

ADMINISTRATIVE APPEAL DECISION
CLEAN WATER ACT (CWA)
Palace Exploration Company
Matagorda Bay, Texas
Galveston District Declined Permit
File Number SWG-2007-00917

6 April 2010

Review Officer: John Davidson, U.S. Army Corps of Engineers (Corps), Southwestern Division, Dallas, Texas

Appellant Representatives: John E. Brown – Palace Exploration Company
Clay Bryant – Fenstermaker & Associates
Michael Rayle – E & E Group, LLC
Tom Holland – Pegasus Exploration
Leslie Brinkley – Palace Exploration Company

District Representatives: Felicity Dodson - Regulatory Project Manager
Kevin Morgan – Regulatory Evaluation Chief

Authority: Clean Water Act (33 USC 1344) and Rivers and Harbors Act (33 USC 403)

Receipt of Request for Appeal: 24 October 2008

Appeal Meeting and Site Visit Date: 26 March 2009

Summary of Decision: This request for appeal of the declined permit is without merit. The conclusion that the permit should be proffered, which requires upland disposal of the dredged material from the access channel, is supported by substantial evidence in the administrative record. The proffered permit is in accordance with applicable laws, regulations and policy guidance. The District's decision is not arbitrary, capricious or an abuse of discretion and is not plainly contrary to applicable law or policy.

Background Information: Palace Exploration Company (Palace) applied for a Department of the Army (DA) permit on 9 August 2005 to dredge an access channel and drill a well in State Tract 274 in Matagorda Bay, Matagorda County, Texas. Palace proposed to side-cast the dredged material along the channel with no mitigation to compensate for adverse impacts to the aquatic ecosystem. The application was withdrawn on 23 February 2007 after the applicant did not provide requested additional information.

Palace reapplied for a permit on 10 May 2007 for the same work as the original application and provided the additional information that was requested by the district during the first application review process. SWG initially proffered DA Permit SWG-2007-00917 to Palace on 9 June 2008. The proffered permit included a provision that the dredged material be placed in an upland contained disposal site and not side-cast back into the bay. Palace, by letter dated 6 August 2008, objected to the initial proffered permit and requested the District Engineer (DE) to issue a proffered permit without the requirement of upland disposal of dredged material. SWG again proffered DA Permit SWG-2007-00917 to Palace, by letter dated 25 August 2008, with the original terms and conditions initially proffered on 9 June 2008. Palace declined the proffered permit and, by request for appeal (RFA) dated 23 October 2008 (received by the Southwestern Division on 24 October 2008), appealed the declined permit citing the following reasons for appeal:

Appeal Evaluation, Findings and Instructions to the Galveston District Engineer (DE):

REASON FOR APPEAL 1: The CESWG fails to properly interpret and apply 33 CFR 320.4(a)(1), 33 CFR 320.4(b), 33 CFR 320.4(n), and 33 CFR 320.4(q) resulting in adverse public interest consequences from initially proffered permit SWG-2007-00917. See item 3(c) of RGL 84-09. Also note that after two public notices no adverse public comments were received.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: In the regulations, 33 CFR 320.4(a) *Public Interest Review* (1) states "The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. For activities involving (Section) 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's

404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines and criteria (see §§320.2 and 320.3), a permit will be granted unless the district engineer determines that it would be contrary to the public interest.”

Furthermore, 33 CFR 320.4(b) *Effect on wetlands* reads as follows:

“(1) Most wetlands constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest. For projects to be undertaken or partially or entirely funded by a federal, state, or local agency, additional requirements on wetlands considerations are stated in Executive Order 11990, dated 24 May 1977.

- (2) Wetlands considered to perform functions important to the public interest include:
- (i) Wetlands which serve significant natural biological functions, including food chain production, general habitat and nesting, spawning, rearing and resting sites for aquatic or land species;
 - (ii) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;
 - (iii) Wetlands the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;
 - (iv) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, islands, reefs and bars;
 - (v) Wetlands which serve as valuable storage areas for storm and flood waters;
 - (vi) Wetlands which are ground water discharge areas that maintain minimum base flows important to aquatic resources and those which are prime natural recharge areas;
 - (vii) Wetlands which serve significant water purification functions; and
 - (viii) Wetlands which are unique in nature or scarce in quantity to the region or local area.

(3) Although a particular alteration of a wetland may constitute a minor change, the cumulative effect of numerous piecemeal changes can result in a major impairment of wetland resources. Thus, the particular wetland site for which an application is made will be evaluated with the recognition that it may be part of a complete and interrelated wetland area. In addition, the district engineer may undertake, where appropriate, reviews of particular wetland areas in consultation with the Regional Director of the U. S. Fish and Wildlife Service, the Regional Director of the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, the Regional Administrator of the Environmental Protection Agency, the local representative of the Soil Conservation Service of the Department of Agriculture, and the head of the appropriate state agency to assess the cumulative effect of activities in such areas.

(4) No permit will be granted which involves the alteration of wetlands identified as important by paragraph (b)(2) of this section or because of provisions of paragraph (b)(3), of this section unless the district engineer concludes, on the basis of the analysis required

in paragraph (a) of this section, that the benefits of the proposed alteration outweigh the damage to the wetlands resource. In evaluating whether a particular discharge activity should be permitted, the district engineer shall apply the section 404(b)(1) guidelines (40 CFR part 230.10(a) (1), (2), (3)).

(5) In addition to the policies expressed in this subpart, the Congressional policy expressed in the Estuary Protection Act, Pub. L. 90-454, and state regulatory laws or programs for classification and protection of wetlands will be considered.”

Additionally, 33 CFR 320.4(n), *Energy conservation and development*, states “Energy conservation and development are major national objectives. District engineers will give high priority to the processing of permit actions involving energy projects.”

