: None. There will be no performance guarantee for plant noise limits, and no performance liquidated damages will be applicable.

5.6.1 **Environmental Noise Levels:** The environmental noise levels resulting from the operation of the Plant under all operational conditions and capacities will not exceed either (a) an A-weighted sound pressure level of 65 dBA at the terminal fence, or (b) 52.6 dBA (Ldn) at the Noise Sensitive Area (NSA) identified below:

- NSA 2 – 5,800 feet east of the center of the Site. Residence at the corner of 8th Street and Avenue B.

The Specific Performance Guarantee for environmental Noise Levels includes the contribution of all equipment and systems included in normal operation of the Plant (including NGL extraction), while an LNG Vessel is unloading and Gas is being sent out of the Plant at the Specific Performance Guarantee for Gas Send-Out Rate.

The EPC Contractor will conduct a noise level Acceptance Test to verify compliance with the Specific Performance Guarantee for environmental Noise Levels. Compliance will be based on not exceeding the prescribed limit exclusive of measurement uncertainty and test tolerance. The test procedure will be based on applicable industry standards such as, but not limited to, ANSI S1.4, ANSI S1.13, ANSI S12.18, ASTM E1014, and ISO 8297."

Condition 30

Ingleside San Patricio shall evaluate the need for additional dredging, and the quantity of dredging that would be required, to accommodate the maneuvering of LNG vessels up to 254,000 m^3 capacity through the Corpus Christi and La Quinta Channels. This study shall be done in consultation with the COE, Coast Guard, and the Aransas Corpus Christi Pilots Association. Ingleside San Patricio shall file the results of this evaluation with the Secretary for the review and approval of the Director of OEP **prior to the use of LNG ships over 140,000 m^3 in capacity**. *EIS section 4.12.5.1*

Condition 30 Compliance Statement

Ingleside Energy Center commissioned a maneuvering study to evaluate the need for additional dredging in order to accommodate ships up to 254,000 m^3 in size. The results of the study have been presented to representatives of the Coast Guard and the Corpus Christi Pilots Association. Once they have completed their review, Ingleside Energy Center will consult with the Corps of Engineers before filing the results of the evaluation with the Secretary. Until the Director of OEP receives and approves the report, terminal operations will only use vessels up to 140,000 m^3 in capacity.

Condition 31

Ingleside San Patricio shall submit a waterway suitability assessment to the cognizant Captain of the Port/Federal Maritime Security Coordinator for review and validation and provide a copy to the FERC staff. *EIS section 4.12.5.2*

Condition 31 Compliance Statement

Ingleside Energy Center held an initial meeting with the USCG and Captain of the Port/Federal Maritime Security Coordinator to coordinate development of the Waterway Suitability Assessment (WSA). On completion, the WSA will be submitted to the cognizant Captain of the Port/Federal Maritime Security Coordinator for review and validation prior to use of the LNG terminal LNG ship receiving facility.

Ingleside Energy Center will file a copy of the WSA with the FERC staff on completion of these reviews.

Condition 32

Concurrent with the filing of the WSA, Ingleside Energy Center shall provide a comprehensive plan identifying the mechanisms for funding all project-specific security/emergency management costs that would be imposed on state and local agencies. In addition to the funding of direct transit-related security/emergency management costs, this comprehensive plan should include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. This plan should be filed with the Secretary for review and approval by the Director of OEP.

Condition 32 Compliance Statement

Ingleside Energy Center will, concurrent with the filing of the WSA, provide a plan identifying the mechanisms for funding of project specific security/emergency management cost that would be imposed on state and local agencies. This plan will identify funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. This plan will be filed with the Secretary for review and approval by the Director of OEP.

Condition 33

Ingleside San Patricio shall annually review its waterway suitability assessment for the project; update the assessment to reflect changing conditions; provide the updated assessment to the cognizant Captain of the Port/Federal Maritime Security Coordinator for review and validation; and provide a copy to the FERC staff. *EIS section 4.12.5.2*

Condition 33 Compliance Statement

Ingleside Energy Center will review and update the WSA annually to reflect changing conditions. The updated assessment will be submitted to the cognizant Captain of the Port/Federal Maritime Security Coordinator for review and validation; and will provide a copy to the FERC staff.

Condition 34

A complete plan and list of the hazard detection equipment shall be filed **prior to initial site preparation**. The information shall include a list with the instrument tag number, type and location, alarm locations, and shutdown functions of the proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment. *EIS section 4.12.2*

Condition 34 Compliance Statement

Ingleside Energy Center will develop a plan for the hazard detection equipment. The EPC Contractor will specify all the hazard detection equipment and will develop detailed design drawings showing the location and type of detection. In addition the EPC Contractor will provide a detailed list showing the tag number, detection type, manufacturer, model number, alarm and shutdown setpoints for all hazard detection equipment. A preliminary layout of the fire and gas detection equipment is shown in drawing D10-0002 show in Exhibit 34 to meet the requirements of this condition.

Ingleside Energy Center will file the final plan and the final list of hazard detection equipment when the design is completed, as required in Condition 42.

Condition 35

Ingleside San Patricio shall provide a technical review of its facility design that:

a. Identifies all combustion/ventilation air intake equipment and the distance(s) to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases).

b. Demonstrates that these areas would be adequately covered by hazard detection devices and indicate how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.

Ingleside San Patricio shall file this review **prior to initial site preparation.** *EIS section 4.12.2*

Condition 35 Compliance Statement

Ingleside Energy Center's EPC Contractor will develop detailed plan drawings showing the location of all combustion/ventilation air intake equipment, hazard detection devices and the distance(s) to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases). In addition the EPC Contractor will provide documentation such as control cause and effect diagrams and prose descriptions of how the hazard detection devices would operate to isolate or shutdown any equipment whose continued operation could provide an ignition source that would add to or sustain an emergency.

Ingleside Energy Center will file the final technical review with the Secretary.

Condition 36

A complete plan and list of the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam, hazard control equipment shall be filed **prior to initial site preparation**. The information shall include a list with the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers. *EIS section 4.12.2*

Condition 36 Compliance Statement

The design of the facility fire protection systems includes both active and passive systems. The active systems include dry chemical, firewater, deluge, high expansion foam, CCTV, and extensive fire and gas monitoring and detection systems.

High Expansion Foam

Because of the risk of a pool fire, fire water driven high expansion foam packages have been specified for each of the two impoundment basins. The high expansion foam system for the impoundment basins is not for extinguishing the fire, but rather for slowing the vaporization of the LNG in the basin.

Dry Chemical Systems

Two dry chemical systems are to be provided for the completed terminal at the LNG unloading jetty in accordance with NFPA 59A. This includes one fixed dry chemical system and one hose reel system in the Jetty area. Small hand held dry chemical systems will be located at regular intervals throughout the facility.

The preliminary design criteria for the dry chemical systems are as follows:

Dry Chemical Fixed Turret Package	(Jetty)	3" turret, 50 #/sec, 3000# syst.
Dry Chemical Hose Reel Package	(Jetty)	1"x150' hose, 7#/sec,500# syst

Prior to the initial site preparation Ingleside Energy Center will file a preliminary plan and list of the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam, hazard control. The plan will include specifications for the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam, hazard control equipment including drawings showing the location of all equipment.

Ingleside Energy Center will file the final plan when the design is completed as required under Condition 45.

Condition 37

The design of the Bottle-Up Vessel and system shall be re-evaluated for process design, pressure and volume containment under all conditions and the proposed design basis and design filed **prior to initial site preparation**. *EIS section 4.12.2*

Condition 37 Compliance Statement

The EPC Contractor is required to re-evaluate for the process design conditions including pressure and volume containment under all expected operating conditions. The EPC Contractor will complete the design specification for the Bottle-Up Vessel.

Ingleside Energy Center will file the preliminary specification and design basis with the Secretary prior to initial site preparation.

Ingleside Energy Center will provide the final specification and design basis with the Secretary upon completion of the detailed design of the Bottle-Up vessel.

Condition 38

Ingleside San Patricio shall either provide revised vapor dispersion calculations based on the main LNG impoundment configuration with both concrete walls and an insulating perlite concrete floor or specify a different impoundment configuration. This information shall be filed with the Secretary 30 days ***prior to initial site preparation*** for review and approval by the Director of OEP. Alternatively, Ingleside San Patricio may provide evidence of its ability to exercise legal control of the activities that occur with the portions of the vapor dispersion exclusion zone shown to fall outside of the site property line. *EIS section 4.12.4*

Condition 38 Compliance Statement

Calculations using both concrete and an insulating perlite concrete are presented on page 5 of the "Preliminary Siting Calculations" by Project Technical Liaison Associates, Inc. (PTL) (see Exhibit 38) filed originally. In addition Ingleside Energy Center has obtained an easement that places a restrictive covenant on the only property outside of the existing site which is not owned by Ingleside Energy Center or an affiliate (see Exhibit 38a).

Condition 39

Ingleside San Patricio shall examine provisions to retain any vapor produced along the transfer line trenches and other areas serving to direct LNG spills to associated impoundments. Measures to be considered may include, but are not limited to: vapor fencing; intermediate sump locations; or trench surface area reduction. Ingleside San Patricio shall file final drawings and specifications for these measures with the Secretary 30 days **prior to initial site preparation** for review and approval by the Director of OEP. *EIS section 4.12.4*

Condition 39 Compliance Statement

Ingleside Energy Center has reviewed the provisions designed to mitigate impact from vapor produced along the transfer line trenches and other areas serving to direct LNG spills to associated impoundments. Based on this review, Ingleside Energy Center believes that the design as presented in the Project Technical Liaison Associates, Inc. (PTL) report (See Exhibit 38) provides a sound approach to dealing with any vapors generated from a potential spill of LNG to a trench.

Ingleside Energy Center considered intermediate impoundment basins as a potential solution, but given the site constraints, this was not feasible and caused any generated vapors to be closer to the site boundary. Since this design change would make a potential LNG spill worse instead of improving the situation, it was not considered further.

Ingleside Energy Center also considered trench modifications but based on modeling concluded that the original trench geometry is optimum. By minimizing the bottom area of the trench and making the trench relatively narrow, the wetted surface is minimized and the exposed surface which might come in contact with LNG will be more quickly cooled, minimizing vapor generation. Ingleside Energy Center also considered various insulation systems for the trench but all such systems entail maintenance problems impairing reliability.

Ingleside Energy Center considered vapor fences, but due to site geometry this would cause any generated vapors to be somewhat confined. It is well documented that vapors from LNG do not cause an explosive pressure blast wave unless the vapor is confined.

After not finding a different design approach which provides improved safety for the Ingleside Energy Center site configuration, it was decided to review the sensitivity of the modeling done for the site. Vapor dispersion modeling was performed by PTL for this project using the DEGADIS model cited in NFPA 59A and 49CFR193.2059. Specifically, trench modeling was done using the equations from SOURCE5 (developed by the same team which developed DEGADIS) to break the trench into segments and calculate a source strength. This data was then fed to the DEGADIS model and the distance to the desired concentration calculated.

Condition 39 Compliance Statement (cont.)

To confirm that the design was conservative, in lieu of the ½ LFL concentration level stated in the code, a concentration of ¼ of the LFL was used. Ingleside Energy Center understands that this approach has been used in similar situations for LNG terminal siting to illustrate the conservatism of a given design. Using this basis the maximum distance calculated by *DEGADIS* was 404 feet as compared to 256 feet in the original *PTL* report submitted with the Project Resource Report 13. Since this very conservative approach results in a maximum ¼ LFL isopleth which is still well within the Oxy property, this calculation validates the original design layout as being a good design. See the revised unloading trench DEGADIS calculation result in Exhibit 39. This calculation replaces Attachment 9 in the original PTL report.

Ingleside Energy Center will file preliminary drawings and specifications for these measures with the Secretary 30 days prior to initial site preparation for review and approval by the Director of OEP

Ingleside Energy will file the final drawings and specifications for these measures with the Secretary for review and approval by the Director of OEP when completed by the EPC Contractor.

Condition 40

Ingleside San Patricio shall develop emergency evacuation routes/methods for the areas along the route of the LNG vessel transit in conjunction with the local emergency planning groups and town officials and file the routes/methods with the Secretary for review and written approval by the Director or OEP **prior to initial site preparation.** *EIS section 4.12.5*

Condition 40 Compliance Statement

Ingleside Energy Center will submit an emergency evacuation plan that is developed in consultation with the local emergency planning groups and town officials, for the areas along the route of the LNG vessel transit. No later than 60 days prior to the start of construction, the plan will be filed with the Secretary for review and written approval by the Director or OEP.

Condition 41

Prior to initial site preparation, Ingleside San Patricio shall demonstrate that suitable procedures and coordination exist between Ingleside San Patricio, the Pilots, and the TDOT to minimize delays to ferry operations from LNG carrier transits. *EIS section 4.12.5.3*

Condition 41 Compliance Statement

Ingleside Energy Center will provide correspondence, prior to initial site preparation, demonstrating that suitable procedures and coordination exist between Ingleside Energy Center, the Pilots, and the TDOT to minimize delays to ferry operations from LNG carrier transits.

Condition 42

The **final design** of the hazard detection equipment shall identify manufacturer and model. *EIS section 4.12.2*

Condition 42 Compliance Statement

Ingleside Energy Center will file with the Secretary the final design documentation of the hazard detection equipment. The documentation will include a detailed summary list and detailed specification data sheets for all the hazard detection equipment. The detailed summary list will provide information showing the tag number, detection type, manufacturer, model number, alarm and shutdown setpoints for all hazard detection equipment.

Condition 43

The **final design** of the hazard detection equipment shall include redundancy and fault detection and fault alarm monitoring in all potentially hazardous areas and enclosures. *EIS section 4.12.2*

Condition 43 Compliance Statement

Ingleside Energy Center has required the EPC Contractor to design all safety functions to be a part of a Safety Instrumented System as defined by ANSI/ISA 84.00.01. This standard requires that evaluation methods be used to determine a Safety Integrity Level (SIL) for the hazards identified using PHA requirements of OSHA 29CFR 1910-119. The equipment used to mitigate these hazards is evaluated based on the redundancy and fault detection and alarm capabilities, and on the proven integrity of each hardware and software component, by manufacturer and model number, to meet the SIL requirement. All the hazard detection equipment will be evaluated using this method and will include redundancy and fault detection requirements to meet the ANSI/ISA 84.00.01 standard and this condition of the FEIS and Order. In addition the logic solver microprocessor based safety system that receives the remote hazard detection equipment signals is required to be certified by an internationally recognized testing agency, such as TUV, for proper redundancy and fault detection suitable for Safety Instrumented System use.

Ingleside Energy Center will incorporate the required redundancy and fault detection in the final hazard detection and mitigation systems using the above methodology. Ingleside Energy Center will file with the Secretary the final design of the hazard detection and mitigation systems.

Condition 44

The **final design** shall specify that open path detectors shall be calibrated to detect the presence of flammable gas and alarm at the lowest reliable set point, in addition to the required 25 percent LEL set point. *EIS section 4.12.2*

Condition 44 Compliance Statement

Ingleside Energy Center will file with the Secretary the final design specifications, identifying manufacturer and model number as well as calibration data and set points for all open path detectors. The specifications will require the minimum calibrated setting to be the lowest reliable set point.

Condition 45

The **final design** of the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam hazard control equipment shall identify manufacturer and model. *EIS section 4.12.2*

Condition 45 Compliance Statement

High Expansion Foam

Because of the risk of a pool fire, fire water driven high expansion foam packages have been specified for each of the two impoundment basins. The high expansion foam system for the impoundment basins is not for extinguishing the fire, but rather for slowing the vaporization of the LNG in the basin.

Dry Chemical Systems

Two dry chemical systems are to be provided for the completed terminal at the LNG unloading jetty in accordance with NFPA 59A. This includes one fixed dry chemical system and one hose reel system in the Jetty area. Small hand held dry chemical systems will be located at regular intervals throughout the facility.

The preliminary design criteria for the dry chemical systems are as follows:

Dry Chemical Fixed Turret Package	(Jetty)	3" turret, 50 #/sec, 3000# syst.
Dry Chemical Hose Reel Package	(Jetty)	1"x150' hose, 7#/sec,500# syst

Ingleside Energy Center will file with the Secretary the final design of the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam hazard control equipment including manufacturer and model number.

Condition 46

The **final design** shall include equipment and instrumentation for the measurement of translational and rotational movement of the inner vessel for use during and after cool down. *EIS section 4.12.2*

Condition 46 Compliance Statement

Ingleside Energy Center has required the EPC Contractor and its LNG Tank subcontractor to provide a system capable of monitoring both horizontal as well as rotational movements of the inner shell relative to the outer shell at a minimum of two locations around the tank

Ingleside Energy Center will file with the Secretary the final design specification including equipment and instrumentation for the measurement of translational and rotational movement of the inner vessel for use during and after cool down. The specifications will include manufacture and model number of all components as well as the final placement locations of all components.