Lastly, 33 CFR 320.4(q), *Economics*, states “When private enterprise makes application for a permit, it will generally be assumed that appropriate economic evaluations have been completed, the proposal is economically viable, and is needed in the market place. However, the district engineer in appropriate cases, may make an independent review of the need for the project from the perspective of the overall public interest. The economic benefits of many projects are important to the local community and contribute to needed improvements in the local economic base, affecting such factors as employment, tax revenues, community cohesion, community services, and property values. Many projects also contribute to the National Economic Development (NED), (*i.e.* , the increase in the net value of the national output of goods and services).”

Item 3(c) of RGL 84-09 provides “Practicable Alternatives: Alternatives to the applicant’s proposal must be discussed to demonstrate compliance with the 404(b)(1) guidelines (40 CFR 230.10(a)), the Corps’ permit regulations (33 CFR 320.4(b)(4)), and NEPA 320.4(a)(2)(ii)). These various requirements to discuss alternatives require somewhat redundant documentation, so each can be satisfied in part by one thorough discussion of alternatives, to be incorporated by reference in the various documents of the administrative record. Nevertheless, the essential differences between 33 CFR 320.4(b)(4) and 40 CFR 230.10(a) must be remembered. The Corps regulations’ provision merely requires the District Engineer (DE) to consider whether a proposed activity is water dependent, and whether practicable alternative sites are available. If the benefits of a proposed alteration of wetlands are deemed to outweigh the damage to the wetlands resource, 33 CFR 320.4(b)(4) authorizes the DE to “grant the permit”. In contrast, the 404(b)(1) guidelines provide for a more detailed treatment of practicable alternatives, all the requirements of which should be carefully documented (see 40 CFR 230.10(a)). The discussion of practicable alternatives for any or all of the above requirements should be guided by the rule of reason, and should consider alternatives both in terms of the applicant’s wishes and capabilities, and in terms of the need for or purpose to be served by the proposed activity. See especially 40 CFR 230.3(g) [sic 40 CFR 230.3(q)] which requires consideration of cost, existing technology, and logistics in light of overall project purposes.”

In regard to the claim that the CESWG failed to properly interpret and apply 33 CFR 320.4(a) **Public Interest Review**, the CESWG evaluated the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest prior to deciding to proffer the permit to Palace, as required by the regulation in 33 CFR 320.4(a)(1). While there are over twenty (20) public interest review factors, only the factors which may be relevant to the proposal must be considered in the public interest review. In the Statement of Findings, the CESWG evaluated thirteen (13) public interest review factors that were pertinent for the evaluation of the proposed well and access channel, including energy needs and mineral needs. CESWG properly interpreted and applied 33 CFR 320.4(a)(1) since it conducted a public interest review and evaluated relevant public interest review factors. If a public notice results in identifying adverse impacts to public interest factors, it does not mean the public interest review was not properly interpreted and applied, it simply means the proposed project is not in the public interest with respect to the public interest factors that are adversely impacted. The applicant's proposal to side-cast the dredged material into the open bay resulted in adverse public interest and the Corps, proactively, proffered a permit with an alternative of discharging the dredged material into an upland contained disposal area that would resolve the adverse public interest. Additionally, while the CESWG determined that the project proffered in SWG-2007-00917 did meet the 404(b)(1) guidelines, it met the guidelines under the condition that the dredged material be disposed in an upland contained disposal area. The applicant's proposal of open bay disposal was inconsistent with the 404(b)(1) guidelines. Furthermore, CESWG determined that, based on the general balancing process of the public interest review, the benefits of the proposed project would outweigh the detriments if the dredged material was disposed in an upland contained area. CESWG's interpretation and application of 33 CFR 320.4(a) **Public Interest Review**, did not result in adverse public interest consequences.

With respect to the claim that CESWG did not properly interpret and apply 33 CFR 320.4(b) **Effect on wetlands**, the project proposed by Palace did not impact or involve wetlands and therefore, this claim is meritless and not substantiated.

Concerning the reason for appeal that the CESWG failed to properly interpret and apply 33 CFR 320.4(n) **Energy conservation and development**, the regulation states that the District Engineers will give high priority to the processing of permit actions involving energy projects. Although the regulation states that the District Engineer will give high priority to energy conservation and development, the regulation does not suggest that the District Engineer will render favorable decisions to all energy conservation and development projects. The applicant first applied for a DA permit for this project on 9 August 2005. However, the first application was withdrawn due to a lack of response from the applicant for additional information. The applicant again applied for a DA permit for this project on 10 May 2007. This project was evaluated and a decision reached to proffer a permit to Palace on 9 June 2008, which was 13 months after the permit application was filed. This amount of time to evaluate a complex and controversial permit application is not uncommon when negative comments are received. CESWG's interpretation and application of 33 CFR 320.4(n) **Energy conservation and development** did not result in adverse public interest consequences. The resultant permit

allows Palace to drill a well in their preferred location and does not deny a permit based on impacts of open bay disposal of dredged material.

With respect to the assertion that the CESWG failed to properly interpret and apply 33 CFR 320.4(q) *Economics*, the CESWG did not determine that the proposed project was not economically viable or not needed in the market place. In fact, in the Statement of Findings, the CESWG determined that the proposed project would positively impact the economics of the State of Texas if the wells were productive by receiving tax revenue from the distribution and sale of hydrocarbons. Furthermore, CESWG did not make an independent review of the need for the project from the perspective of the overall public interest and assumed the proposed project was economically viable and needed in the market place. CESWG's interpretation and application of 33 CFR 320.4(q) *Economics*, did not result in adverse public interest consequences.