Condition 47

The **final design** shall include details of the boil-off gas flow measurement system provided for each tank. *EIS section 4.12.2*

Condition 47 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details of the boil-off gas flow measurement system provided for each tank. The details will include tag numbers, manufacturer and model numbers of all measurement equipment.

Condition 48

The **final design** shall include details of the LNG flow measurement system provided for the top and bottom fill to each tank. *EIS section 4.12.2*

Condition 48 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details of the LNG flow measurement system provided for the top and bottom fill to each tank. The details will include tag numbers, manufacturer and model numbers of all measurement equipment.

The project P&ID's have been revised to reflect this requirement. Refer to Exhibit 48.

Condition 49

The **final design** shall include a reliable measurement system to monitor deflections during the hydraulic test. At a minimum, this system shall include two slope indicator ducts which bisect the tank in mutually perpendicular directions, monitoring points at the terminals of these ducts, and other monitoring points along the perimeter of the concrete shell, so that sag, warping, tilt, and settlement can be monitored. Tolerances for sag, tilt, and shell warping shall meet or exceed the limits specified by the tank manufacturer. *EIS section 4.12.2*

Condition 49 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details of the measurement system to monitor deflections during the hydraulic test of the LNG tank.

The system will be designed by the EPC Contractor to include at a minimum, two slope indicator ducts which bisect the tank in mutually perpendicular directions, monitoring points at the terminals of these ducts, and other monitoring points along the perimeter of the concrete shell, so that sag, warping, tilt, and settlement can be monitored. Tolerances for sag, tilt, and shell warping shall meet or exceed the limits specified by the tank manufacturer.

Condition 50

The **final design** shall include details of the LNG tank tilt settlement and differential settlement limits between each LNG tank and piping and procedures to be implemented in the event that limits are exceeded. *EIS section 4.12.2*

Condition 50 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details of the LNG tank tilt settlement and differential settlement limits between each LNG tank and piping and will include detailed procedures to be implemented in the event that limits are exceeded. The details will include tag numbers, manufacturer and model numbers and placement of all measurement equipment.

Condition 51

The **final design** shall include drawings and specifications of the spill protection system to be applied to the LNG tank roofs. *EIS section 4.12.2*

Condition 51 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details include drawings and specifications of the spill protection system to be applied to the LNG tank roofs. The details will include tag numbers, manufacturer and model numbers and placement of all measurement equipment.

Condition 52

The **final design** shall include a discretionary vent for each tank, to be operated through the DCS. The outlet from the vent piping shall be designed to discharge beyond the outer containment, to prevent vapor from flowing into the annular containment. *EIS section 4.12.2*

Condition 52 Compliance Statement

Ingleside Energy Center will file with the Secretary the final detailed design specifications and drawings showing the discretionary vent for each tank.

The EPC Contractor is required by contract to design the vent be operated through the DCS and have the outlet from the vent piping designed to discharge beyond the outer containment, to prevent vapor from flowing into the annular containment.

The project P&ID's have been revised to reflect this requirement. Please note that the P&ID requires the vent be routed to a "Safe Location". A safe location refers to a discharge beyond the outer containment of the LNG tank. See Exhibit 52

Condition 53

The **final design** shall include provisions to measure the discharge flow of each intank pump. *EIS section 4.12.2*

Condition 53 Compliance Statement

Ingleside Energy Center will file with the Secretary final design details of the discharge flow measurement system for each intank LNG pump. The details will include tag numbers, manufacturer and model numbers of all measurement equipment.

Condition 54

The **final design** of the vaporizers shall include double block isolation on the suction and double block isolation and check valve on the discharge of each vaporizer. One of the valves on the suction and one valve on the discharge shall be automatically actuated. *EIS section 4.12.2*

Condition 54 Compliance Statement

Ingleside Energy Center will file with the Secretary the final detailed design specifications and drawings showing the double block isolation on the inlet and double block isolation and check valve on the discharge of each vaporizer.

The EPC Contractor is required by contract to design the vaporizer with double block isolation on the suction and double block isolation and check valve on the. In addition one of the valves on the suction and one valve on the discharge will be automatically actuated.

The project P&ID's have been revised to reflect this requirement. See Exhibit 54.

Condition 55

The **final design** shall include provisions to ensure that hot glycol/water circulation is operable at all times when LNG is present in the LNG booster pump discharge piping or when the temperature in the LNG inlet channel to any vaporizer is below 0°F. *EIS section 4.12.2*

Condition 55 Compliance Statement

The EPC Contractor is required by contract to design the hot glycol/water circulation to be operable at all times when LNG is present in the LNG booster pump discharge piping or when the temperature in the LNG inlet channel to any vaporizer is below 0°F.

Ingleside Energy Center recognizes that on a loss of power, glycol/water circulation would quickly slow to a halt as the flow momentum is lost. The Safety Instrumented System would shut down LNG flow immediately on loss of power and prevent LNG flow without sufficient glycol/water circulation. However, the power supply to the complex is very reliable and redundant. The power will primarily come from the onsite cogeneration with stand-by back-up power sourced from the utility grid.

Ingleside Energy Center will file with the Secretary the final detailed design specifications and drawings.

Condition 56

The **final design** shall include detection instrumentation and shut down procedures for vaporizer tube leak, shell side overpressure, or bursting disc failure. *EIS section 4.12.2*

Condition 56 Compliance Statement

The EPC Contractor is required by contract to design the detection instrumentation and shut down procedures to mitigate hazards caused by vaporizer tube leak, shell side overpressure, or bursting disc failure.

Ingleside Energy Center will file with the Secretary final design details include drawings and specifications of detection instrumentation and shut down procedures for vaporizer tube leak, shell side overpressure, or bursting disc failure. The details will include tag numbers, manufacturer and model numbers and placement of all measurement equipment.

Condition 57

The **final design** shall include temperature measurement of the vaporizer common discharge header which shall alarm the low temperature condition. *EIS section 4.12.2*

Condition 57 Compliance Statement

The EPC Contractor is required by contract to design the temperature measurement of the vaporizer common discharge header and alarms for the low temperature condition.

Ingleside Energy Center will file with the Secretary final design details include drawings and specifications of the temperature measurement system for the vaporizer common discharge header and alarms for a low temperature condition. The details will include tag numbers, manufacturer and model numbers and placement of all measurement equipment.

The project P&ID's have been revised to reflect this requirement. See Exhibit 57.

Condition 58

The **final design** shall include a fire protection evaluation carried out in accordance with the requirements of NFPA 59A, chapter 9.1.2. *EIS section 4.12.2*

Condition 58 Compliance Statement

The EPC Contractor is required by contract to evaluate the fire protection systems in accordance with the requirements of NFPA 59A, chapter 9.1.2

Ingleside Energy Center will file with the Secretary final design details for a fire protection evaluation carried out in accordance with the requirements of NFPA 59A, chapter 9.1.2.

Condition 59

The **final design** shall include details of the shut down logic, including cause and effect lists for alarm and shutdown. *EIS section 4.12.2*

Condition 59 Compliance Statement

Ingleside Energy Center has required the EPC Contractor by contract to design all safety functions to be a part of a Safety Instrumented System as defined by ANSI/ISA 84.00.01. The shutdown logic must be properly designed and validated using tools like the cause and effect diagrams. The final design documentation will also include the actual logic printouts (ladder logic) from the validated logic solver.

Ingleside Energy Center will file with the Secretary final design details including logic drawings and cause and effect diagrams of the shut down logic. The details will include tag numbers, manufacturer and model numbers and placement of all measurement and isolation equipment.

Condition 60

The **final design** shall include emergency shutdown of equipment and systems activated by hazard detection devices for flammable gas, fire, and cryogenic spills, when applicable. *EIS section 4.12.2*

Condition 60 Compliance Statement

Ingleside Energy Center has required the EPC Contractor to design all safety functions to be a part of a Safety Instrumented System as defined by ANSI/ISA 84.00.01. This standard requires that evaluation methods be used to determine a Safety Integrity Level (SIL) for the hazards identified using PHA requirements of OSHA 29CFR 1910-119. All hazards including flammable gas, fire, and cryogenic spills will be evaluated by this proven method.

Ingleside Energy Center will file with the Secretary the final Safety Instrumented System documentation including the Safety Requirements Specification that defines all identified hazards, hardware and software mitigation requirements and the final calculations showing that the design of the Safety Instrumented System meets the requirements of the ANSI/ISA standard.

Condition 61

Security personnel requirements for prior to and during LNG vessel unloading shall be filed **prior to commissioning**. *EIS section 4.12.2*

Condition 61 Compliance Statement

Ingleside Energy Center will provide the Secretary prior to commissioning with a complete plan for security personnel showing numbers of personnel, their specific security function, their specific location and area of responsibility and schedules to be in place prior to and during LNG vessel unloading.

Condition 62

Operation and Maintenance procedures and manuals, as well as emergency plans, emergency evacuation plan and safety procedure manuals, shall be filed **prior to commissioning.** *EIS section 4.12.2*

Condition 62 Compliance Statement

Ingleside Energy Center will require, by contract, that the EPC Contractor develop and provide Operation and Maintenance procedures and manuals as well as training manuals for the entire LNG terminal facility.

Ingleside Energy Center in conjunction with its EPC Contractor will develop emergency plans, evacuation plans and safety procedure manuals for the LNG terminal and affected areas around the facility. These plans will be in full compliance with local, state and federal requirements for safety.

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, with a copy of the Operation and Maintenance procedures and manuals, training manuals emergency plans, evacuation plans and safety procedure manuals.

Condition 63

Copies of the Coast Guard security plan, vessel operation plan, and emergency response plan shall be provided to the FERC staff **prior to commissioning**. *EIS section 4.12.2*

Condition 63 Compliance Statement

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, with a copy of the Coast Guard security plan, vessel operation plan, and emergency response plan.

Condition 64

The contingency plan for failure of the outer LNG tank containment shall be filed **prior to commissioning**. *EIS section 4.12.2*

Condition 64 Compliance Statement

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, a copy of the contingency plan for failure of the outer LNG tank containment.

Condition 65

A copy of the criteria for horizontal and rotational movement of the inner vessel for use during and after cool down shall be filed **prior to commissioning**. *EIS section 4.12.2*

Condition 65 Compliance Statement

The EPC Contractor is required, by contract, to provide a system to monitor movement of the inner tank relative to the outer shell. The system will be capable of monitoring both horizontal as well as rotational movements of the inner shell relative to the outer shell at a minimum of two locations around the tank.

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, with a copy of the criteria for horizontal and rotational movement of the inner vessel for use during and after cool down.

Condition 66

Ingleside San Patricio shall coordinate with the Coast Guard to define the responsibilities of Ingleside San Patricio's security staff in supplementing other security personnel and in protecting the LNG tankers and terminal **prior to commissioning.** *EIS section 4.12.5*

Condition 66 Compliance Statement

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, with copies of the coordination documentation between Ingleside Energy Center and the Coast Guard regarding the responsibilities of Ingleside Energy Center's security staff in supplementing other security personnel and in protecting the LNG tankers and terminal.

Condition 67

The FERC staff shall be notified of any proposed revisions to the security plan and physical security of the facility **prior to commencement of service.** *EIS section 4.12.2*

Condition 67 Compliance Statement

Ingleside will notify the FERC staff of changes to the security plan and physical security of the facility prior to commencement of service.

Condition 68

Ingleside San Patricio shall develop an Emergency Response Plan (including evacuation) and coordinate procedures with local emergency planning groups, fire departments, state and local law enforcement, and appropriate federal agencies. This plan shall include at a minimum:

a. designated contacts with state and local emergency response agencies;

b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;

c. procedures for notifying residents and recreational users within areas of potential hazard;

d. evacuation routes for public use areas and residents of areas along the route of the LNG transit;

e. locations of permanent sirens and other warning devices; and

f. an "emergency coordinator" on each LNG vessel to activate sirens and other warning devices.

The Emergency Response Plan shall be filed with the Secretary for review and approval by the Director of OEP **prior to commencement of service**. Ingleside San Patricio shall notify FERC staff of all meetings in advance and shall report progress on its Emergency Response Plan at 6-month intervals starting at the commencement of construction. *EIS section 4.12.5*

Condition 68 Compliance Statement

Prior to commencing operations, Ingleside Energy Center will prepare an Emergency Response Plan that is integrated into the existing Occidental Chemical Emergency Response Plan. This plan will include emergency procedures manuals, as required by 49 CFR Part 193.2509 that provide for:

(a) responding to controllable emergencies and recognizing an uncontrollable emergency

(b) taking action to minimize harm to the public including the possible need to evacuate the public

(c) coordination and cooperation with appropriate local officials.

Condition 68 Compliance Statement (cont)

This plan will coordinate with local emergency planning groups, fire departments, state and local law enforcement, and appropriate federal agencies. This plan shall include at a minimum:

a. designated contacts with state and local emergency response agencies;

b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;

c. procedures for notifying residents and recreational users within areas of potential hazard;

d. evacuation routes for public use areas and residents of areas along the route of the LNG transit;

e. locations of permanent sirens and other warning devices; and

f. an "emergency coordinator" on each LNG vessel to activate sirens and other warning devices.

Condition 69

Progress on the construction of the LNG terminal shall be reported in **monthly reports** filed with the Secretary. Details shall include a summary of activities, problems encountered and remedial actions taken. Problems of significant magnitude shall be reported to the FERC within 24 hours. *EIS section 4.12.2*

Condition 69 Compliance Statement

Ingleside Energy Center will file with the Secretary monthly reports on the progress of the construction of the LNG terminal. The report will include a summary of activities, problems encountered and remedial actions taken. Ingleside Energy Center will, within 24 hours, report any problems of a significant magnitude.

Condition 70

The facility shall be subject to regular FERC staff technical reviews and site inspections on at least a **biennial** basis or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, Ingleside San Patricio shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted annual report, shall be submitted. *EIS section 4.12.2*

Condition 70 Compliance Statement

Ingleside Energy Center understands that the terminal is subject to regular FERC staff technical reviews and site inspections at least on a biennial basis, and more frequently as circumstances indicate. Prior to each FERC review and site inspection Ingleside Energy Center will respond to specific data requests including any design and operating conditions that may have been imposed by other agencies or organizations.

Ingleside Energy Center will file up-to-date and detailed piping and instrument diagrams reflecting all facility modifications. In addition Ingleside Energy Center will provide all other pertinent information not included in the semi-annual reports, including facility transient events and design changes that have taken place since the previously submitted annual report.

Condition 71

Semi-annual operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported LNG, vaporization quantities, boil-off/flash gas, etc.), plant modifications including future plans and progress thereof. Abnormalities shall include, but not be limited to: unloading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas and/or from other sources, negative pressure (vacuum) within a storage tank and higher than predicted boil-off rates. Adverse weather conditions and the effect on the facility also shall be reported. Reports shall be submitted within **45 days** after each period ending **June 30 and December 31.** In addition to the above items, a section entitled "Significant plant modifications proposed for the next 12 months (dates)" also shall be included in the semi-annual operational reports. Such information would file with the FERC staff with early notice of anticipated future construction/maintenance projects at the LNG facility. *EIS section 4.12.2*

Condition 71 Compliance Statement

Ingleside Energy Center will comply with all parts of this condition. Detailed records of operational changes; abnormal operating experiences; equipment maintenance; instrument repair, calibration and maintenance; process excursions; equipment failures and abnormal operating conditions will be kept. Operations and maintenance manuals will be developed by Ingleside Energy Center and the EPC Contractor containing record keeping and reporting forms; operating and reporting procedures; emergency procedures and maintenance procedures. These manuals will be readily available to all supervisory, operational and maintenance personnel at all times.

Ingleside Energy Center will file a semi-annual report on all conditions identified in condition 71 of the Order, along with supporting documentation within 45 days of the end of each reporting period (June 30 and December 31).

Condition 72

In the event the temperature of any region of any secondary containment, including imbedded pipe supports, becomes less than the minimum specified operating temperature for the material the Commission shall be notified within 24 hours and procedures for corrective action shall be specified. *EIS section 4.12.2*

Condition 72 Compliance Statement

Ingleside Energy Center will notify the Commission within 24 hours of any temperature excursion below the minimum specified operating temperature for the material in the secondary containment, including imbedded pipe supports. The notification will include the procedures to be taken for corrective action.