As previously discussed, Item 3(c) of RGL 84-09 discusses practicable alternatives. During the appeal conference, Palace was asked to explain the relevance of RGL 84-09 Item 3(c) to this appeal. Palace stated that there was contention over how practicability was interpreted by the District when it stated no environmental detriment and that put the DE in a position to grant the permit. It appears that Palace is concerned that CESWG determined that the disposal of the dredged at an upland site was a practicable alternative. CESWG discussed fourteen (14) alternatives for the proposed well and access channel in the Statement of Findings ranging from the no action alternative to uncontained disposal of the dredged material in the open bay. The alternatives also looked at various routes to access the preferred well location. The CESWG determined that the least damaging practicable alternative was to place the dredged material in an upland site due to the fact that open bay disposal is likely to impact nearby oyster reefs due to suspended sediments settling on live reef and hard substrate which would prevent adherence of oysters to hard substrate and thus adversely impacting the reefs viability. 40 CFR 230.3(q) states that practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes. While CESWG determined that the preferred alternative was upland disposal of the dredged material, the cost of such disposal would vary depending upon the availability of upland sites and the distance the dredged material would be transported. Although the regulations state that the cost is a factor in determining practicability, they do not specify that cost would be a limiting factor when considering a less damaging environmental impact. Furthermore, CESWG conditioned the permit to allow Palace to dispose of the dredged material in an upland site closer to the project site rather than specify one in the permit, which could reduce costs, without amending the DA permit. Consideration of cost is unique to each permit application and its effect upon a lesser environmentally damaging alternative is assessed on a case-by-case basis.

REASON FOR APPEAL 2: CESWG fails to properly interpret and apply *practicability* as defined at 40 CFR 230.3(q), 40 CFR 230.10(a), 40 CFR 230.10(b), 33 CFR 320.4(a)(1), 33 CFR 320.4(a)(2)(ii), and 33 CFR 320.4(r). See applicant correspondence to CESWG dated April 25, 2006, July 12, 2006, August 22, 2006, October 5, 2006, November 21, 2006, February 7, 2007, March 8, 2007, March 14, 2007, May 8, 2007,

July 5, 2007, August 16, 2007 (data submitted during meeting), and October 31, 2007. CESWG fails to consider cost, logistics, and their interrelationship when determining availability and capability of upland disposal when assessing practicability.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: The regulations, in 40 CFR 230.3(q), state “the term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes”.

Furthermore, 40 CFR 230.10(a) states “Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

- (1) For the purpose of this requirement, practicable alternatives include, but are not limited to:
 - (i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;
 - (ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;
- (2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant, which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.
- (3) Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or sighting within the special aquatic site in question to fulfill its basic purpose (i.e. is not “water dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge, which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.
- (4) For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. On

occasion, these NEPA documents may address a broader range of alternatives than required to be considered under this paragraph or may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines. In the latter case, it may be necessary to supplement these NEPA documents with this additional information.

- (5) To the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program, a section 208 program, or other planning process, such evaluation shall be considered by the permitting authority as part of the consideration of alternatives under the Guidelines. Where such evaluation is less complete than that contemplated under this subsection, it must be supplemented accordingly.”

Additionally, 40 CFR 230.10(b) states “No discharge of dredged or fill material shall be permitted if it:

- (1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;
- (2) Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;
- (3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply, in lieu of this subparagraph;
- (4) Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972”.

33 CFR 320.4(a)(1) **Public Interest Review** states “The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are conservation, economics,

aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. For activities involving (Section) 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines and criteria (see §§320.2 and 320.3), a permit will be granted unless the district engineer determines that it would be contrary to the public interest.”

To address the appellant’s concerns with 33 CFR 320.4(a)(2)(ii), 33 CFR 320.4(a)(2) must be read in its entirety. It states “The following general criteria will be considered in the evaluation of every application: (i) The relative extent of the public and private need for the proposed structure or work; (ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and (iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.”

Finally, 33 CFR 320.4(r), **Mitigation**, states “(1) Mitigation is an important aspect of the review and balancing process on many Department of the Army permit applications. Consideration of mitigation will occur throughout the permit application review process and includes avoiding, minimizing, rectifying, reducing, or compensating for resource losses. Losses will be avoided to the extent practicable. Compensation may occur on-site or at an off-site location. Mitigation requirements generally fall into three categories. (i) Project modifications to minimize adverse project impacts should be discussed with the applicant at pre-application meetings and during application processing. As a result of these discussions and as the district engineer’s evaluation proceeds, the district engineer may require minor project modifications. Minor project modifications are those that are considered feasible (cost, constructability, etc.) to the applicant and that, if adopted, will result in a project that generally meets the applicant’s purpose and need. Such modifications can include reductions in scope and size; changes in construction methods, materials or timing; and operation and maintenance practices or other similar modifications that reflect a sensitivity to environmental quality within the context of the work proposed. For example, erosion control features could required on a fill project to reduce sedimentation impacts or a pier could be reoriented to minimize navigational problems even though those projects may satisfy all legal requirements (paragraph (r)(1)(ii) of this section) and the public interest review test (paragraph (r)(1)(iii) of this section) without such modifications. (ii) Further mitigation measures may be required to satisfy legal requirements. For Section 404 applications, mitigation shall be required to ensure that the project complies with the 404(b)(1) Guidelines. Some mitigation measures are enumerated at 40 CFR 230.70 through 40 CFR 230.77 (Subpart H of the 404(b)(1) Guidelines). (iii) Mitigation measures in addition to those under paragraphs (r)(1)(i) and (ii) of this section may be required as a result of the public interest review process. (See 33 CFR

325.4(a).) Mitigation should be developed and incorporated within the public interest review process to the extent that the mitigation is found by the district engineer to be reasonable and justified. Only those measures required to ensure that the project is not contrary to the public interest may be required under this subparagraph.

(2) All compensatory mitigation will be for significant resource losses which are specifically identifiable, reasonably likely to occur, and of importance to the human or aquatic environment. Also, all mitigation will be directly related to the impacts of the proposal, appropriate to the scope and degree of those impacts, and reasonably enforceable. District engineers will require all forms of mitigation, including compensatory mitigation, only as provided in paragraphs (r)(1)(i) through (iii) of this section. Additional mitigation may be added at the applicants' request".

The Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230) state that the purpose of these guidelines is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States through the control of discharges of dredged or fill material. They further state that fundamental to these guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystem of concern. In 230.10(a)(1), the 404(b)(1) guidelines state that practicable alternatives include activities that do not involve a discharge of dredged or fill material into waters of the United States and discharges of dredged or fill material at other locations in waters of the United States. The guidelines continue by stating that an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. The CESWG determined that the proposed sidecast of the dredged material into Matagorda Bay was not practicable because the material was being discharged in an aquatic ecosystem instead of being discharged into uplands. The guidelines state that when determining practicability, costs, existing technology, and logistics in light of the overall project purposes should be considered. It is apparent that the CESWG did consider these factors when it determined there were practicable alternatives were available as evidenced in the SOF by the statement that similarly situated petroleum and mineral exploration companies utilized an upland contained disposal site.

While the correspondence noted in the reason for appeal does discuss alternatives and address questions and concerns from the public interest review and the Corps, it also addresses practicability. Furthermore, practicability is not defined in 40 CFR 230.10(b), 33 CFR 320.4(a)(1), 33 CFR 320.4(a)(2)(ii), or 33 CFR 320.4(r) and therefore, the claim that the CESWG did not properly interpret and apply practicability as defined in these regulations is irrelevant and not substantiated.

REASON FOR APPEAL 3: CESWG fails to properly apply the *Army Corps of Engineers Standard Operating Procedures for the Regulatory Program* Part 1, Item 12, Paragraph 7 directing CESWG to not use a permit applicant's financial standing as a consideration when determining practicability. Statement of Findings Item 6.c on page

13 clearly demonstrates that CESWG relied on its opinion of Palace's financial standing when conditioning SWG-2007-00917.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: The Army Corps of Engineers Standard Operating Procedures for the Regulatory Program Part 1, Item 12, Paragraph 7 states "It is important to emphasize, however, that it is not a particular applicant's financial standing that is the primary consideration when determining practicability, but rather characteristics of the project and what constitutes a reasonable expense for these types of projects that are most relevant to practicability determinations".

The Statement of Findings (SOF) Item 6.c on page 13 states "Concerns regarding the proposed project were limited to the applicant's proposal to sidecast dredged material, excavated to create an access route, into the open bay and the need for a buffer zone between the access route and Mad Island Reef. The applicant has stated that open bay disposal of dredged material was the only practicable DMMP alternative available to them. However, open bay disposal of dredged material would impinge upon the 1,000-foot buffer zone. Similarly situated petroleum and mineral exploration companies have successfully utilized this alternative with a greater volume of dredged material than that of the proposed project, and at greater cost. CESWG will condition the permit to allow the applicant to propose, pending CESWG approval, an alternative upland, contained, DMPA which may be closer to the project site, and/or less costly. This will allow the applicant to utilize the well site location necessary to drill a well to the necessary depth. The special condition will provide them the option to search for alternative DMPAs, that reduce their cost, without being required to amend their original permit." DMMP is an acronym for Dredged Material Management Plan, which is a comprehensive, long-term plan for management of dredged material removed from channels and berths to provide safe navigation. DMPA stands for Dredged Material Placement Area, which is a specific placement area where dredged material is discharged.

After reviewing the Corps' Standard Operating Procedures and the SOF, there is no evidence that the CESWG utilized the applicant's financial standing as a consideration when assessing practicability. Although the SOF states that similarly situated petroleum and exploration companies have successfully used upland disposal sites with a greater volume of dredged material and at a greater cost, there is no statement regarding Palace's financial standing. Furthermore, 40 CFR 230.10(a) states that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. In its review, CESWG determined that open bay disposal was not the least environmentally damaging alternative due to the availability of an upland site which would result in no discharge into the aquatic ecosystem or potential/probable impacts to nearby oyster reefs. The fact that the CESWG determined that upland disposal was the least damaging

practicable alternative does not equate to CESWG relying on Palace's financial standing when conditioning SWG-2007-00917 to require upland disposal of the dredged material.

REASON FOR APPEAL 4: 40 CFR 230.10 – CESWG erroneously concludes that specified and unspecified upland dredged material disposal areas are reasonably obtainable and therefore a practicable alternative. The Statement of Findings is devoid of economic, logistical, and technology analysis.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: The regulations in 40 CFR 230.10(a) and (b) are quoted in Reason for Appeal 2 above.

In addition, 40 CFR 230.10(c) states "Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests required by subparts B and G, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

- (1) Significantly adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.
- (2) Significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;
- (3) Significantly adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or
- (4) Significantly adverse effects of discharge of pollutants on recreational, aesthetic, and economic values."

Lastly, 40 CFR 230.10(d) states "Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Subpart H identifies such possible steps."

The permit was proffered with the dredged material being placed in a specified upland dredged material placement area managed by King Fisher Marine. In the SOF, it states that the applicant (Palace) rejected this specified disposal area because of the distance between the access channel and the placement area, the requirement of double handling the material and the increased cost. Although Palace rejected the disposal area due to increased cost, it does not mean that the disposal area is not reasonably obtainable as they could obtain it. The CESWG did not search for alternate disposal areas and are not required to. The CESWG's responsibility was to evaluate the proposal or proposals from the applicant and determine if they were the least damaging practicable alternative and warrant permitting. The regulations, in 40 CFR 230.10(a)(2), state that an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. These regulations further state that if it is otherwise a practicable alternative, an area not presently owned by the applicant, which could be reasonably obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered. Although the regulations mention cost as a factor to consider when looking at practicable alternatives, the regulations do not state that cost is an overriding factor of practicability. The first threshold of practicability is for activities that do not involve a discharge of fill material into waters of the United States. Lastly, as stated in the SOF, other petroleum and mineral exploration companies have used upland disposal for the disposal of dredged material from Matagorda Bay without cost or logistics being a limiting factor.

REASON FOR APPEAL 5: 40 CFR 230.11 – CESWG erroneously dismissed Palace's use of thin-layer dredged material disposal and the wealth of scientific information on thin-layer disposal conducted by the U.S. Army Corps of Engineers – Engineer Research and Development Center (ERDC) and provided to CESWG by Palace. CESWG dismisses scientific information provided by Palace, among other substantial data, doing so to a degree that CESWG declares its own studies used to support its dredging activities as "inconclusive". CESWG therefore fails to properly interpret and apply 40 CFR 230.70, 40 CFR 230.72, and 40 CFR 230.73 which in turn causes CESWG to fail to properly interpret and apply the regulations stated in Item # 1 (Reasons for Appeal 1 and 2) of this Request for Appeal.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: 40 CFR 230.11, **Factual Determinations**, states "The permitting authority shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment in light of subparts C through F. Such factual determinations shall be used in Sec. 230.12 in making findings of compliance or non-compliance with the restrictions on discharge in Sec. 230.10. The evaluation and testing procedures described in Sec. 230.60 and Sec. 230.61 of subpart G shall be used as necessary to make, and shall be described in, such determination. The determinations of effects of each proposed discharge shall include the following:

(a) Physical substrate determinations. Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, on the characteristics of the substrate at the proposed disposal site. Consideration shall be given to the similarity in particle size, shape, and degree of compaction of the material proposed for discharge and the material constituting the substrate at the disposal site, and any potential changes in substrate elevation and bottom contours, including changes outside of the disposal site which may occur as a result of erosion, slumpage, or other movement of the discharged material. The duration and physical extent of substrate changes shall also be considered. The possible loss of environmental values (Sec. 230.20) and actions to minimize impact (subpart H) shall also be considered in making these determinations. Potential changes in substrate elevation and bottom contours shall be predicted on the basis of the proposed method, volume, location, and rate of discharge, as well as on the individual and combined effects of current patterns, water circulation, wind and wave action, and other physical factors that may affect the movement of the discharged material.

(b) Water circulation, fluctuation, and salinity determinations. Determine the nature and degree of effect that the proposed discharge will have individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation. Consideration shall be given to water chemistry, salinity, clarity, color, odor, taste, dissolved gas levels, temperature, nutrients, and eutrophication plus other appropriate characteristics. Consideration shall also be given to the potential diversion or obstruction of flow, alterations of bottom contours, or other significant changes in the hydrologic regime. Additional consideration of the possible loss of environmental values (Secs. 230.23 through 230.25) and actions to minimize impacts (subpart H), shall be used in making these determinations. Potential significant effects on the current patterns, water circulation, normal water fluctuation and salinity shall be evaluated on the basis of the proposed method, volume, location, and rate of discharge.

(c) Suspended particulate/turbidity determinations. Determine the nature and degree of effect that the proposed discharge will have, individually and cumulatively, in terms of potential changes in the kinds and concentrations of suspended particulate/turbidity in the vicinity of the disposal site. Consideration shall be given to the grain size of the material proposed for discharge, the shape and size of the plume of suspended particulates, the duration of the discharge and resulting plume and whether or not the potential changes will cause violations of applicable water quality standards. Consideration should also be given to the possible loss of environmental values (Sec. 230.21) and to actions for minimizing impacts (subpart H). Consideration shall include the proposed method, volume, location, and rate of discharge, as well as the individual and combined effects of current patterns, water circulation and fluctuations, wind and wave action, and other physical factors on the movement of suspended particulates.

(d) Contaminant determinations. Determine the degree to which the material proposed for discharge will introduce, relocate, or increase contaminants. This determination shall consider the material to be discharged, the aquatic environment at the proposed disposal site, and the availability of contaminants.

(e) Aquatic ecosystem and organism determinations. Determine the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms. Consideration shall be given to the effect at the proposed disposal site of potential changes in substrate characteristics and elevation, water or substrate chemistry, nutrients, currents, circulation, fluctuation, and salinity, on the recolonization and existence of indigenous aquatic organisms or communities. Possible loss of environmental values (Sec. 230.31), and actions to minimize impacts (subpart H) shall be examined. Tests as described in Sec. 230.61 (Evaluation and Testing), may be required to provide information on the effect of the discharge material on communities, or populations of organisms expected to be exposed to it.

(f) Proposed disposal site determinations.

(1) Each disposal site shall be specified through the application of these Guidelines.

The mixing zone shall be confined to the smallest practicable zone within each specified disposal site that is consistent with the type of dispersion determined to be appropriate by the application of these Guidelines. In a few special cases under unique environmental conditions, where there is adequate justification to show that widespread dispersion by natural means will result in no significantly adverse environmental effects, the discharged material may be intended to be spread naturally in a very thin layer over a large area of the substrate rather than be contained within the disposal site.

(2) The permitting authority and the Regional Administrator shall consider the following factors in determining the acceptability of a proposed mixing zone:

(i) Depth of water at the disposal site;

(ii) Current velocity, direction, and variability at the disposal site;

(iii) Degree of turbulence;

(iv) Stratification attributable to causes such as obstructions, salinity or density profiles at the disposal site;

(v) Discharge vessel speed and direction, if appropriate;

(vi) Rate of discharge;

(vii) Ambient concentration of constituents of interest;

(viii) Dredged material characteristics, particularly concentrations of constituents, amount of material, type of material (sand, silt, clay, etc.) and settling velocities;

(ix) Number of discharge actions per unit of time;

(x) Other factors of the disposal site that affect the rates and patterns of mixing.

(g) Determination of cumulative effects on the aquatic ecosystem.

(1) Cumulative impacts are the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material.

Although the impact of a particular discharge may constitute a minor change, in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.

(2) Cumulative effects attributable to the discharge of dredged or fill material in waters of the United States should be predicted to the extent reasonable and practical. The

permitting authority shall collect information and solicit information from other sources about the cumulative impacts on the aquatic ecosystem. This information shall be documented and considered during the decision-making process concerning the evaluation of individual permit applications, the issuance of a General permit, and monitoring and enforcement of existing permits.

(h) Determination of secondary effects on the aquatic ecosystem.

(1) Secondary effects are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities.

(2) Some examples of secondary effects on an aquatic ecosystem are fluctuating water levels in an impoundment and downstream associated with the operation of a dam, septic tank leaching and surface runoff from residential or commercial developments on fill, and leachate and runoff from a sanitary landfill located in waters of the U.S. Activities to be conducted on fast land created by the discharge of dredged or fill material in waters of the United States may have secondary impacts within those waters which should be considered in evaluating the impact of creating those fast lands.”