Condition 73

Significant non-scheduled events, including safety-related incidents (i.e., LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security-related incidents (i.e., attempts to enter site, suspicious activities) shall be reported to FERC staff within 24 hours. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made immediately, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG-related incidents include:

a. fire;

b. explosion;

c. estimated property damage of $50,000 or more;

d. death or personal injury necessitating in-patient hospitalization;

e. free flow of LNG for five minutes or more that results in pooling;

f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes gas or LNG;

g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG;

h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas or LNG to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices;

i. a leak in an LNG facility that contains or processes gas or LNG that constitutes an emergency;

j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;

k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG;

Condition 73 (cont.)

l. safety-related incidents to LNG vessels occurring at or en route to and from the LNG facility; or

m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, FERC staff would determine the need for a separate follow-up report or follow-up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a recurrence of the incident. *EIS section 4.12.2*

Condition 73 Compliance Statement

Ingleside Energy Center will develop emergency plans, evacuation plans and safety procedure manuals for the LNG terminal and affected areas around the facility. These plans will be in full compliance with local, state and federal requirements for safety and will include all incidents identified in condition 73 along with correct response and reporting procedures.

Ingleside Energy Center will file with the Secretary, prior to commissioning of the LNG terminal, with a copy of the facilities Emergency Plan.

Ingleside Energy Center understands that in the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations.

Ingleside Energy Center will report to FERC staff, within 24 hours, all significant non-scheduled events, including safety-related incidents and security-related incidents as defined in condition 73 of the Order.

Ingleside Energy Center will file separate follow-up reports or follow-up in the upcoming semi-annual operational report as required by the FERC staff. All company follow-up reports will include investigation results and recommendations to minimize a recurrence of the incident.

Exhibit 4

Affirmative Statement Draft

Ingleside Energy Center LLC
Docket No. CP05-13-000
And
San Patricio Pipeline LLC
Docket No. CP05-11-000, CP05-12-000 & CP05-14-000

Affirmative Statement Regarding Environmental Inspector's Authority and on Training on Environmental Mitigation Measures.

I certify that that all company personnel, environmental inspectors, and EPC Contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

By:_____
Company Officials Name
Company Officials Title
Ingleside Energy Center LLC

SUBSCRIBED AND SWORN before me this _____day of _____, 2005

_____
Notary Public.

Exhibit 7

ENVIRONMENTAL INSPECTOR ORGANIZATION CHART.

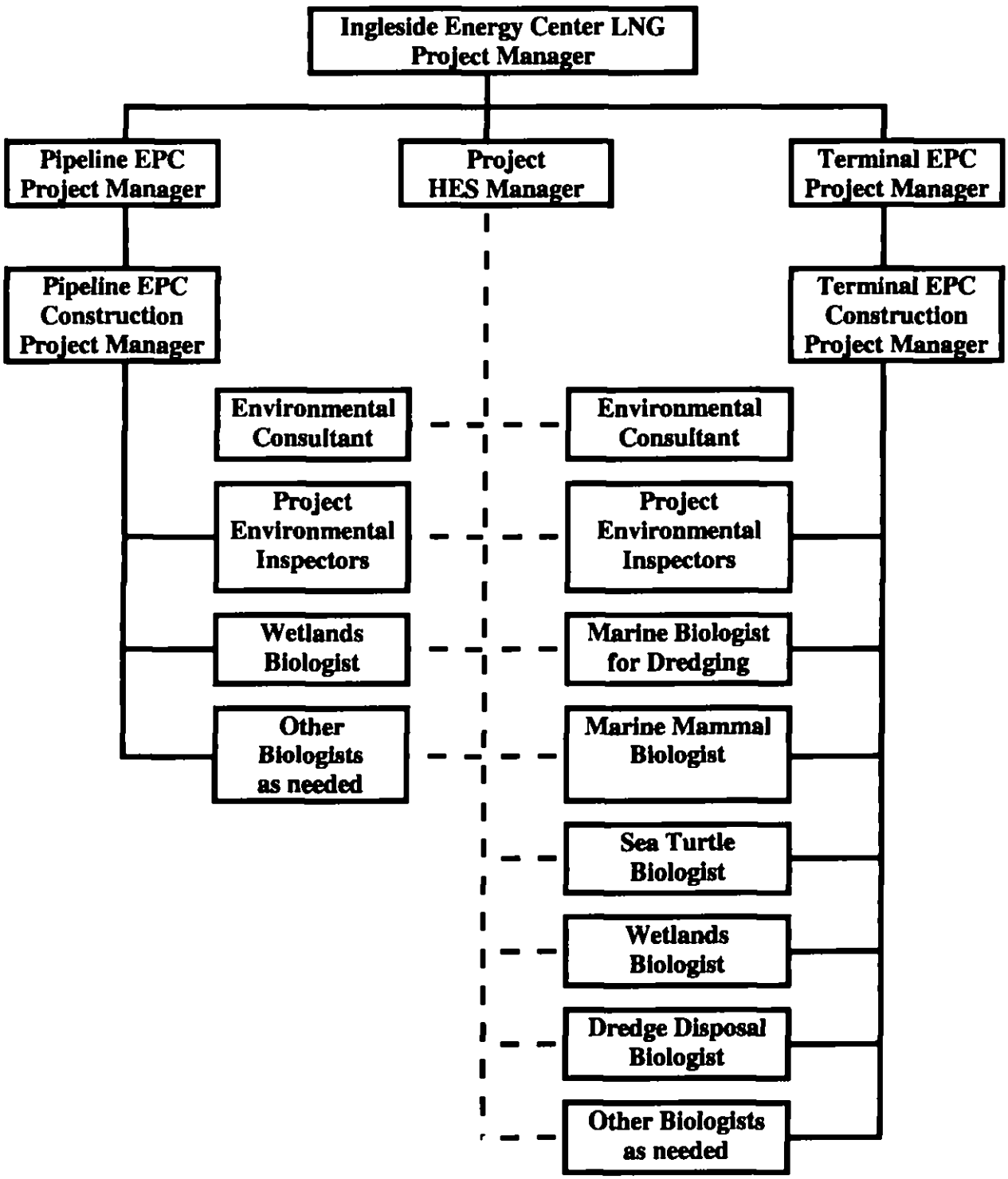


Exhibit 8

ENVIRONMENTAL COMPLAINT RESOLUTION PROCEDURE

[Letter to landowners whose property is within ½ mile of the LNG terminal site]

(Date)

(Landowner)

(Address)

(Town), (State) (zip code)

SUBJECT: Environmental Complaint Resolution Procedure
Ingleside Energy Center LLC
Docket No. CP05-13-000

Dear Landowner:

During _____, 2006, Ingleside Energy Center LLC (referred to as Ingleside Energy Center) will begin construction of its Ingleside Energy Center LNG Terminal (Project). Included with this letter is a copy of our ***Environmental Complaint Resolution Procedure (Procedure)***. This ***Procedure*** includes contact information for local, company, and agency representatives who can assist you in the resolution of environmental complaints you may have during construction of the Project and restoration.

As detailed in our ***Procedure***, you are encouraged to call our local contact, the Project Environmental Compliance Officer, should you have questions or concerns regarding construction or restoration activities. The Project Environmental Compliance Officer can be reached by telephone: (___) ___-____, cell phone: (___) ___-____, or e-mail: _____@oxy.com. You should receive a response from the Project Environmental Compliance Officer, or an Ingleside Energy Center representative, within 2 to 4 business hours of your initial inquiry. If you do not hear from the Project Environmental Compliance Officer, or an Ingleside Energy Center representative, within this timeframe, then please contact the Ingleside Energy Center Main Office Hotline at 1-800-___-____ or Fax at 1-___-___-____. You can also e-mail us at: http://www.inglesideenergycenter.com/. We will work with you to respond to your questions or concerns in an expeditious manner; however, if you are not satisfied with our response you may contact the Federal Energy Regulatory Commission's Enforcement Hotline at (888) 889-8030.

If you have any questions regarding our enclosed ***Environmental Complaint Resolution Procedure*** or how to contact us during construction and restoration of the Project, please call _____ at (___) ___-____.

Sincerely,_____

Occidental Petroleum Corporation
Ingleside Energy Center
Ingleside, Texas

18 November 2005
Rev P2

Ingleside Energy Center
LNG Terminal Project

Environmental Complaint Resolution Procedure

_____ 2006

OCCIDENTAL HEALTH, ENVIRONMENT AND SAFETY PRINCIPLES

Occidental strives for continual improvement in health, environment and safety (HES) performance and believes that HES management is one of the fundamental elements upon which business success is based. A corporate HES vision statement and 10 guiding principles give direction to all Occidental HES activities. These principles, executed through Occidental's HES policies and procedures, set forth a commitment to:

1. Protect the environment and the health and safety of people using design procedures, work practices and employee training to prevent incidents.
2. Correct operating conditions that have a significant adverse health, safety or environmental impact.
3. Reduce waste generation and responsibly manage waste disposal.
4. Reduce releases of pollutants to the environment.
5. Make efficient use of nonrenewable natural resources.
6. Use energy efficiently.
7. Provide information on the safe use and disposal of Occidental's products.
8. Maintain a dialogue with neighboring communities about HES concerns.
9. Keep Occidental's Board of Directors informed about HES issues.
10. Report annually on Occidental's HES performance.

The full text of these principles is included in the Health, Environment and Safety section of Occidental's web site: www.oxy.com.

ENVIRONMENTAL COMPLAINT RESOLUTIN PROCEDURE

Ingleside Energy Center LLC (referred to as Ingleside Energy Center) understands and appreciates the importance of timely resolution of environmental complaints during construction and restoration of the Ingleside Energy Center LNG Terminal Project (Ingleside Energy Center LNG Project or Project). We encourage contact from you, the local stakeholder, as a means to understand your questions or concerns about the project and to provide us with the information needed in order to resolve any environmental complaints in a timely manner. The objective of this environmental complaint resolution procedure is to provide clear and simple directions for receiving, tracking and resolving your concerns. This procedure consists of:

- Contact methods for reporting environmental complaints during construction and restoration.
- Required information for environmental complaint tracking and resolution.
- Dispute resolution and status.
- Environmental complaint minimization and prevention.

CONTACT MEHODS

There are three levels of contacts available to you to record an environmental complaint and seek resolution to an issue that develops from the construction of the Ingleside Energy Center LNG Project and restoration:

First Level Contact (most immediate) - call the designated Local Contact

Local Contact:

Project Environmental Compliance Officer

Telephone: (___) ___-____

Cell Phone: (___) ___-____

Email: _____ @oxy.com

You should expect a response from the Project Environmental Compliance Officer, or an Ingleside Energy Center, representative within 2 to 4 business hours of your initial inquiry. Ingleside Energy Center will make every attempt to contact you about your environmental concern.

Second Level Contact - call or e-mail the Ingleside Energy Center Main Office

If you have called our Local Contact and do not hear from the Project Environmental Compliance Officer, or an Ingleside Energy Center, representative within the timeframe identified above, then please contact the Ingleside Energy Center Main Offices telephone Hotline or e-mail us via our website 'http://www.inglesideenergycenter.com/) to report your environmental problem or concern or to request follow-up contact.

Ingleside Energy Center Main Office Contact:

Telephone Hotline: 1-800-___-____

Main Office Fax 1-___-___-____

Internet Website Contact: http://www.inglesideenergycenter.com/ Select "_____" on the *home page to send us an e-mail.*

The telephone Hotline is a 24-hour line dedicated to individuals calling to report an environmental complaint. Calls received on this line will be sent to voice mail and callers will be asked to leave a message and include a return contact phone number. On normal business days, the Hotline voice mail system will be checked each morning and several times throughout the day.

The Ingleside Energy Center Main Office fax machine accepts faxes 24-hours a day 7-days a week. Incoming faxes will be checked at regular intervals during all normal business days. Please include a return contact phone and/or fax number in your fax message so we can respond to you promptly.

The Project website will accept e-mails 24-hours a day 7-days a week. The mailbox will be checked at regular intervals during all normal business days. Please include a return contact phone number in your e-mail message so we can respond directly to you by phone.

You will be contacted about your environmental complaint within one business day of Ingleside Energy Center's Main Office receipt of a Hotline phone or fax message or a home page e-mail message.

Third Level Contact – call the Federal Energy Regulatory Commission's Enforcement Hotline

Ingleside Energy Center will work with you to respond to your environmental complaint in an expeditious manner; however if you are not satisfied with the response you may contact the Federal Energy Regulatory Commission's (FERC's) Enforcement Hotline at:

FERC Enforcement Hotline (888) 889-8030

FERC identifies the Project as Ingleside Energy Center LLC Docket No. CP05-13-000.

REQUIRED INFORMATION

Ingleside Energy Center representatives will need the following information from you to assist us in tracking and adequately resolving your environmental complaint. Please be prepared to answer as many of the questions provided below either in your initial contact with us or at the time we make our return contact with you:

- Date the environmental problem or concern occurred.
- Date and time of the call to Ingleside Energy Center's Local Contact or Main Office.
- Name of individual filing the environmental problem or concern.
- Phone number of individual contacting us about an environmental problem or concern.
- Location of the environmental problem or concern.
- Description of the environmental problem or concern.
- Is this an emergency or time-sensitive complaint?
- Is the environmental problem or concern a safety issue for yourself or the public?
- Is the environmental problem or concern related to construction-generated dust, noise, traffic, or vegetation clearing?
- Is the environmental problem or concern believed to be related to a violation of applicable statutory standards or regulatory requirements?
- Provide us with your preferred method for contact or complaint follow-up (e.g. phone, fax, email, or U.S. mail).
- Identify previous contacts with personnel or companies associated with the Project who have been involved in your specific inquiry.

DISPUTE RESOLUTION AND STATUS

Once an environmental complaint is recorded, and additional information is received from you, the stakeholder, an Ingleside Energy Center representative will investigate your environmental complaint. We will first assess the environmental complaint by conducting a site visit and communicating with Ingleside Energy Center personnel, contractors, yourself, and other local residents. Following this initial assessment, an environmental complaint resolution plan will be developed and implemented to address your environmental problem or concern. Safety and time sensitive issues will receive the highest priority.

We will follow-up with you and inform you of the status of your environmental complaint resolution in accordance with the method requested by you in your response to the question above (e.g. phone, fax, e-mail, or U.S. mail). Environmental complaints and their resolution status will be recorded in Ingleside Energy Center's weekly status reports per the guidelines of the FERC Order.

ENVIRONMENTAL COMPLAINT MINIMZATION AND PREVENTION

Resolution, minimization, and prevention of environmental complaints will be accomplished by adherence to the Ingleside Energy Center Environmental Compliance Management Plan. This plan contains the following programs highlights:

Environmental Training - To support environmental compliance and landowner requirements, we will conduct environmental training and awareness programs prior to the start of construction and throughout the construction.

Environmental Inspection - Environmental Inspectors (EIs) will be present during preconstruction field reviews and active construction. The EIs will ensure that the work being conducted is done so in an environmentally responsible manner and in compliance with the environmental permits and requirements.

Commitment to Environmental Complaint Resolution - We will make every effort to resolve environmental problems or concerns as soon as they are identified. Should recurring or significant environmental problems or concerns occur, we will work with you to develop and implement responsive resolutions as efficiently as possible.

Lines of Communication - Environmental and construction representatives will interact daily and maintain professional, responsive communications at all times. All project personnel will communicate on a regular basis so that environmental and landowner problems or concerns that require resolution are communicated in a timely manner.

Quality Assurance - We will provide on-going quality assurance on the Project. The Environmental Compliance Officer will provide support to the EIs, oversight of the compliance effort, and continuous evaluation of the effectiveness of the environmental inspection efforts.

Occidental Petroleum Corporation
Ingleside Energy Center
Ingleside, Texas

18 November 2005
Rev P2

INGLESIDE ENERGY CENTER LNG TERMINAL PROJECT

WEEKLY LANDOWNER ENVIRONMENTAL ISSUES RESOLUTION REPORT

Reporting Period: [Month/ Date] through [Month/Date]

Location, Milepost, Tract No.	Date, Time	Name	County	Call Taken By	Description of Environmental Problem or Concern	Resolution	Follow-Up Required	Response By

Exhibit 15

Offshore Spill Prevention Control and Countermeasures Plan Outline

- Introduction
- Offshore SPCC Plan Review and Certification
- Offshore Spill Prevention, Control and Countermeasures
  - Facility Information
    - Site Location
    - Construction Activities
  - Offshore Environmentally Sensitive Receptors
  - Summary of Potential Pollutant Sources
    - Fuel Oil Transport
    - Oil Delivery, Storage and Handling
    - Chemical Delivery, Storage and Handling
    - Solid Waste Storage Areas
    - Construction Equipment and Vessels
    - Vessel Traffic
  - Roles and Responsibilities
    - Site Manager
    - On Scene Coordinator
    - Site Personnel
  - Offshore Spill Prevention
    - Housekeeping
    - Shoreline Protection Equipment
    - Preventative Maintenance
    - Inspections and Records
    - Security
    - Warning Signs and Barriers
  - Offshore Spill Response, Pollution Prevention and Spill Response Team
    - Spill Response Procedures
    - Identify Spill Response Vessels and Capabilities
    - Pollution Prevention and Spill Response Team and Qualifications
    - Pollution Prevention and Spill Response Team Leader Qualifications and Responsibilities
    - Pollution Prevention and Spill Response Team Leader Actions
  - Offshore Potential Spill Scenarios

Exhibit 16

SEAGRASS IMPACTS

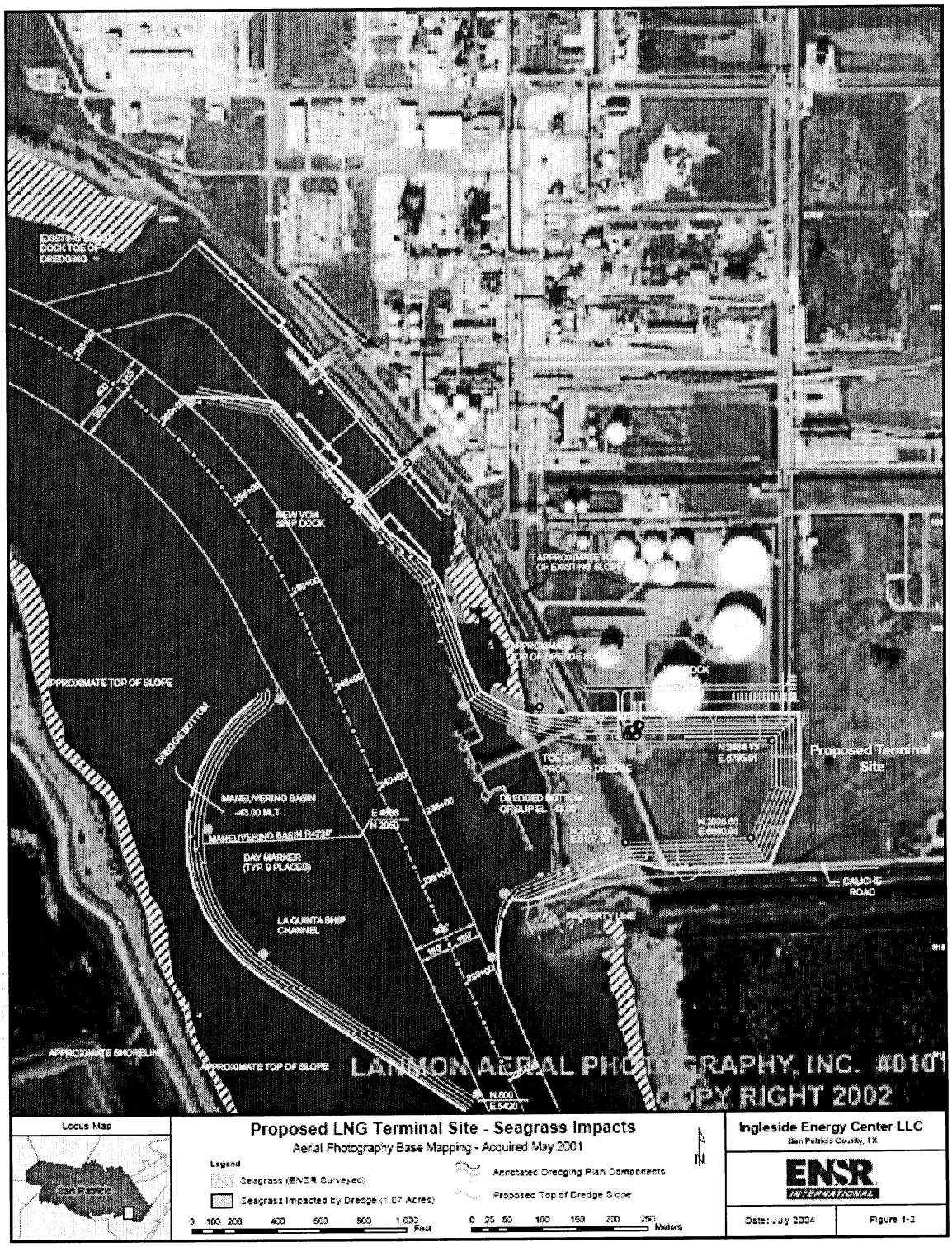


Exhibit 21

INGLESIDE ENERGY CENTER LNG TERMINAL

WEST INDIAN MANATEE TRAINING PROGRAM – DRAFT OUTLINE

ATTENDEES: TO BE DETERMINED

PLACE: INGLESIDE, TEXAS

TO BE DETERMINED

TIME: TO BE DETERMINED

INTRODUCTION

- Statement by Project Management, Commitment to Environmental Compliance Program
- Project Construction Schedule Overview
- Environmental Compliance Program Overview
- Project Safety Compliance Overview

WEST INDIAN MANATEE (*TRICHECHUS MANATUS*)

- Federal and State Status
- Description
- Distribution in Texas
- Occurrence in Corpus Christ Bay and La Quinta Channel
- Habitat
- Behavior
- Longevity and Causes of Death
- Conservation

WEST INDIAN MANATEE PROTECTION AND COMPLIANCE REPORTING

If West Indian manatee is observed near the construction work area:

- What not to do
- What to do
- Who to call
- Contacting the U.S. Fish and Wildlife Service, Corpus Christi Ecological Filed Office

[POSTER AND FIELD CARD REVIEW]

QUESTIONS AND ANSWERS

WEST INDIAN MANATEE TRAINING SIGN-IN AND STICKERS

- Each participant signs certification form and receives hardhat stickers.

END –

Exhibit 24

NOAA FISHERIES CORRESPONDENCE

ORIGINAL

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701
(727) 570-5312, FAX 570-5517
http://sero.nmfs.noaa.gov

JUN 17 2005

F/SER32:KPB

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, DC 20426

Dear Ms. Salas:

This is in response to your February 2005 correspondence and associated documents regarding the Ingleside Energy Center LNG Terminal and Pipeline Project (Docket Nos. CP05-11-000, CP05-12-000, and CP05-13-000, and CP05-14-000), collectively referred to as Ingleside Energy Center, and your request for interagency consultation under section 7 of the Endangered Species Act (ESA). We have reviewed the material submitted by the Federal Energy Regulatory Commission (FERC) with respect to possible effects on the listed species and critical habitat designated under the purview of NOAA's National Marine Fisheries Service (NMFS).

Summary of the Proposed Action

The following is a summary of the project and actions that we have determined are pertinent to our analysis for potential effects to ESA-listed species. A complete description of the project may be found in the environmental impact statement (EIS)[1] prepared for this project. The stated purpose of the proposed Ingleside Energy Center is to provide a supply of natural gas to Ingleside San Patricio County affiliates, and to deliver natural gas into existing interstate and intrastate natural gas pipelines in the Corpus Christi area. FERC proposes to permit Ingleside Energy Center to construct and to operate a new liquid natural gas (LNG) import, storage, and vaporization terminal on the La Quinta Ship Channel near Ingleside, San Patricio County, Texas.

Description of the Project Area

The LNG terminal would be located on 74 acres of a 1,196-acre site owned by Occidental Chemical. The LNG terminal site is proposed to be sited on the northeast shoreline of Corpus Christi Bay, bordered by the La Quinta Channel to the west, the Occidental Chemical manufacturing plant to the north, a Navy dredge disposal area to the east, and privately owned industrial land to the south. The Corpus Christi Ship Channel extends for 36 miles from Port Aransas to the Port of Corpus Christi and is dredged to maintain a depth of 45 feet. The La Quinta Channel is 5.5 miles long and between 300 to 400 feet wide, and its authorized depth is

[1] Federal Energy Regulatory Commission. 2005. Ingleside Energy Center LNG Terminal and Pipeline Project. Draft Environmental Impact Statement. FERC/EIS-0177D, February 2005.

45 feet. Corpus Christi Bay is approximately 75 miles long and covers about 600 mi^2, with 127 miles of shoreline. Barrier islands such as Mustang Island and Padre Island separate Corpus Christi Bay from the Gulf of Mexico (GOM). The average depth of the bay ranges from 3-11 feet. By far, the most common benthic habitat in Corpus Christi Bay is muddy bottom. Muddy bottoms occur where there is a lack of other physical features, such as seagrasses or oyster reefs. Movement of the water over the surface of the mud keeps the sediment oxygenated to about one centimeter depth. Mud is easily resuspended leading to high turbidity levels in the bay. Deposit feeders can be found in high abundance and diversity in this habitat. In recent years the freshwater inflows have declined due to increasing diversions and demands by municipalities, industries, farmers, and other residents, resulting in increased water salinity levels in Corpus Christi Bay.

Construction

Ingleside Energy Center proposes to construct 26.4 miles of a 26-inch diameter overland pipeline, connecting to an existing natural gas pipeline infrastructure. The LNG terminal will consist of the construction of a dock and new marine basin with one LNG carrier (LNGC) berth, two LNG storage tanks, and an LNG vaporization and processing system. Excavation equipment and dredging will be used to remove material to create the basin and LNGC berth. The proposed operations and facilities would import, store, and vaporize an average of approximately one billion cubic feet per day, to supply natural gas markets in the United States.

Four breasting dolphins consisting of steel pipe piles with concrete caps would be constructed at the LNGC berth. The diameter of the piles required is expected to range between 36-48 inches in diameter. Crane barges will be used to lift piles into place so they can be driven. Driving tubular steel piles in similar construction projects has yielded sound pressure levels of 192-194 dB re 1 ΦPa. The transmission loss rate will vary depending on several factors, such as substrate type, water depth, hammer type and force, and diameter of the pile. In many cases *in situ* measurements are required to measure source level and transmission loss; however, similar projects have measured transmission loss rates of 0.21 to 0.046 dB re 1μPa per foot.[2,3]

LNG Vessel Traffic

There are no standard or prescribed routes for vessels transiting the open waters of the GOM. However, shipping fairways are established near port entrances and along coastwise trade routes. A system of shipping safety fairways and fairway anchorages has been established for the Gulf of Mexico (See 33 CFR Part 166); 33 CFR 166.105 defines a shipping safety fairway as "a lane or corridor in which no artificial island or fixed structure, whether temporary or permanent, will be permitted." The coordinates for shipping safety fairways in the GOM are published in 33 CFR 166.200. They do not extend all the way across the GOM and are not defined in deep, open

[2] Nedwell, J., and B. Edwards. 2002. Measurements of underwater noise in the Arun River during piling at County Wharf, Littlehampton. Unpublished report prepared for David Wilson Homes Ltd. Subacoustech Ltd. 26 pp.
[3] Nedwell, J., A. Turnpenny, J. Langworthy, and B. Edwards. 2003. Measurements of underwater noise during piling at the Red Funnel Terminal, Southhampton, and observations of its effects on caged fish. Unpublished report prepared for Red Funnel. Subacoustech Ltd. 33 pp.

waters. Vessels will transit into the GOM via the Straits of Florida (approximately 24°25'N, 83°00'W). It is expected that a merchant vessel will traverse the Gulf by the most direct safe route to its destination port. For the Ingleside Energy Center, a vessel will likely travel west into the Corpus Christi Ship Channel, then into the La Quinta Channel to the existing turning basin near the proposed terminal. LNGCs would typically have an average length of 950 to 1,000 feet, a beam of 145 to 150 feet, and a draft of 40 feet. LNGCs may be of a larger or smaller size depending upon the existing and future LNGC fleet. The terminal is expected to receive approximately 140 LNGCs per year.

Excavation and Dredging

The LNG terminal will be located along the east side of La Quinta Channel on 74 acres of a 1,196-acre site owned by Occidental Chemical. Construction of the maneuvering area would require dredging of a 40-acre area to a minimum of 43 feet below mean low tide (MLT). Approximately 1,365,300 cubic yards of material would be dredged from La Quinta Channel to create the maneuvering basin. The LNG berth area would be excavated and dredged within a 19-acre upland area at the terminal site. The berth will be 750 feet by 1,400 feet and would be dredged to a minimum of 43 feet MLT. Approximately 1,719,400 cubic yards of material will be removed to create the berth resulting in the transformation of the shallow water habitat in the La Quinta Channel into deeper water habitat, of which about 320,000 cubic yards will be dry excavation.

Excavation equipment will be used to complete the removal of upland material and a cutterhead suction dredge will be used for the wet excavation. Working off a dredge barge, a rotating cutter would displace the basin sediments, which would then be suctioned into a pipeline attached to the cutterhead. Ingleside plans to use a 20- to 30-inch diameter pipeline to suction the slurry and transport it to a dredge material placement area (DMPA). The material is proposed to be placed at a bauxite residue tailing pond owned by Alcoa Inc., located about 3 miles northwest of the terminal. Periodic maintenance dredging of the maneuvering area and LNGC berth is expected every 10 to 12 years.

Decommissioning and Modification of the Terminal

The project as proposed includes no plans for future development or abandonment. The project may be expanded or upgraded over the anticipated 40-year lifetime of the project, but no such plans are currently planned or proposed. Decommissioning and modification are not covered under this section 7 consultation.

Non-jurisdictional Actions

Four non-jurisdictional facilities are related to the Ingleside Energy project are relocation of the Occidental Chemical's existing loading dock and chemical storage tank, construction of a natural gas liquids (NGL) recovery facility, construction of a medium pressure natural gas pipeline, and a heated wastewater delivery and cool water return system. Many of these interdependent actions effect the terrestrial environment and will not result in any potential effects to listed species.

However, relocation of the dock may have some impacts on the aquatic environment (i.e., dredging, water quality, and pile driving noise). FERC has indicated that Ingleside Energy will use FERC procedures and other state and federal requirements to protect aquatic resources. The aquatic effects of the dock relocation are covered in the *Effects of the Action* section below, and the harm avoidance measures that will be implemented.

Listed species/designated critical habitat

ESA-listed species under the purview of NMFS that potentially occur in the action area include the green (*Chelonia mydas*),[4] loggerhead (*Caretta caretta*),[5] Kemp's ridley (*Lepidochelys kempii*),[6] leatherback (*Dermochelys coriacea*),[5] and hawksbill (*Eretmochelys imbricata*)[7] sea turtles. The known ranges of other listed species under the jurisdiction of NMFS are not found in the project area. No critical habitat has been designated within the project area.

Endangered sperm whales *(Physeter macrocephalus)* are the most abundant large cetacean in the Gulf of Mexico.[8] Sperm whales may be affected by tankers transiting to and from the Ingleside Energy and, thus, are only discussed in the *Vessel Traffic* section below. There is no critical habitat designated for sperm whales.

Effects Considered, but Discounted

The following effects were considered, but discounted because endangered and threatened species under the purview of NMFS are not present, or will not otherwise be affected.

LNG Vaporization System

LNG will be returned to a gaseous state through warming. The LNG processing system will consist of eight shell and tube vaporizers (STVs), and regasification would be accomplished by the transfer of LNG from the storage tanks to the STV heat exchangers. The STVs would be part of a closed loop system, using heated wastewater from the neighboring Occidental Chemical

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[4] NMFS (National Marine Fisheries Service) and FWS (US Fish and Wildlife Service). 1991. Recovery Plan for U.S. Population of Atlantic Green Turtle. NMFS, Washington D.C.

[5] NMFS (National Marine Fisheries Service). 2001. Stock assessments of loggerhead and leatherback sea turtles and an assessment of the pelagic longline fishery on the loggerhead and leatherback sea turtles of the Western North Atlantic. U.S. Department of Commerce NOAA Technical Memorandum NMFS-SEFSC-455.

[6] Turtle Expert Working Group. 2000. Assessment update for the Kemp's ridley and loggerhead sea turtle populations in the Western North Atlantic. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SEFSC-444; 2000. 115 pp.

[7] NMFS (National Marine Fisheries Service) and FWS (U.S. Fish and Wildlife Service). 1993. Recovery Plan for Hawksbill Turtles in the U.S. Caribbean, Atlantic Ocean, and Gulf of Mexico. National Marine Fisheries Service, St. Petersburg, Florida.