Furthermore, 40 CFR 230.70, **Actions concerning the location of the discharge**, states “The effects of the discharge can be minimized by the choice of the disposal site. Some of the ways to accomplish this are by:

- (a) Locating and confining the discharge to minimize smothering of organisms;
- (b) Designing the discharge to avoid a disruption of periodic water inundation patterns;
- (c) Selecting a disposal site that has been used previously for dredged material discharge;
- (d) Selecting a disposal site at which the substrate is composed of material similar to that being discharged, such as discharging sand on sand or mud on mud;
- (e) Selecting the disposal site, the discharge point, and the method of discharge to minimize the extent of any plume;
- (f) Designing the discharge of dredged or fill material to minimize or prevent the creation of standing bodies of water in areas of normally fluctuating water levels, and minimize or prevent the drainage of areas subject to such fluctuations”.

Also, 40 CFR 230.72, **Actions controlling the material after discharge**, states “The effects of the dredged or fill material after discharge may be controlled by:

- (a) Selecting discharge methods and disposal sites where the potential for erosion, slumping or leaching of materials into the surrounding aquatic ecosystem will be reduced. These sites or methods include, but are not limited to:
 - (1) Using containment levees, sediment basins, and cover crops to reduce erosion;
 - (2) Using lined containment areas to reduce leaching where leaching of chemical constituents from the discharged material is expected to be a problem;
- (b) Capping in-place contaminated material with clean material or selectively discharging the most contaminated material first to be capped with the remaining material;

- (c) Maintaining and containing discharged material properly to prevent point and nonpoint sources of pollution;
- (d) Timing the discharge to minimize impact, for instance during periods of unusual high water flows, wind, wave, and tidal actions”.

Lastly, 40 CFR 230.73, **Actions affecting the method of dispersion**, states “The effects of a discharge can be minimized by the manner in which it is dispersed, such as:

- (a) Where environmentally desirable, distributing the dredged material widely in a thin layer at the disposal site to maintain natural substrate contours and elevation;
- (b) Orienting a dredged or fill material mound to minimize undesirable obstruction to the water current or circulation pattern, and utilizing natural bottom contours to minimize the size of the mound;
- (c) Using silt screens or other appropriate methods to confine suspended particulate/turbidity to a small area where settling or removal can occur;
- (d) Making use of currents and circulation patterns to mix, disperse and dilute the discharge;
- (e) Minimizing water column turbidity by using a submerged diffuser system. A similar effect can be accomplished by submerging pipeline discharges or otherwise releasing materials near the bottom;
- (f) Selecting sites or managing discharges to confine and minimize the release of suspended particulates to give decreased turbidity levels and to maintain light penetration for organisms;
- (g) Setting limitations on the amount of material to be discharged per unit of time or volume of receiving water.”

During the evaluation of this permit application, Palace provided the CESWG with numerous studies concerning uncontained thin-layer dredged material disposal. The CESWG, in the SOF, stated that “[W]hile these studies do offer insight into movement and behavior of sediments suspended in the water column, none of the studies were conducted in environments similar to that which exists at the project site, and limited data was available regarding the long term impacts of suspended dredged material on oyster reefs”. The SOF further states that “[M]any of the studies also stated that, because of the multitude of factors and forces affecting the dredged sediment, their impacts on the surrounding environment are inconclusive”. Based on the information in the SOF, CESWG is not calling the studies inconclusive, they are stating that the studies themselves indicate that the impacts of open water disposal of dredged material on the surrounding environment are inconclusive. In addition, the 404(b)(1) guidelines, in 40 CFR 230.10(a), state that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have a less adverse impact on the aquatic ecosystem and that practicable alternatives include activities which do not involve a discharge of dredged or fill material into waters of the United States. Because the CESWG determined that open water disposal of the dredged material was not practicable, application of 40 CFR 230.70, 40 CFR 230.72, and 40 CFR 230.73 was no longer required.

The CESWG evaluated the scientific information on thin-layer disposal provided by Palace and did not dismiss it. While the CESWG did not concur with Palace's conclusions of the scientific information, the CESWG properly took the information into consideration. The fact that the CESWG's conclusion with respect to the scientific information does not agree with the conclusion reached by Palace does not mean that CESWG failed to properly consider the information or interpret and apply 40 CFR 230.70, 40 CFR 230.72, or 40 CFR 230.73.

REASON FOR APPEAL 6: 40 CFR 230.12 – CESWG findings are not supported by facts as required by 40 CFR 230.11, because the facts in this case support Palace's preferred alternative (Statement of Findings Item 5.b.13), rather than CESWG's (Statement of Findings Item 5.b.14) selected alternative.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: 40 CFR 230.12, **Findings of compliance or non-compliance with the restrictions on discharge**, state

“(a) On the basis of these Guidelines (subparts C through G) the proposed disposal sites for the discharge of dredged or fill material must be:

- (1) Specified as complying with the requirements of these Guidelines; or
- (2) Specified as complying with the requirements of these Guidelines with the inclusion of appropriate and practicable discharge conditions (see subpart H) to minimize pollution or adverse effects to the affected aquatic ecosystems; or
- (3) Specified as failing to comply with the requirements of these Guidelines where:
 - (i) There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem, so long as such alternative does not have other significant adverse environmental consequences; or
 - (ii) The proposed discharge will result in significant degradation of the aquatic ecosystem under Sec. 230.10(b) or (c); or
 - (iii) The proposed discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem; or
 - (iv) There does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with these Guidelines.

(b) Findings under this section shall be set forth in writing by the permitting authority for each proposed discharge and made available to the permit applicant. These findings shall include the factual determinations required by Sec. 230.11, and a brief explanation of any adaptation of these Guidelines to the activity under consideration. In the case of a General permit, such findings shall be prepared at the time of issuance of that permit rather than for each subsequent discharge under the authority of that permit.”