[8] Mullin, K.D., and W. Hoggard. 2000. Visual surveys of cetaceans and sea turtles from aircraft and ships, chapter 4. In: R.W. Davis, W.E. Evans, and B. Würsig (EDS.), Cetaceans, Sea Turtles and Birds in the Northern Gulf of Mexico: Distribution, Abundance and Habitat Associations. Volume II: Technical Report. Prepared by Texas A&M University at Galveston and the National Marine Fisheries Service. U.S. Department of the Interior, U.S. Geologic Survey, Biological Resources Division, USGS/BRD/CR-1999-005 and Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La. OCS Study MMS 2000-003.

of a closed loop system, using heated wastewater from the neighboring Occidental Chemical plant to warm LNG. Cooled water would be returned to Occidental Chemical for reuse. There are no effects associated with the STV LNG vaporization system that may affect listed species.

Pipeline and Facilities

The proposed 26.4 miles of steel, 26-inch diameter pipeline construction would occur over terrestrial and wetland habitats. The pipeline right of way will not be present in listed species' habitats under NMFS jurisdiction. Since the pipeline will not be constructed or operated in the known habitats of listed species, no adverse impacts to listed species under our jurisdiction are expected from the construction and operation of the pipeline or its associated facilities.

Upon review we have determined the principal effects to the estuarine and marine environment that may affect listed species under the jurisdiction of NMFS are associated with construction (dredging and pile driving) and routine operation (routine terminal discharges and vessel traffic) of the LNG terminal.

Seagrass Impacts

Construction of Ingleside Energy Center would affect a total of about 0.54 acre of submerged aquatic seagrass beds. An additional 0.53 acre of submerged aquatic seagrass beds would be permanently converted to open water habitat as part of the removal of Occidental Chemical's existing loading dock. Green sea turtles may forage on seagrasses; however, the density of green sea turtles in this area is low (0.0008 km^{-2}) and the destruction of these sea grasses is not expected to result in any measurable decrease in foraging success for this species. Additionally, Ingleside Energy Center is in consultation with NMFS' Habitat Conservation Division regarding a mitigation plan to compensate for these losses in an area adjacent to the project location. Any effects to the prey base of other sea turtle species in the area are expected to be localized and insignificant to the foraging success of individuals. Therefore, NMFS concludes that the seagrass impacts associated with the project are not likely to adversely affect listed species.

Effects of the Action

We have identified the following actions as having the potential to affect listed species:

- Pile driving noise;
- vessel traffic;
- dredging; and
- water quality.

Pile Driving Noise

The sound waves produced by some pile driving projects have resulted in fish kills and injuries. Studies have shown that effects of pile driving may result in trauma to fish that is similar to the

trauma occurring during explosions.[9] Because the anatomy of sea turtles differs significantly from fishes and other animals (predominantly an outer, protective carapace), comparisons are difficult; however, the potential effects of pile driving on animals are correlated with body mass. Similar noise-related effects may be expected for sea turtles and other animals with gas-filled cavities, such as swim bladders, lungs, sinuses, and hearing structures. The more likely effect that may be expected to occur to listed sea turtle species in the action area is temporary threshold shift (TTS or temporary hearing loss) and behavioral alterations to the noise levels produced from the pile driving.

There are two methods of pile driving: vibropiling and impact piling. Due to differences in the methods used to drive the piles into the substrate, impact piling results in greater acoustic impacts on the surrounding aquatic environment, such as those that could result in fish mortality as described above. Additionally, the hardness of the substrate and diameter of the pile affect the force required to drive it into the ground, and are, thus, important factors in the amount of energy released into surrounding waters. During pile driving, the size and maximum operating energy level of the hammer, the size and length of the piles, substrate type, water depth, bathymetry, salinity, and temperature may affect the level of sound produced from the impact hammering. Low to mid-frequency sounds, such as those that dominate in pile driving, tend to attenuate more rapidly in relatively shallow water than in deeper waters. Although the EIS does not identify the type of hammer that will be used to drive the piles, similar LNG construction projects have indicated that impact driving is required to construct these marine structures. Estimated underwater sound levels of 190 dB re 1 µPa would be expected to be received up to 190 feet, and 155 dB re 1 µPa at 1,860 feet from a pile being driven. Although the pile driving noise is not continuous, as many as 50 blows per minute could occur with potentially adverse effects on hearing abilities of sea turtles, or long-term avoidance of the area could result from prolonged pile driving activity.

Sea turtles may occur in the project area where pile driving will occur. Since the area will be thoroughly dredged prior to pile driving, it is not expected that significant numbers of prey items (e.g., crustaceans, algae, or sea grasses) or other marine life will be present in the area that may attract foraging sea turtles. In addition to an anticipated lack of foraging opportunities in the area, there are no nesting beaches in the area. Therefore, any long-term avoidance of the area is not expected to measurably reduce foraging success or reproductive potential of sea turtles in the wild.

Although sea turtles would be expected to avoid the ensonified area during pile driving activities, a potential exists for sea turtles to be injured during the first several strikes of the pile driving hammer if they are within the zone of influence. Protocols implemented to reduce the effects of noise, such as species monitoring and the use of bubble curtains, are sometimes used to reduce the impact-producing factors resulting from pile driving. NMFS recommends that pile driving not be initiated if sea turtles are observed to be within a distance equivalent to 175 dB re 1 µPa from the pile driving, a sound level at which sea turtles have been observed to be in a

[9] Abbott, R., and E. Bing-Sawyer. 2002. Assessment of Pile Driving Impacts on the Sacramento Blackfish (*Orthodon microlepidotus*). Draft report prepared for CALTRANS. October 10, 2002.

behaviorally agitated state.[10] Although the physiological effects of pile driving noise have not been tested, NMFS believes precautionary measures should be implemented to reduce the potentially harmful effects of exposure to these sound levels. Based on an estimated transmission loss rate of 0.046 dB re 1 µPa per foot, a 175 dB zone of influence would be realized at a distance of 413 feet (126 meters) from the activity. An additional safety zone of 100 meters (an approximate monitored zone of 225 meters) is recommended to be monitored for this activity to account for any variations in the source levels of the pile driving, as well as to observe for any animals that may be in the vicinity and swimming toward the construction area (see Harm Avoidance Measures below).

Vessel Traffic

The distance from the entrance into the Gulf of Mexico at the Straits of Florida to the 200-meter contour line offshore of Corpus Christi Bay is estimated to be approximately 895 NM (1,658 km). The marine terminal will have the capacity to unload up to 140 LNGCs per year. Both sea turtles and sperm whales can be affected by vessel traffic. Interactions between listed species and vessels have resulted in injuries and death. Large, deep-draft merchant vessels (e.g., LNGCs) push a considerable bow wave because of their bulbous bow hull design and large displacement tonnage. Bulbous bows are used on tankers, freighters, and large fishing vessels because the projecting bulb reduces hydrodynamic drag at the speeds these ships travel. The bulbous bow reduces hull resistance to the water by displacing the water upward and ahead of the hull region, thereby reducing the magnitude of both the pressure and suction fields. As a result of this design, flotsam and other relatively small objects at the surface (e.g., sea turtles) are pushed away from vessels with a bulbous bow. Therefore, NMFS concludes that any potential effects on sea turtles as a result of vessel traffic will be minor and insignificant.

Although interactions between large vessels and small marine life are considered unlikely, large vessels have been documented to strike and injure larger sea life (e.g., sperm whales), mostly due to bow strikes.[11] These collision accounts suggest that serious injury to whales rarely occurs at speeds below 10 kn. Sperm whales may potentially be affected by the increase in offshore traffic of large vessels associated with the proposed action. NMFS considers vessel approaches within 100 yards (estimated to 90 meters) to have the potential for harassment of marine mammals (with the exception of 500 yard approaches to endangered right whales), and close approaches within tens of meters to have the potential to injure a marine mammal. A vessel's operational speed has an influence on the probability of animal detection and reaction time. At slower vessel speeds, a particular location ahead of the vessel is within visual range for a longer period of time before the vessel arrives at that location. For example, a vessel traveling at 16 kn that sees a whale 1,000 meters ahead, will arrive at the whale's position in 2.02 minutes; at 10 kn, the vessel will arrive at the whale's position in 3.23 minutes.

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[10] McCauley, R.D., J. Fewtrell, A.J. Duncan, C. Jenner, M.N. Jenner, J.D. Penrose, R.I.T. Prince, A. Adhitya, J. Murdoch, and K. McCabe. 2000. Marine seismic surveys: A study of environmental implications. APPEA Journal. pp 692-708.

[11] Laist, D.W., A.R. Knowlton, J.G. Mead, A.S. Collet, and M. Podesta. 2001. Collisions between ships and whales. Marine Mammal Science 17: 35-75.

Aerial surveys have confirmed that sperm whales are present in the GOM throughout the year. Sperm whales are the most often sighted and abundant cetaceans in offshore waters greater than 200 meters in depth. The estimated density of sperm whales per 100 km^2 in the Gulf of Mexico is 0.35.[12] Adverse reactions by whales to vessel activity have been recorded, and sperm whales are vulnerable to collisions with vessels. Based on sperm whale density and estimated round trip distance (3,316 km), an estimated one sperm whale (1.04) would be within the 90-meter radius harassment zone per round trip through the GOM. Sperm whales generally avoid underway vessels and would not be expected to be adversely affected by routine shipping operations; however, a few individuals may be expected to be at increased risk of injury over the lifetime of the action or at risk of disturbance (e.g., nursing calfs).

FERC has agreed to require Ingleside Energy Center to implement NMFS' Vessel Strike Avoidance and Injured/Dead Protected Species Reporting policy (Appendix A) in all marine waters. NMFS believes that with implementation of this policy, possible disturbances to sperm whales and the potential risk of collisions will be minimized to discountable levels.

Dredging

Hydraulic pipeline cutterhead dredging will be utilized to remove material from the maneuvering basin and LNGC berth in La Quinta Channel. Takes of sea turtles are primarily associated with hopper dredging, which will not be used during this project. Cutterhead dredges have not been implicated in strandings of sea turtles or other federally-listed threatened or endangered species, probably because they advance at such a slow pace and are noisy, giving mobile sea turtles time to get out of the way of the rotating cutterhead. Recently, two green sea turtles were taken by a cutterhead dredge in Laguna Madre, Texas, because they were presumable "cold-stunned" due to the rapid temperature change and unable to swim away from the suction pipe.[13] The proposed dredging will be creation of a new marine basin from previously terrestrial habitat; therefore, turtles would not be expected to occur in the area prior to dredging. Additionally, the deep waters (40 ft) of La Quinta Ship Channel would be expected to be thermally buffered against rapid changes in temperature that are believed to be the cause of this recent cold-stunning event. Therefore, takes of sea turtles from cutterhead dredging in La Quinta Ship Channel are not expected. Water quality in the dredge area would be temporarily affected by increased turbidity, but would be expected to return to normal following dredging. Although a temporary increase in suspended solids in the water may occur in the direct vicinity of the dredging, most solids are captured by the cutterhead dredge, and any suspended solids remaining are expected to have only short-term, minor effects in a localized area. The DMPA is on land and is not expected to result in any adverse effects to water quality or other habitat characteristics that may affect listed

[12] Mullin, K.D. and G.L. Fulling. 2003. Abundance of cetaceans in the oceanic northern Gulf of Mexico, 1996-2001. Marine Mammal Science 20(4):787-807.

[13] A recent cold-stunning event in the shallow waters of the Laguna Madre, Texas, resulted in temperatures dropping over 19 degrees Fahrenheit in less than 72 hours during late-December 2004, resulting in the stranding of 20 juvenile green turtles. In all likelihood, the two green turtles entrained by the cutterhead dredge operating in the Brazos Santiago Pass area at the time of the cold-stunning event were already lethargic or moribund, and thus unable to avoid the suction draghead, when they were entrained.

species. Therefore, NMFS concludes that the dredging activity associated with the project is not likely to adversely affect listed species.

Water Quality

The primary impacts on water quality will be from construction (dredging) and operation (stormwater runoff) of the Ingleside Energy Project. Sediment suspension has the potential to release contaminants into the environment and could also have effects on the surrounding habitat, such as seagrass beds and prey availability that may affect the foraging success of sea turtles. Sediments near the surface may be contaminated from anthropogenic releases of contaminants. Data collected in this area between 1985 and 2000 were used to compare with the effects low range (ERL) values as found in NOAA's Screening Quick Reference Tables.[14] The EIS indicates that contaminants analyzed are all currently below ERL levels. The EIS also indicates that best management practices will be used during dredging, such as adjusting cutterhead rotational speed and hydraulic pump operating parameters to entrain the maximum amount of material and minimize turbidity. It is expected that fine silt and suspended particles would wash out of the channel before settling. It is expected that any turbidity effects would be localized and short-term, having minor impacts on the surrounding environment that would not adversely affect listed species.

FERC will require Ingleside Energy to prepare a Stormwater Pollution Prevention Plan and Erosion and Sedimentation Control Plan. Stormwater collected at the LNG terminal site would be discharged through the existing stormwater system at Occidental Chemical. In addition, about 420,000 gallons of seawater will be withdrawn weekly for testing of the firewater system and will be discharged back into the area at a rate of 14,000 gallons per minute.

NMFS believes that the above-mentioned effects associated with dredging and routine operational impacts are only expected to result in short-term, minor impacts on the environment. These effects are expected to have negligible impacts on listed species.

Harm Avoidance Measures

In addition to the Vessel Strike Avoidance and Reporting policy (Appendix A), FERC will require harm avoidance for pile driving activities to minimize the potential for harm or harassment to sea turtles. Following consultation on pile driving effects with FERC, it was determined that alternative sets of harm avoidance measures would be available to the applicant. Ingleside Energy Center will prepare a plan to minimize potential impacts on sea turtles from driving piles during construction of the marine terminal. The plan will include the use of either bubble curtains and/or a monitoring protocol. FERC will require Ingleside Energy Center to implement at least one of the following two alternatives to avoid the possibility of harm to listed species:

[14] Buchman, M. 1999. National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables. HAZMAT Report 99-1.

Alternative One: Two options to reduce sound transmission into the water (no time of day restriction).

A. A bubble curtain system will be required to surround the piles being driven at all times. The bubble curtain system must be effective at reducing peak sound pressure levels to at least 175 dB re 1 µPa rms outside of the bubble curtain.

B. A smaller hammer type may be used to reduce the sound produced by pile driving. Given any hammer type used to drive the piles, peak sound pressure levels will be monitored during pile driving to ensure that they do not exceed 175 dB re 1 µPa rms.

Alternative Two: One option to observe a zone of influence (daylight restriction).

A. An observer dedicated to conduct sea turtle observations will be posted to monitor for species presence.

B. A 225-meter radius zone will be established and monitored for 60 minutes prior to engaging the pile driving hammer during construction. If a sea turtle is observed within the 225-meter zone, pile driving will be delayed until the animal is observed to have left and on a heading away from the established zone. If an animal dives and cannot be resighted, pile driving may begin 30 minutes after the last sighting or until the 60-minute observation period is complete, whichever is longer.

C. If pile driving activity ceases for any reason, observations for sea turtles will resume until pile driving begins, or the one-hour survey of the area will be repeated (see B above).

D. Pile driving will not be started during nighttime hours (sunset to sunrise). Pile driving begun during the day that continually occurs into the night may continue through the night until the hammer activity ceases.

E. All animals must be allowed to exit the 225-meter radius under their own volition.

F. The applicant will keep records of all observations including the following information: the date of each survey; the start and end time of each survey; the species and number of animals sighted; behavior of the animals; and how long the animals were observed before leaving the established 225-meter zone. All records will be available to NMFS upon request.

After considering the possible sources of effects on the listed species and the above harm avoidance measures, NMFS concludes that listed species are not likely to be adversely affected by this project. This concludes the FERC's consultation responsibilities with NMFS under section 7 of the ESA for the Ingleside Energy Center. Be advised that a new consultation must be initiated 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 listed species or critical habitat in a manner or to an extent not previously considered (e.g.,

utilizing a hopper dredge), or if a new species is listed or critical habitat designated that may be affected by the identified action. Potential project impacts utilizing methodology not considered in the consultation will require additional ESA section 7 consultation with NMFS' Protected Resources Division (PRD).

You are also reminded that in addition to your protected species/critical habitat consultation requirements with NMFS' PRD 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 Magnuson-Stevens Fishery Conservation and Management Act's requirements for essential fish habitat (EFH) consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-600.930, subpart K). Consultation is not complete until EFH and ESA concerns have been addressed. If you have any questions about EFH consultation for this project, please contact Mr. Rusty Swafford, HCD, at (225) 389-0508.

We look forward to continued cooperation with the FERC in conserving our endangered and threatened resources. If you have any questions, please contact Kyle Baker, fishery biologist, at (727) 551-5789, or by e-mail at Kyle.Baker@noaa.gov.

Sincerely,

Roy E. Crabtree, Ph.D.
Regional Administrator

Enclosure

cc: F/SER4 – M. Croom
F/SER46 – R. Swafford
F/PR3, F/PR2 – K. Hollingshead, M. Kim

Ref: NSER\2004\01847
File: 1514-22.O.1.FERC

APPENDIX A. Vessel Strike Avoidance and Injured/Dead Protected Species Reporting

1. Offshore crews will use a Gulf of Mexico reference guide that includes and helps identify sea turtles (five species), and whales and dolphins (28 species) that may be encountered in the Gulf of Mexico. One example of an appropriate field guide is *Guide to Marine Mammals & Turtles of the U.S. Atlantic and Gulf of Mexico* by K. Wynne and M. Schwartz, Rhode Island Sea Grant, University of Rhode Island at Narragansett.

2. Vessel operators and crews shall maintain a vigilant watch for both sea turtles and marine mammals and slow down or stop their vessel to avoid striking protected species.

3. When whales are sighted, a distance of 90 meters or greater will be maintained between the whale and the vessel.

4. When sea turtles or dolphins are sighted, the operator shall attempt to maintain a distance of 45 meters or greater whenever possible.

5. When marine mammals are sighted while the vessel is underway, the operator shall attempt to remain parallel to the animals' course. Excessive speed or abrupt changes in direction should be avoided until the animal has left the area.

6. Vessel speed shall be reduced to 10 knots or less when pods or large assemblages of marine mammals are observed near a motoring vessel. The presence of marine mammals at the surface may indicate the presence of submerged animals nearby the vessel.

7. Whales may surface in unpredictable locations or approach slowly moving vessels. When animals are sighted in the vessel's path or in close proximity to a motoring vessel, speed shall be reduced and the engine shifted into neutral. Engines shall remain disengaged until the animals are clear of the area.

8. Vessel crews must report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with your vessel, you must notify the Maritime Administrator within 24 hours of the strike. The report should include the date and location (latitude/longitude) of the strike, the name of the vessel involved, and the species identification or a description of the animal, if possible. The responsible parties should remain available to assist the respective salvage and stranding network as needed.

Exhibit 27

RAILROAD COMMISSION OF TEXAS CONSISTENCY DETERMINATION

STATEMENT OF BASIS
AND
RESPONSE TO COMMENTS
CONCERNING STATE WATER QUALITY CERTIFICATION
AND
COASTAL MANAGEMENT PROGRAM CONSISTENCY DETERMINATION
OF
U.S. ARMY CORPS OF ENGINEERS
PERMIT APPLICATION NO. 23630

Ingleside Energy Center, LLC, San Patricio Pipeline, LLC;
Ingleside Energy Center LNG Terminal and Pipeline Project
Occidental Energy Ventures Corp.
5 Greenway Plaza, Suite 1600
Houston, TX 77046-0506

I. STATE WATER QUALITY CERTIFICATION AND TEXAS COASTAL MANAGEMENT PROGRAM CONSISTENCY DETERMINATION REQUIRED

The Ingleside Energy Center and San Patricio Pipeline project is designed for the importation, storage, and delivery of foreign-source liquified natural gas (LNG) to natural gas markets. On June 10, 2005, the Federal Energy Regulatory Commission (FERC) issued the final Environmental Impact Statement[1]. FERC issued its final order on July 21, 2005, under Sections 3 and 7 of the Natural Gas Act authorizing construction and operation of the LNG terminal and pipeline system. In addition, Ingleside Energy Center, LLC and San Patricio Pipeline, LLC (jointly referred herein as Ingleside San Patricio or the applicant) submitted to the U.S. Army Corps of Engineers (USACE) the referenced joint application for a permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the federal Clean Water Act (CWA) to construct, operate, and maintain structures and equipment necessary for a LNG receiving terminal and natural gas transportation facility, including a natural gas send-out pipeline.

State water quality certification is required for USACE permits to discharge to or fill waters of the United States, to discharge dredged or fill material under Section 404 of CWA, and for activities that might affect navigation under Sections 9 and 10 of the Rivers and Harbors Act.

In addition, Section 307 of the Coastal Zone Management Act of 1972 (CZMA) requires federal agency activities to be consistent to the maximum extent practicable with the state coastal management program. For activities within the boundary of the Texas coastal zone, applicable state water quality requirements include the enforceable goals and policies of the Texas Coastal Management Program (TCMP). The USACE has submitted to the Railroad Commission of Texas (Commission) a request for certification of the subject activities within jurisdiction of the state.

II. PROJECT DESCRIPTION

The Ingleside Energy Center project would consist of several components:

- a new marine terminal basin connected to the La Quinta Channel, including a ship-maneuvering area and one protected berth to unload up to 140 LNG ships per year;
- two, double containment LNG storage tanks with a nominal working volume of approximately 160,000 cubic meters (1,006,000 barrels equivalent);
- LNG vaporization and processing equipment;
- 26.4 miles of 26-inch-diameter natural gas pipeline; and

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[1] Federal Energy Regulatory Commission (FERC) 2005. Final Environmental Impact Statement, Ingleside Energy Center LNG Terminal and Pipeline Project. FERC/EIS-0177F, Docket Nos. CP05-13-000 and CP05-11-000, CP05-12-000, and CP05-14-000. June 2005. FEIS available for download at http://www.ferc.gov

- nine (9) interconnects with existing intrastate/interstate pipelines, and related meter stations (8)/delivery points.

The project site for the proposed liquefied natural gas (LNG) facility is located off Highway 361 on the northeast shoreline of Corpus Christi Bay, west of Ingleside, Texas in San Patricio County and approximately 10 miles northeast of Corpus Christi, Texas. The LNG terminal would be constructed on 77 acres of a 1,196-acre site owned by Occidental Chemical and situated next to OxyChem's Ingleside chemical manufacturing facility. The majority of the project would be on land dedicated for industrial activities since the construction of the chemical manufacturing facility in 1972.

The LNG terminal facilities would consist of a ship unloading facility (marine terminal, ship maneuvering area, and one ship berth), two LNG storage tanks, vaporization and vapor handling system, and support buildings and piping structures. Construction of the terminal would involve: 1) excavation of the slip; 2) shoreline protection for the slip; 3) construction of a new LNG dock; 4) dredging of a maneuvering basin; 5) dredging for access to the relocated dock; 6) relocation of the existing OxyChem VCM dock; 7) dredge material placement; and 8) maintenance dredging of the new ship dock.

Excavation of the slip. The LNG ship berth would be excavated and dredged within a 19-acre upland area at the terminal site and oriented perpendicular to the La Quinta Channel so that LNG ships would not affect ship traffic in the channel. The berth would be approximately 750 by 1,400 feet and be dredged to a minimum depth of minus 43 feet mean low tide (MLT) to accommodate LNG ships with storage capacities up to 250,000 cubic meters of LNG per ship and drafts up to 40 feet. About 1,719,400 cubic yards of material would be removed from the proposed LNG ship berth area. Of this amount, about 320,000 cubic yards of material would be removed as dry excavation.

Shoreline protection for the slip. The applicant proposes to construct shoreline protection to protect key areas from the LNG ship prop wash. Shoreline in the vicinity of the new LNG dock would be protected by the installation of an eight-inch thick articulate concrete block mat. The matting would be placed on the lower portion of the north slope from 5 feet below MLT to the bottom of the slope. Erosion protection would not be required on the south side of the LNG ship berth.

Dredging of a maneuvering basin. The applicant proposes to construct a maneuvering basin in front of the slip in the existing La Quinta Channel. The construction would require the dredging of a 40-acre area owned by the Port of Corpus Christi Authority (PCCA) in La Quinta Channel. The basin would be dredged to a minimum of minus 43 feet MLT, two feet shallower than the existing channel, and would be roughly 1,480 feet in diameter centered approximately on the middle of the channel. About 1,365,300 cubic yards of material would be dredged from the La Quinta Channel for the Ingleside Energy Center LNG Terminal maneuvering area. The maneuvering basin is partially within Nueces County.

Dredging for access to the relocated dock. Approximately 582,300 cubic yards of sediments will be dredged resulting in an operating depth of approximately -42 feet MLT when the loading dock is relocated. Relocation of the existing OxyChem dock: The existing VCM dock, together with associated piping and equipment, would be relocated approximately 2,000 feet northwest of its current location. Currently there is an existing barge dock terminal located at this site. Current construction planning will not necessitate obtaining more land. The relocated VCM dock would be set up in the same configuration and orientation to the La Quinta Channel as it is currently configured and oriented.

Dredge Spoils Disposal: The dredge materials would be placed in either Dredged Material Placement Area Number 13 (DMPA-13) owned by the Port of Corpus Christi (PCCA) or on old settlement ponds on the Reynolds Metal Company Property north of the IEC Project site. Either site has sufficient capacity to accommodate all the dredged material, Reynolds being the

preferred site. The routing of the dredge disposal pipe to the PCCA DMPA No. 13 would be from the Ingleside site along a submerged pipe route across the channel to the DMPA No. 13 site, then along the shore toward the south so the dredged material and water would have sufficient settling time as it flows back to the DMPA outfall. The disposal pipe length would be approximately 6,000 feet in length. The site is approximately 600 acres and the dikes would be built up to allow the placement of the dredged materials from the Ingleside site. By additional dike building, this site is sufficiently large enough to handle multiple projects.

Reynolds Metal Company has indicated that they have three potential areas for dredge placement; DMPA's #1, #2 and #3. The routing of the dredge disposal pipe to the Reynolds Metal Company site has two potential optional routings. The dredge disposal line length would be approximately 20,000 feet in length. The routings would not interfere with the normal shipping traffic on La Quinta Channel. The piping would be routed either on property owned by Occidental, the PCCA disposal site, or be routed on easements controlled and secured by Reynolds Metal Company. All routing of the dredge lines would be aboveground except for the west leg, which would cross La Quinta Channel. This portion of the line would be a submerged dredge line to eliminate any interference with shipping in La Quinta Channel.

Maintenance Dredging. Based on the operating history of the existing dock, maintenance dredging of the relocated dock and the new slip and maneuvering basin is expected to be required about every 10 to 12 years. Due to the long time span between the initial dredging and the first expected maintenance dredging, it would be speculative to state where the spoils would be placed from the maintenance dredging. However, the applicant anticipates that they could use the areas discussed above, DMPA No. 13 or Reynolds Metal Company ponds if they were still available, or they would use another property permitted disposal area.

Construction Access. Because the marine facilities are inaccessible from land, materials would be brought to the site via barges and constructed from working marine barges including a crane barge, working barge, and tender boat. The supply barges that come to the construction area would generally berth to the construction barges for the time of unloading. Most of the materials would be stored on the construction barges. Deliveries of piling, concrete and support materials for the construction of the docks are expected to occur periodically during the entire five- to six-month construction period. Barge deliveries are anticipated to average roughly two to three per week. There would be no need for temporary berthing facilities for the construction of the marine or terminal work.

Pipeline Construction. Ingleside San Patricio proposes to construct and operate a new natural gas pipeline extending from the LNG terminal to north of Sinton. The pipeline route can be found in Appendix C of the FEIS. The proposed 26.4-mile-long San Patricio Pipeline route would begin on the LNG facility (at the San Patricio Pipeline Meter Station), and run through Aransas Pass, Gregory, Taft, and Sinton East Quadrangles and terminate at the TGP Meter and Regulating Station in the Sinton West Quadrangle.

The total length of the proposed route is 26.4 miles and parallels existing utility and/or road corridors for approximately 86.5 percent of the route. The typical land uses traversed by a majority of the pipeline route are cropland, pastureland, and shrub and brush rangeland for the segment paralleling the GulfTerra pipeline. This route is not located within any of the nearby urban or residential areas or communities. The pipeline crosses several Federal, state, county, or private roads, two railroads, and numerous other pipelines. It also crosses Chiltipin Creek and Oliver Creek, as well as several unnamed drainage/irrigation ditches. The pipeline would be installed by trenching/open cut except for Horizontal Directional Drill (HDD) installations proposed for Oliver and Chiltipin Creeks and the drainage canals in order to avoid significant construction or operational impacts. Approximately nine HDD's are planned totaling 9,600 feet in length. In general, the right-of-way configuration for this pipeline would require 50 feet of new permanent right-of-way and 50 feet of temporary construction workspace parallel to the right-of -way. Extra workspace would be necessary at road, railroad, wetland, and waterbody crossings. The final phase of pipeline construction would be cleanup and restoration of the right-of-way.

III. AUTHORITY AND PROCEDURES

Under Section 401 of the federal CWA, federal agencies cannot issue certain types of licenses and permits unless the state certifies that the permitted activities will comply with applicable state water quality laws. These state certifications are called "401 certifications" or "water quality certifications."

Under Texas Natural Resources Code, Title 3, and the Texas Water Code, Chapter 26, the Railroad Commission has responsibility for the prevention of pollution that might result from activities associated with exploration, development, and production of oil, gas, or geothermal resources of the State and to prevent operations dangerous to life or property. Texas Natural Resources Code, §91.101, and Texas Water Code, §26.131, grants the Commission jurisdiction for water quality certifications for federal permits covering activities associated with the exploration, development, and production of oil, gas or geothermal resources that may result in discharges to waters of the United States. No person may conduct any activity subject to Commission jurisdiction pursuant to a USACE permit if that activity may result in a discharge into to waters of the United States within the boundaries of the State of Texas, unless the Commission has first issued a certification or waiver of certification under 16 Texas Administrative Code §3.93 (Rule 93).

Water quality certification in Texas is required for USACE permits to discharge to or fill waters of the United States, to discharge dredged or fill material under Section 404 of CWA and for activities that might affect navigation under Sections 9 and 10 of the Rivers and Harbors Act. The Commission must determine whether the proposed activity for which a request for certification has been received will result in any discharge to waters of the United States[2] within the boundaries of Texas, and if so, whether the proposed activity will comply with all applicable water quality requirements. Applicable water quality requirements include, but are not limited to, state water quality standards and any other applicable water quality requirements.

Actions of state agencies authorizing certain activities within the coastal zone must be consistent with the enforceable goals and policies of the Texas Coastal Management Program (CMP) and applicable state water quality requirements (the CMP rules or the Council rules) adopted by the Coastal Coordination Council pursuant to Texas Natural Resources Code, Chapter 33, relating to the Texas Coastal Coordination Act. The CMP policies for the Commission's actions are found in the Coastal Coordination Council's (Council) rules at 31 TAC §501.14 and in the Commission's rule at 16 TAC §3.8(j). On March 29, 2005, the Council secretary deferred the coastal consistency determination for this project to the Commission.

Under the CMP, the Commission must issue a final determination on a request for certification or consistency review of a USACE permit application within 15 days of the close of the Council's public comment period or request an extension of time, unless the proposed action meets certain criteria for referral and is referred for consideration by the Council or an extension of time is granted. Because of the complex and extensive nature of the LNG facilities recently proposed to be constructed in Texas and limited agency resources, the USACE and the Commission have a tacit agreement to afford the Commission with additional time for a thorough review of this type of proposal. In addition, the applicant was submitting additional information and responses to comments as late as July 28, 2005. This office has received no request for referral of consideration of this action to the Council.

After the close of the public comment period, the Commission must determine whether the proposed activity complies with all applicable water quality requirements, including the enforceable goals and policies of the CMP. The Commission must provide written notice of its final determination to waive, grant, grant conditionally or deny certification to the applicant, the USACE, and any person so requesting. The notification of a final determination must include a statement of any conditions that are necessary to ensure compliance with the applicable water quality

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[2] Waters of the United States are defined as interstate waters, the territorial seas, and waters that would or could affect interstate commerce, including tributaries of such waters and adjacent wetlands, as defined in Title 33, Code of Federal Regulations Part 328.

requirements and a statement of the basis for the Commission's determination to waive certification, grant certification, grant conditional certification, or deny certification.

If a certification or conditional certification is made, the Commission issues a statement of basis for the Commission's determination that includes either a statement that there is reasonable assurance that the activity will be conducted in a manner which will not violate any applicable water quality requirements or a statement of conditions, including monitoring conditions, that the Commission deems necessary to assure that the discharge will not violate applicable water quality requirements. If denial of certification is made, the Commission issues a statement of basis for the Commission's determination explaining why the Commission has determined that the proposed activity will result in a violation of applicable water quality requirements.

If the Commission's final determination denies certification or grants conditional certification and the applicant disagrees with one or more of such conditions, the applicant may request a hearing on the final determination. The applicant must file any request for a hearing within 15 days after the Commission issues its final determination. The Commission will provide notice of the hearing to all parties to whom notice of the public meeting was sent. After the hearing, the examiner will recommend final action to the Commissioners, who will vote on whether to accept the examiner's recommendation.