40 CFR 230.11 is quoted in Reason for Appeal 5 above.

The CESWG determined that the practicable alternative was to require the dredged material to be discharged into an upland contained disposal area. Additionally, 40 CFR

230.11 requires factual determinations for the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic ecosystem. Because the preferred alternative was not a discharge of dredged or fill material into the aquatic ecosystem, factual determinations under 40 CFR 230.11 are not required or warranted.

REASON FOR APPEAL 7: CESWG relied on data from Texas Parks and Wildlife Department (TPWD) to arrive at the conclusion that open bay thin-layer dredged material disposal would result in significant degradation of oyster reef. Statement of Findings Item 5.b.12 clearly depicts the incorrect data by geographically locating the reefs in the wrong places, making false statements about freshwater flows, and making false statements about reef accretion and health. Within the administrative record are maps, ERDC sediment contour exhibits, and an oyster resource survey that factually contradict TPWD data.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: SOF Item 5.b.12 locates Sammy's Reef, a man-made reef, west of Mad Island Reef and Shell Island Reef. It further states that Mad Island Reef is located centrally, between Shell and Sammy's Reef. The SOF also states that Mad Island Reef is the only reef that receives freshwater flow, which cleanses the reef of disease and marine predators. Additionally, the SOF states that the freshwater flow is filtered such that sediment and debris are filtered out through wetlands before reaching the reef, which is causing the reef to accrete to the south towards the proposed access channel.

The 7.5 Minute Palacios NE and Palacios SE Quadrangle Maps show Mad Island Reef located southeast of Mad Island Bayou and show Shell Island Reef located approximately 2 miles northeast of Mad Island Reef. They do not show any reef named Sammy's Reef in Matagorda Bay. Additionally, Palace's permit application plans and oyster resource survey, as well as TPWD's oyster data map included in their 22 June 2007 response to the public notice, show an artificial reef extending southeast from Mad Island Reef. Both the TPWD, by letter dated 22 June 2007, and the National Marine Fisheries Service, by letter dated 27 June 2007, refer to this artificial reef as the Mad Island Mitigation Reef and Mad Island Reef complex. On TPWD's map of oyster data map, it shows the presence of oysters southwest of Mad Island Reef. This is presumably Sammy's Reef as no other information was found on Sammy's Reef. Palace's oyster resource survey did not cover this area of Matagorda Bay. Also, Palace's oyster resource survey, performed by E & E Group, L.L.C., shows oyster reef extending southeast from the Mad Island artificial reef which indicates the artificial reef is accreting toward the proposed channel. While information, including the ERDC sediment contour exhibits and an oyster resource survey, was found in the administrative record, no information that factually contradicted the TPWD was found. Furthermore, no information in the file was found that indicates SOF Item 5.b.12 clearly depicts the incorrect data by geographically locating the reefs in

the wrong places, making false statements about freshwater flows, and making false statements about reef accretion and health.

REASON FOR APPEAL 8: CESWG dismissed the conclusions of the Corps' own dredging experts at the Engineer Research and Development Center, Dredging Operations Technical Support Program, including conclusions from work performed on behalf of CESWG.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: Palace, in response to comments received during the public notice, submitted several studies that discussed dredged material and suspended sediment impacts on surrounding environments. Of those studies, three were produced by the Engineer, Research and Development Center (ERDC) and two were papers published in scientific journals with Douglas G. Clarke, of ERDC, as co-author.

The first study produced by ERDC, "Sedimentation: Potential Effects of Dredging Operations in Estuarine and Marine Environments", was published in May 2005. The study concluded that the literature available to determine whether elevated sedimentation rates associated with dredging and disposal can result in impacts to sensitive biological resources is generally inadequate, that the affect that natural and dredging-induced sedimentation rates have on biological communities needs to be quantified, that data for all habitat types investigated are insufficient to establish dose-response models at scales appropriate for dredging, and that predicting potentially harmful rates of sedimentation or establishing technically defensible guidelines for resource protection remains a challenge.

The second study produced by ERDC, "Silt Curtains as a Dredging Project Management Practice", was published in September 2005. This study concluded that almost every silt curtain application has unique features that require site-specific adaptations; for cost considerations, logistical constraints, and performance expectations, prevailing current velocities of 1 to 1-1/2 knots effectively limit deployment; and silt curtains should not be considered a one solution fits all type of best management practice.

The third study produced by ERDC, "Ecological Functions of Shallow, Unvegetated Estuarine Habitats and Potential Dredging Impacts (with emphasis on Chesapeake Bay)", was published in December 2005. This study concluded that shallow water habitats represent ecologically important and generally under-valued natural resources, chronic resuspension of sediment may also represent a threat to nearby oyster reefs, adult oysters are adapted to living in turbid environments and are therefore relatively insensitive to moderate increases in turbidity or suspended sediments, and that settling oyster larvae are reputed to be sensitive to even very thin layers (a few millimeters) of sedimentation.

The first paper with Douglas G. Clarke, of ERDC, as co-author was entitled "Estimating Secondary Production and Benthic Consumption in Monitoring Studies: A Case Study of

the Impacts of Dredged Material Disposal in Galveston Bay, Texas” and was published in “Estuaries” in June 1998. The paper concluded that there was no obvious long-term detrimental impact of dredged material disposal on secondary production. Two years after placement of the dredged material, macroinvertebrate species richness and total benthic production were highest at treatment stations in both upper and lower bays. Densities of bi-valves, which are common prey for blue crab and demersal fish, increased substantially one year following disposal of dredged material at the treatment stations. Bi-valves were most common on clay substratum of the disposal mounds. Increases in the densities of bi-valves are a common successional stage in the recolonization of disturbed benthic habitat. Higher macroinvertebrate species richness after dredged material disposal may reflect an early successional stage of recolonization caused by recruitment from surrounding areas. Low production throughout the bay in 1992 may have masked a short-term impact to treatment stations that could have been apparent in a year with higher overall production. In Galveston Bay, strong winds and currents are common, thus dispersion of the dredged material after settlement may have occurred and contributed to negligible impacts.