The Council rules include thresholds for referral of activities to the full Council for consideration. The Commission set its threshold at a level calculated to ensure that actions that may have unique and significant adverse effects on coastal natural resources (CNRAs) are above the threshold for referral of an activity to the Council (16 TAC §3.8(j)(3)(A)). Because the proposed action will result in removal of greater than 10,000 cubic yards of dredged material from a critical area and disturbance of greater than five (5) acres of critical area, the proposed action is above the threshold for referral in accordance with the CMP; however, the consistency determination for the proposed project was deferred to the Commission.

IV. WATER QUALITY STANDARDS AND CMP CONSISTENCY

For an activity within the boundary of the coastal zone, applicable state water quality requirements include the enforceable goals and policies of the CMP. The proposed activity is located within the Texas Coastal Zone and, therefore, must be consistent with the enforceable goals and policies of the CMP. The applicant has stated that the proposed project is consistent with the Texas CMP goals and policies and will be conducted in a manner consistent with the program.

The Commission must determine if a proposed activity will have a direct[3] and significant[4] impact on any coastal natural resource area (CNRA)[5]. If the Commission determines that the proposed activity would result in direct and significant adverse affects to a CNRA, the Commission must determine whether the proposed activity is consistent with the goals and policies of the CMP.

The Commission is required to comply with the Council goals and policies in §§501.12-501.15 (Goals, Administrative Policies, and Policies for Specific Activities and CNRAs). The goals of the CMP are listed in §501.12, and include (among others) goals to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs; to ensure sound management of all coastal resources by allowing for compatible economic development and

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3 "Direct" refers to impacts that are causally linked to an activity.

4 "Significant" refers to appreciable impacts to CNRAs.

5 A coastal natural resource area is a coastal barrier, coastal historic area, coastal preserve, coastal shore area, coastal wetland, critical dune area, critical erosion area, gulf beach, hard substrate reef, oyster reef, submerged land, special hazard area, submerged aquatic vegetation, tidal sand or mud flat, water in the open Gulf of Mexico, or water under tidal influence, as these terms are defined in 33.203 of the Texas Natural Resources Code.

multiple human uses of the coastal zone; to minimize loss of human life and property due to the impairment and loss of protective features of CNRAs; to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone; to balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone.

Issuance of certifications of compliance with applicable water quality requirements for federal permits for development in critical areas,[6] and dredging, dredged material disposal and placement in the coastal area is a Commission action subject to the CMP (31 TAC §505.11). The CMP policies for the Commission's actions are found at 31 TAC §501.14. Section 501.14(c), requires that any discharge of wastewater and disposal of waste from oil and gas activities in the coastal zone comply with all provisions of the Texas Water Quality Standards. Section §501.14(h) contains the CMP policies for development in critical areas, and §501.14(j) contains the CMP policies for dredging and dredged material disposal and placement.

The proposed activity for which certification has been requested will result in a discharge into waters of the United States within the boundaries of the State of Texas. The applicant is proposing to dredge waters of the United States to construct facilities associated with the transportation of LNG to the storage facility and proposes to disturb waters of the United States by placing fill in wetland areas for the purpose of development of the LNG terminal and storage area and associated facilities, and installation of the send out pipeline.

Construction of the marine terminal would affect a total of approximately 1.36 acres of coastal marsh, 3.08 acres of tidal flats, and 1.07 acres of submerged aquatic vegetation. Construction of the pipeline would affect approximately 0.003 acres of terrestrial palustrine emergent wetlands. The applicant proposes to restore all of the wetlands that are temporarily affected and to mitigate for permanent impacts.

Discharges or spills from the facility to waters of the state could cause adverse impacts to water quality. The applicant's permit from the FERC requires the applicant to use the highest degree of care and all proper safeguards to prevent pollution. The applicant has indicated that it will have an appropriate spill containment and response plan in place. In addition, the chance for a liquid spill is significantly reduced because of the nature of LNG to be handled at the facility.

Construction of the marine basin and ship berth would temporarily impact about 59 acres of open water as a result of hydraulic dredging. Water quality in the area being dredged would be temporarily affected by increased turbidity, but should be short-term, localized, and not significant. The effects from dredging would be expected to consist of temporary, elevated suspended sediment concentrations in the water at the dredging location.

Pipeline construction could affect surface waters in a variety of ways. Clearing and grading, in-water trenching, trench dewatering, and backfilling could result in temporary modifications to aquatic habitat, increased sedimentation, turbidity, decreased dissolved oxygen levels, increased water temperature, releases of chemical and nutrient pollutants from sediments, and accidental release of chemical contaminants such as fuels and lubricants.

The proposed pipeline would cross 12 surface waterbodies. The applicant would cross nine perennial waterbodies using the HDD method and three intermittent waterbodies using the use open cut method. To minimize construction impacts on surface waters, the applicant will develop and implement the measures in the FERC Plan and Procedures, as well as the requirements in the permits issued by other regulatory bodies, including the Commission. In addition, the

[6] A critical area is a coastal wetland, oyster reef, hard substrate reef, submerged aquatic vegetation, or tidal sand or mud flat.

applicant would comply with the requirements contained in the federal National Pollutant Discharge Elimination System (NPDES) construction storm water and wastewater (operations) general permits, and the federal Spill Prevention Control and Countermeasures (SPCC) requirements.

Development in Critical Areas. Proposed construction and dredging activity would occur in and near critical areas. The policies for construction of structures in or discharge of material into critical areas include no net loss of critical area functions and values, consideration of cumulative and secondary effects, and demonstration that no alternatives with fewer adverse effects are available. (31 TAC §501.14(h))

Persons proposing development in critical areas must demonstrate that no practicable alternative with fewer adverse effects is available. The Commission cannot certify any discharge where there is a practicable alternative, not including compensatory mitigation, to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other more significant adverse environmental consequences. In evaluating practicable alternatives, the Commission is required to apply the following sequence: (1) avoid adverse effects on critical areas to the greatest extent practicable; (2) minimize unavoidable adverse effects to the greatest extent practicable by limiting the degree or magnitude of the activity and its implementation; and (3) require appropriate and practicable compensatory mitigation to the greatest extent practicable for all adverse effects that cannot be avoided or minimized.

Development also cannot be authorized if significant degradation of critical areas will occur. Significant degradation occurs if the activity jeopardizes species listed as endangered or threatened, or will result in likelihood of the destruction or adverse modification of a habitat determined to be a critical habitat under the Endangered Species Act, 16 United States Code Annotated, §§1531-1544; the activity will cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards; the activity violates any applicable toxic effluent standard or prohibition in the Texas Surface Water Quality standards; violates any requirement imposed to protect a marine sanctuary designated under the Marine Protection, Research, and Sanctuaries Act of 1972, 33 USC Annotated, Chapter 27; or taking into account the nature and degree of all identifiable adverse effects, including their persistence, permanence, areal extent, and the degree to which these effects will have been mitigated, will, individually or collectively, cause or contribute to significant adverse effects on human health and welfare, aquatic life and other wildlife dependent on aquatic life, ecosystem diversity, productivity, and stability, or generally accepted recreational, aesthetic or economic values of the critical area which are of exceptional character and importance.

Activities that are not water dependent are presumed to have practicable alternatives, unless the applicant clearly demonstrates otherwise. The CMP places preference for water-dependent uses and facilities over those uses and facilities that are not water-dependent. Water dependency refers to those activities that must be located in or adjacent to waters to meet the project's basic purpose. If it is determined that the project is not water dependent, the applicant must perform an analysis of alternatives and show why the impact is unavoidable. The Council rules list a number of facilities that qualify as water dependent. Included in this list is any facility that "must be located in coastal waters or on submerged land or that must have direct access to coastal waters in order to serve its basic purpose and function." (31 TAC §501.3) The proposed facility is water dependent because it is dependent on marine transportation. Likewise, the project pipeline system must be located within the coastal zone to transport natural gas from the LNG terminal to the existing pipeline network.

Regardless of whether or not a project is water dependent, the proposed activity must represent the least environmentally damaging practicable alternative. In order for an alternative to be practicable, "it must be available and capable of being done after taking into consideration cost, existing technology and logistics in light of the overall project purposes." Therefore, even if an upland site is available, other factors may make the upland site impracticable. Consideration must be given to costs, the size and impact of the project, technological constraints, and local

availability of alternative sites. The applicant's evaluation of alternatives, determination of appropriate and practicable mitigation, and assessment of significant degradation has been coordinated among state and federal resource agencies.

Alternatives for the general siting of the receiving and storage facility: The CMP requires that facilities be located at sites or designed and constructed to the greatest extent practicable to avoid and otherwise minimize the potential for adverse effects. The direct release of pollutants from oil or hazardous substance spills or storm water runoff to coastal waters and critical areas is of specific concern.

The applicant evaluated a number of alternatives to the Ingleside site for determining whether there were any alternatives that would be less environmentally damaging. The purpose of the facility is to provide imported LNG to be unloaded from ocean-going vessels and stored before it is vaporized for delivery to Ingleside San Patricio affiliates (Occidental Chemical and Ingleside Cogeneration Partners, LP), and other large energy-consuming industries in the Corpus Christi area, and customers in the Texas intrastate and interstate markets by 2008. The applicant evaluated sites to determine whether or not they possessed the qualities critical to the purpose of the project, including existing LNG import and storage systems, and systems for which the permitting process has already begun.

A "no-action" alternative would result in rejection of the proposed project. Because the demand for energy in the U.S. is predicted to increase and domestic natural gas supplies are declining, natural gas customers may have fewer and potentially more expensive options for obtaining natural gas supplies in the near future. Potential customers of natural gas could select other available energy alternatives to compensate for the reduced availability of natural gas. However, increased use of alternative fossil fuels, such as oil or coal, generally would result in higher emission rates of nitrogen oxides and sulfur dioxide than would be the case with natural gas. Another option is the development of renewable energy sources as well as energy conservation; growth projections continue to indicate that the demand for energy, and specifically natural gas, will far exceed energy provided through renewable sources or savings from energy conservation. It is not possible to predict what actions the end users would take if the natural gas to be supplied by Ingleside were not available, nor is it possible to predict the associated direct and indirect environmental impacts of those actions. However, the applicant rejected the no-action alternative as it would postpone delivery of natural gas to U.S. markets.

According to the U.S. Department of Energy, the Gulf of Mexico has provided most of the natural gas consumed in the U.S. and accounted for 19 billion cubic feet per day to these markets in 2001. As reserves decline in the Gulf of Mexico, this pipeline capacity would become available to transport LNG delivered to LNG terminals in the Gulf of Mexico. Therefore, the alternatives analysis did not consider existing LNG facilities, or proposed or planned LNG projects on the East or West Coasts of the U.S., or projects outside of the U.S. in Mexico or Canada because these projects would serve different regional (or niche) markets and could not make use of existing infrastructure that has been developed to transport natural gas from the Gulf to U.S. markets.

None of the existing, approved, or proposed Gulf of Mexico onshore and offshore LNG terminal facilities as summarized in the FEIS[7] could handle the additional volumes proposed by Ingleside San Patricio without significant expansion of the proposed facilities and associated environmental impact. Expansion of these LNG terminal facilities could not be approved and constructed in time to meet the needs to be in service by 2008. The applicant also evaluated several alternative locations, including considering the nature of the activity to determine the geographical limits for the proposed facility and was forced to eliminate them as not practicable. The Cameron and Freeport projects are too distant to serve the Ingleside San Patricio markets. Further, these sites

7 Federal Energy Regulatory Commission (FERC) 2005. Final Environmental Impact Statement, Ingleside Energy Center LNG Terminal and Pipeline Project. FERC/EIS-0177F, Docket Nos. CP05-13-000 and CP05-11-000, CP05-12-000, and CP05-14-000. June 2005. FEIS available for download at http://www.ferc.gov

may not be able to accommodate additional berths and LNG tanks. In addition, moving the location of the Ingleside San Patricio project would defeat one of the applicant's stated objectives of combining its facilities with the Occidental Chemical manufacturing complex to offset respective heating and cooling needs.

Because development of an onshore LNG import terminal requires a shoreline site with ocean access, this facility is water-dependent and could not be built without affecting surface water in the state. Inadequate experience and technology, as well as distance from necessary infrastructure, currently make infeasible an offshore storage and vaporization facility location. In addition, construction of an offshore facility would involve a longer pipeline, construction of a graving dock (which would impact the shoreline), and a permanent onshore support facility—all of which would likely have greater adverse impacts.

Alternatives routes for the send out pipeline: The applicant evaluated three pipeline route alternatives and four route variations and determined that the proposed route is the more environmentally preferable route. Expansion of an existing interstate or intrastate pipeline to connect with the proposed LNG terminal would result in construction of a pipeline similar to that proposed, with similar environmental impacts. In evaluating pipeline alternatives, the applicant evaluated alternatives that would avoid or reduce impacts on sensitive areas such as population centers, special use areas, waterbodies, wetlands, existing or planned residences, or specific landowner concerns. Route variations were also evaluated to reduce or avoid impacts to more localized concerns such as cultural resource sites, residences, landowner concerns, and terrain conditions. Where practicable, the applicant proposes to locate pipelines and roads in existing rights of way or previously disturbed areas to avoid or minimize adverse effects.

The applicant also determined the location for the aboveground meter stations associated with the pipeline in order to avoid or minimize impacts to agricultural land and other current land uses, landowner concerns, and proximity to existing access roads.

Impacts on water quality from HDD pipeline construction would be localized and short term. There is a potential for unintentional discharge of drilling mud, but the applicant indicates that the impacts of elevated suspended solids would be short term and localized.

The Commission is satisfied that the applicant, through extensive cooperation with the various resources agencies, has developed the least damaging and most preferable route and installation methods for the pipeline.

Alternatives for Dredging: Dredging and the disposal and placement of dredged material cannot be authorized if there is a practicable alternative that would have fewer adverse effects on CNRAs. The applicant has proposed procedures to minimize the adverse effects from dredging and dredged material disposal and placement, including beneficial re-use of some of the dredged material and, in the alternative, use of existing permitted DMPA No. 13.

Alternatives for disposal or placement of dredged material: The CMP rules state that dredged material from dredging projects in commercially navigable waterways is a potentially reusable resource and must be used beneficially where the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner.

The applicant evaluated two possible dredged material placement areas for use during construction of the LNG terminal. The applicant looked at the Port of Corpus Christi's Dredged Material Placement Areas (DMPA) No. 13, which is an active placement area close to the proposed LNG terminal site. This DMPA has sufficient capacity to accept the material dredged for the subject project, however, such action would reduce the DMPA's capacity to accept material from maintenance dredging of the Corpus Christi and La Quinta Channels. The applicant also looked at the Reynolds Metal Company site, which consists of two bauxite storage beds and other designated placement areas. Placement of the dredged material within the bauxite beds would complement a Texas Risk Reduction Program that was developed to complete closure of the Reynolds Metal

Company site. The site has more than sufficient capacity to receive the dredged material from this project and was selected as the preferred dredged material placement area for the Ingleside San Patricio project.

Certification for Dredging and Dredged Material Disposal and Placement. When issuing a water quality certification of compliance with applicable water quality requirements for federal permits authorizing dredging and dredged material disposal and placement in the coastal zone, the Commission must confirm that the policies in the Council rules at §501.14(j) relating to dredging and dredged material disposal and placement have been satisfied. Unless it is determined to be of overriding importance to the public and national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways, the CMP prohibits the Commission from authorizing dredging if there is a practicable alternative that would have fewer adverse effects on CNRAs, so long as that alternative does not have other significant adverse effects; all appropriate and practicable steps have not been taken to minimize adverse effects on CNRAs; or significant degradation of critical areas would result. If the applicant has not selected an alternative that would avoid impacts to surface water in the State, the applicant must explain its plans to minimize adverse effects on the surface water in the state. Dredging and dredged material disposal and placement cannot cause or contribute to violation of any applicable surface water quality standards and must avoid and otherwise minimize adverse effects to CNRAs to the greatest extent practicable. Appropriate and practicable compensatory mitigation must be performed for unavoidable adverse effects (§501.14(j)(1)).