The second paper with Douglas G. Clarke, of ERDC, as co-author was entitled “Biological Effects of Suspended Sediments: A Review of Suspended Sediment Impacts on Fish and Shellfish with Relation to Dredging Activities in Estuaries” and was published in the “North American Journal of Fisheries Management” in 2001. The paper concluded that in the case of potential dredging impacts, variations in the project – specific conditions of a dredge plant, in situ sediment characteristics, local hydrodynamics, and distribution of organisms in space and time all interact to affect suspended sediment dosage the local biota experience. For motile organisms, such as fish, exposure durations to suspended sediment plumes are probably minutes to hours. Suspended sediment dosages for juvenile and adult fishes have exposure durations extending up to 1 day. For organisms or life history stages that are nonmotile, for example salmonid eggs and adult bivalves, the projected maximum exposure durations extend up to 3.5 days based on estimates of dredge advance rates. Although human activities affecting the concentrations of suspended sediment in the estuarine environment have a long history, no relevant body of research exists for estuarine species but is needed for effective resource management. This paper only addresses suspended sediments resulting from dredging itself and not from dredged material disposal.

The CESWG reviewed the studies and concluded that while the studies do offer insight into movement and behavior of sediments suspended in the water column, none of the studies were conducted in an environment similar to that which exists at the project site in Matagorda Bay. The CESWG also stated that limited data was available regarding the long term impacts of suspended dredged material on oyster reefs. The CESWG indicated that many of the studies stated that, because of the multitude of factors and forces affecting the dredged sediment, their impacts on the surrounding environment are inconclusive. Therefore, the CESWG did not dismiss the conclusions of the Corps’ own dredging experts at ERDC.

REASON FOR APPEAL 9: CESWG dismissed the approved Water Quality Certification for SWG-2007-00917 that concludes that open water unconfined thin-layer disposal of dredged material has no adverse effects to the aquatic environment.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: The Railroad Commission of Texas (RCT) issued a Water Quality Certification under Section 401 of the Clean Water Act for DA Permit Application SWG-2007-00917 on 23 January 2008. The CESWG did not dismiss the Water Quality Certification as it is required prior to the Corps proffering a permit under Section 404 of the Clean Water Act. However, the Water Quality Certification does not conclude that open water unconfined thin-layer disposal of dredged material has no adverse effects to the aquatic environment. The Water Quality Certification stated that the RCT would much prefer upland disposal or beneficial use of the dredged material and is concerned that approval of this application could ultimately result in unacceptable cumulative impacts by opening the floodgates to numerous other applications for similar activities. The Water Quality Certification states that the activity under the permit application would be a “test case” for the purpose of collecting data to see if the activity will cause unacceptable, permanent adverse impact. The Water Quality Certification further states that there is reasonable assurance that the activities under this permit, if conducted in the manner described in the certification with appropriate controls and monitoring, will not cause a violation of applicable water quality requirements. This certification required survey and monitoring reports to be submitted to the RCT, the Corps and the other resource agencies for two years following completion of the dredging. However, since the CESWG determined that open water disposal of the dredged material was not the least damaging practicable alternative, the Water Quality Certification was limited in application to the shell pad to support the drilling rig.

REASON FOR APPEAL 10: By teleconference on January 10, 2007, CESWG stated to the applicant, “we do not issue permits for this [i.e., unconfined disposal of dredged sediments in open water] and we do not want to set a precedent”. In direct conflict with CESWG’s proclamation see permits MVN-2004-4684-EGG, MVN-2007-03520-CT, and CESWG funded, permitted, and directed unconfined discharge of 2,171,000 cubic yards of dredged material from the Gulf Intracoastal Waterway into open bay sites in Texas during the fiscal year 2005 and 2006 (latest data publicly available).

FINDING: This reason for appeal does not have merit.


ACTION: No action is required.

DISCUSSION: 33 CFR 320.1(a)(2), states that the Corps is a highly decentralized organization and that most of the authority for administering the Regulatory Program has been delegated to the district and division engineers. Therefore, applications for permits for similar activities in different districts or divisions may not receive the same decision,

depending on the specific facts that apply to each proposal. The permits mentioned in the reason for appeal were issued in the New Orleans District, which is in the Mississippi Valley Division, which are under different commands than this particular permit application. Additionally, all permit applications are evaluated on a case-by-case basis with the decision to issue a permit being based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. The evaluation of the probable impact of the proposed activity may have on the public interest requires a careful weighing of all those factors in each particular case. Finally, the Corps of Engineers does not issue DA permits to itself for work involving discharges of dredged or fill material into waters of the United States or work, such as dredging, or structures in navigable waters of the United States. However, these activities are subject to the same environmental evaluation as permitted actions, are the result of years of studies and are only authorized by the United States Congress after an Environmental Impact Statement or Environmental Assessment is completed, which includes analysis to determine compliance with the 404(b)(1) Guidelines. Furthermore, if there are adverse impacts to the aquatic ecosystem that result from these projects, mitigation, such as beneficial use, is required to offset the adverse impacts. The Gulf Intracoastal Waterway is an example of a Federal project authorized by Congress. Palace is applying for a Department of the Army permit under the Clean Water Act and the Rivers and Harbors Act which is a separate review process. Therefore, the Palace permit application decision is not in direct conflict with current practices relating to work performed by the Corps.

Information Received During the Appeal Review and its Disposition: The administrative appeal was evaluated based on the District's administrative record, the Appellant's Request for Appeal, and discussions at the appeal conference. Information which was received during and after the appeal conference was considered to the extent it clarified information in the existing administrative record. New information was not considered in the appeal.

Conclusion: As my final decision on the merits of the appeal, I conclude that substantial evidence exists in the administrative record to support the proffered permit, which is in accordance with applicable laws, regulations and policy guidance. The Galveston District's decision was not arbitrary, capricious or an abuse of discretion and was not plainly contrary to applicable law or policy. Accordingly, I conclude that this Request for Appeal does not have merit. This concludes the Administrative Appeal Process.


Anthony C. Funkhouser
Colonel, US Army
Commanding