In order to ensure that the dredging and disposal and placement of dredged material will comply with applicable standards for sediment toxicity, the applicant evaluated sediment sampling and analysis results from the Final Environmental Impact Statement for the Corpus Christi Ship Channel Improvement Project (USACE, 2003), which included sample from the La Quinta Channel extension. The applicant also performed sampling and analysis of additional channel sediments. The analytical results were compared to conservative levels established by NOAA below which no effects (NOE) on marine ecology have been observed. The USACE tested sediments in La Quinta Channel in 1985, 1990, and 2000. In 1985, arsenic ranged from 12 to 15 milligrams per kilogram (mg/kg) in all six samples. Samples from the same stations were tested in 1990 and 2000 and all metals were below the NOAA NOE levels. The samples collected in 1985 were also analyzed for polychlorinated biphenyls (PCBs) and pesticides and all detections were below the NOAA NOE levels. The samples collected in 1990 and 2000 were analyzed for PCBs, pesticides, and PAHs and all detections were below NOE levels. In addition, analysis of composite samples collected from the maneuvering basin and Occidental Chemical's loading dock revealed few compounds, none of which exceeded state regulatory limits.

Construction of the marine basin and ship berth would temporarily impact about 59 acres of open water as a result of hydraulic dredging. Water quality in the area being dredged would be temporarily affected by increased turbidity, but should return should be short-term, localized, and not significant. The effects from dredging would be expected to consist of temporary, elevated suspended sediment concentrations in the water at the dredging location.

Adverse impacts in the immediate area of a project may be minor, but the cumulative effects of numerous subsequent similar activities can result in an increase of impacts. Cumulative effects on water resources affected by the proposed Ingleside San Patricio project would be limited and short-term. Increased turbidity and sedimentation from initial dredging during construction and maintenance dredging could occur. However, the negative effects of these activities would be temporary and water quality would be expected to return to ambient conditions soon after completion of dredging. Given the short period of effects, the cumulative impacts associated with dredging likely would result in minor changes in aquatic resources (e.g., temporary avoidance of dredged areas by fish and other aquatic organisms).

There is a potential for possible adverse impacts to water quality from this project from dredged material placement, discharge of primary and secondary water from dewatering of the dredged material, and discharge of return water from dredged material disposed of in a dredged material

placement area. The applicant has proposed the use of techniques that would minimize adverse effects from dredging, and dredged material disposal and placement. Thus, water quality impacts would be short-term (coinciding with dredging operations) and localized. In addition, the applicant proposes to beneficially use the dredged material. Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter is presumed to comply with the requirements unless modified in design, size, use, or function (§501.14(j)(3)). If the Reynolds Metal Company site is not available for use, the applicant proposes to use DMPA No. 13, which is an existing permitted active disposal site and is, therefore, presumed to comply with the §501.14(j)(1).

The proposed Ingleside San Patricio terminal would be located in an area that is subject to coastal storms, hurricanes, flooding, and other coastal processes. The applicant designed its LNG terminal to mitigate the potential effects of flooding and/or storm damage. The top of the dock, main processing equipment, storage tanks and support buildings will be located in the upland area at an elevation of 20 feet above mean sea level (msl), which is sufficient to withstand the highest forecast storm surge water level of 11.5 feet above msl.

There is no indication that the proposed activity would result in permanent adverse effects as a result of disruption of wildlife corridors or fish or bird migratory routes. Furthermore, the FERC final order requires that the applicant conduct additional monitoring of bird strikes during and after construction to verify lack of impacts.

There also should be no adverse effects as a result of alterations of salinity regimes, nutrient supply, oxygen concentration, or temperature regimes in coastal waters that are harmful to terrestrial or aquatic life or alterations of hydrology, water flow, circulation patterns, water level, or surface drainage that are harmful to humans or terrestrial or aquatic life, impair the aesthetic qualities of CNRAs, or exacerbate erosion of shorelines.

The pipeline would cross approximately 23 acres of soils that have hydric characteristics. Hydric soils have high compaction potential and poor revegetation potential. Ingleside San Patricio LNG proposes to use best management practices and to construct the pipeline in accordance with its procedures, which include provisions for wetland and waterbody crossings and special construction measures in areas of saturated soils, as well as FERC's Plan and Procedures. The applicant further proposes to restore the pipeline right-of-way to pre-construction contours and revegetate.

Compensatory Mitigation.
A total of 5.51 acres of wetland habitat will be permanently impacted during construction of the project. Construction of the ship berthing area for the terminal will result in permanent impacts to a small fringing coastal wetland, coastal tidal flat, and seagrass beds.

Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts that remain after all practicable avoidance and minimization has been completed. Compensatory mitigation includes restoring adversely effected critical areas or replacing adversely affected critical areas by creating new critical areas. Such mitigation should be undertaken, when practicable, in areas adjacent or contiguous to the affected critical areas (on-site). If on-site mitigation is not practicable, mitigation should be undertaken in close physical proximity to the affected critical areas if practicable and in the same watershed if possible (off-site). Mitigation should attempt to replace affected critical areas with critical areas with the same or close to those of the affected critical areas (in-kind). In determining compensatory mitigation requirements, the impaired functions and values of the affected critical area must be replaced on a one-to-one ratio, with a goal of no net loss of critical area functions and values.

The applicant's mitigation plan incorporates a goal of offsetting wetland impacts by some activity aimed at providing wetland functions similar to those affected by the permitted project. The applicant proposes to provide funding for the purchase of two tracts (Tract #2 and #3) of land totaling 32.83 acres from the Portland Harbors Corporation to meet mitigation requirements. These tracts are

located along Highway 35 on the southern shore of Nueces Bay near the City of Portland in San Patricio County. The proposed site was selected by the CBBEP for future mitigation projects.

The applicant has consulted with the Coastal Bend Bays and Estuaries Program (CBBNEP), Texas Parks and Wildlife Department (TPWD), Texas General Land Office (GLO), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and National Oceanic and Atmospheric Administration (NOAA). The resource agencies agreed that the applicant could use preservation of existing wetlands as mitigation for the impacts from the project, provided that the site be located within the same watershed, include similar habitat components, and meet mitigation ratios and in-kind habitat requirements (3:1 for seagrasses and 1:1 for coastal wetlands and tidal flats). Smooth cordgrass comprises eight acres, mixed coastal vegetative communities comprise 18 acres and tidal flats and non-vegetative areas comprise five to six acres of the plant communities on the two tracts. Visual observation estimates seagrass bed coverage of between three to five acres, although seagrasses occurring in open waters adjacent to the property are under the jurisdiction of the State of Texas and are not part of the overall mitigation proposal. Damage has occurred to the property as a result of vehicles driving through the tidal/ sand flat areas. In addition, with the recent completion of the Highway 35 expansion, this property will face pressure from development. Ownership of the land will be maintained by a governmental entity or conservation organization/land trust with restrictive covenants to ensure preservation of the wetlands. Preservation of these tracts will protect coastal emergent marsh and tidal sand and mud flats, which play a vital role in the ecology of the bay. The mitigation exchange rate will exceed the 1:1 ratio for coastal wetlands and tidal flats. Out-of-kind mitigation for seagrass impacts is proposed with the purchase and preservation of this site.

IV. PUBLIC NOTICE AND OPPORTUNITY FOR COMMENT

On March 11, 2005, the USACE issued public notice of a permit application submitted by Ingleside San Patricio for the subject permit application. In that public notice, the USACE solicited comments from the public and other interested parties. The USACE comment period closed on April 11, 2005. The USACE issued an Interagency Coordination Notice for the mitigations plans on May 23, 2005, with a 20-day comment period, ending on June 12, 2005. The Coastal Coordination Council (the Council) secretary published notice of the permit application on the Council's web page on March 16, 2005. The Council comment period closed at 5:00 p.m. on April 14, 2005. Additional time was allowed for the applicant to respond to comments.

V. RESPONSE TO COMMENTS

The Commission must consider all comments related to the water quality impacts of the proposed activity that are submitted to the Commission in writing prior to the final deadline for submission of comments. The USACE received, and forwarded to the Commission copies of, comments regarding the subject application from the U.S. Environmental Protection Agency (USEPA), United States Fish and Wildlife Service (USFWS), U.S Department of Commerce, NOAA Fisheries (NOAA); Texas Parks and Wildlife Department (TPWD); Mr. Johnny French; and Leona Murff. The USACE transmitted these comments and recommendations to the applicant and the applicant responded in a transmittal dated May 18, 2005. The transmittal from the applicant dated May 18, 2005, included a mitigation proposal, the lack of which was the main concern of the resource agencies. The USACE received, and forwarded to this office by letter dated June 29, 2005, comments from the USEPA, USFWS, National Marine Fisheries Service (NMFS) and TPWD. The applicant responded to these comments by letter dated July 28, 2005.

The comments are discussed below by general categories of wetlands and seagrasses and associated mitigation; pipeline route selection; shoreline erosion; and safety. Some of the comments expressed concern about issues over which the Commission has no jurisdiction and these issues will not be addressed in this document.

One commenter recommended that all wetland delineations be completed prior to authorization of the permit and that all habitats that will be impacted by the proposed project be described in the project plans. The pipeline route is predominantly agricultural land, therefore, it is unlikely forested wetlands will be impacted. Other wetland types will only be temporarily impacted and allowed to

revert to previous conditions after construction. If surveys identify forested wetlands that require mitigation, the applicants will enter into a separate mitigation agreement for that additional habitat impact. The applicant cannot access all property along the pipeline route until it has obtained easement.

One commenter recommended that the applicant be required to monitor adjacent wetlands and seagrass beds for potential impacts from increased ship traffic in La Quinta Channel, propeller wash of sediments, or increased wakes along the entire ship channel and that, if additional adverse impacts occur, the applicant be required to develop and coordinate with the natural resource agencies compensatory mitigation. The applicant indicates that the LNG carriers will not generate a wake since the slow speed and tug assist will not generate a bow wake. Also, the LNG carrier traffic is only an increase of 1.2% of all vessel traffic using the bay and La Quinta Channel and a 10% increase in large vessel traffic. During operations, tugs will turn LNG carriers in the designated maneuvering basin and such action should not impact shoreline vegetation. The LNG ships are comparable in scale and design to many of the crude oil tankers that routinely call at the Port. This, in combination with slow speeds required for LNG ships as they prepare to dock, should reduce the potential for shoreline erosion.

The applicant also agreed to the recommendation that pipeline construction activities requiring vegetation removal or disturbance be timed to avoid peak nesting prior of March through August for migratory birds to avoid destruction of individual birds, nests or eggs, and, if project activities must be conducted during this time, surveys for nests be performed prior to commencing work.

One commenter stated that when farming and ranching land are used for large oil and gas facilities and pipelines, the land could never be used for homes and businesses. This commenter also stated that the pipelines would always be a danger. The applicant is proposing to construct the LNG terminal on land that is already industrial. In addition, the relative footprint of the pipeline is relatively small and should not prevent use of adjacent property with a very few restrictions. The federal U.S Department of Transportation's Office of Pipeline Safety and the Railroad Commission of Texas' Safety Division will ensure that the terminal and the pipeline will be operated in a manner that will protect public safety and the environment.

In their comments on the May 2005, mitigation proposal and subsequent clarification of the applicant's intent, most of the resource agencies expressed general support of the applicant's proposed compensatory mitigation. One commenter expressed appreciation of the "efforts of the project applicant in coordinating with the Coastal Bend Bays and Estuaries Program in developing the mitigation plan." However, there were still a few remaining recommendations.

One commenter recommended that wetland preservation by augmented by wetland restoration or enhancement in order to adequately mitigate for the unavoidable losses projected from the project. This commenter also recommended that the applicant incorporate into the plan the proposed measures to control the currently unrestricted vehicular access across tidal flats, possible circulation improvements, and/or measures to minimize propeller damage to the adjacent seagrass beds and measures to educate the public about the values of seagrass habitat. The applicant responded that it plans to install barriers along the only access points to the property and to post signs to inform the public of the restricted vehicular traffic. In addition, the applicant advised that an educational kiosk would be constructed and maintained at the public access areas.

One commenter recommended that the USACE require a timeline for the method that would be used to restrict vehicle access and remove billboards prior to issuance of the permit. The applicant responded that the measures would be installed at some time between the start of the terminal construction and completed prior to commencement of terminal operations. The applicant is coordinating with local government to determine legal avenues for billboard removals and cannot provide a timeline.

One commenter recommended that the applicant and the State determine what property to be preserved is and is not property of the State of Texas. The applicant is working with the Texas General Land Office on this issue.

In addition, one commenter recommended that the final mitigation plan include (1) documentation that a specific organization has agreed to hold a conservation easement on the property; (2) documentation of the amount of stewardship funds that will be necessary for the conservation organization to hold the easement and the date by which the funds will be transferred. The applicant has begun talks to establish the CBBNEP as the organization responsible for owning and managing the conservation easement.

VI. DETERMINATION ON CERTIFICATION AND CONSISTENCY

Based on staff review of the application, there is reasonable assurance that the activities under this permit, if conducted in the manner described, as conditioned below and in accordance with applicable state and federal regulations, will not cause a violation of applicable water quality requirements. Certification of the referenced application is hereby issued, contingent on compliance with the conditions listed below.

In addition, the areas of the proposed activities are within the boundary covered by the Texas Coastal Management Program (CMP). The proposed activities are above the threshold established in 16 TAC §3.8(j) for review by the Coastal Coordination Council. The Railroad Commission of Texas has reviewed this proposed action for consistency with the CMP goals and policies, in accordance with the regulations of the CMP, and has found that the proposed action will have only a limited and insignificant impact on coastal natural resource areas and the proposed action is consistent with the applicable goals and policies of the CMP, conditioned on compliance with the conditions listed below.

CONDITIONS

The following conditions are recommended for inclusion in the USACE permit:

Pipeline installation: The applicant has stated its intent to adopt FERC's Plan and Procedures for construction and implement best management practices and revegetation of the pipeline right-of-way. The applicant must conduct pre-construction surveys of the proposed pipeline rights-of-way in wetlands to determine pre-project contours, elevations, vegetation types and vegetative cover. The survey should include aerial photography of the rights-of-way and an area 150 feet wide on either side of the rights of way with a GIS analysis overlay of the ground-truthed surveys. In wetlands, any excess spoil that remains should be removed and disposed of properly. Topsoil should be respread over all areas from which it was originally removed.

All areas disturbed by pipeline construction should be monitored to identify any areas that require additional restoration work or erosion control. A copy of the monitoring report should be submitted to the USACE, the Commission, and to the TPWD. The applicant should also coordinate with TPWD to determine actual permanent impacts along pipeline route and success of revegetation efforts. If passive revegetation is determined not to be successful, the applicant must coordinate an active revegetation plan with the resource agencies.

During pipeline installation, the applicant must employ measures to minimize siltation of adjacent wetlands and contiguous natural waterbodies. The applicant must coordinate with the resource agencies during the various pre-construction and post-construction surveys and during mitigation activities as well as during determination as to whether or not the mitigation has been successful. The inspection schedule must be made available for review upon request of any state or federal agency having jurisdiction.

The applicant should be required to take all practicable precautions to avoid discharge of drilling muds generated during pipeline construction to waters of the United States. Drilling

muds generated during pipeline construction must be stored in portable containers rather than in a cuttings pit to ensure maximum control of the muds during installation activities. Waste drilling muds must be disposed of in a permitted facility authorized by the Commission or may be disposed of in upland areas of the easement, so long as the material is contained on the easement.

Compensatory mitigation: The applicant must submit to the Commission a copy of the final wetlands mitigation plan prior to starting pipeline construction.

Dredging and dredge material management: If it is determined to be necessary, the applicant must take practicable protective measures during dredging to minimize suspended solids and turbidity. In order to ensure compliance with the Texas Surface Water Quality Standards and lacking more site specific information concerning potential impacts of suspended solids on water quality, effluent from dredged material disposal areas cannot exceed a total suspended solids concentration of 300 mg/l or ambient suspended solids (using Method Number 160.2. residue, non-filterable and total suspended solids), unless the dredged material is being used beneficially as detailed in the applicant's mitigation plans. If the applicant encounters unanticipated contaminated dredge material during dredging, operations must immediately cease and the applicant must contact the USACE and the Commission. The applicant may not resume dredging activities without authorization from the Commission.

The applicant should be required to use turbidity curtains to protect adjacent seagrass beds during the dredging and loading dock related activities.

The Railroad Commission of Texas reserves the right to deny certification of subsequent applications to substantially amend this certification and consistency determination based on failure to meet water quality standards or inconsistency with the applicable Coastal Management Program goals and policies, and to impose such additional conditions and limitations as necessary to ensure compliance with water quality standards and the applicable CMP goals and policies.

Leslie Savage, Water Quality Certification and CMP Coordinator
Oil and Gas Division
Railroad Commission of Texas

October 10, 2005

Exhibit 29

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 34

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 38

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 38a

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 39

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 48

Contains Critical Energy Infrastructure Information
Which Has Been Removed From This Public Version

Exhibit 52

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Exhibit 54

Contains Critical Energy Infrastructure Information
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Exhibit 56

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Exhibit 57

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