

INTRODUCTION

DESCRIPTION OF THE ENVIRONMENTAL IMPACT STATEMENT

The Environmental Impact Statement (EIS) will be developed by the U.S. Army Corps of Engineers (USACE), Galveston District, in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321-4347), 40 Code of Federal Regulations (CFR) Parts 1500 - 1508, and 33 CFR Parts 230 and 325. The document will be prepared to disclose potential environmental consequences of federal actions requested by the Port of Houston Authority (PHA) related to the proposed development of a marine cargo terminal complex and marine passenger terminal complex along the Bayport Channel, Harris County, Texas.

The EIS will consist of a summary, nine sections, and a series of appendices. The summary will include a brief description of the proposed project and the actions requested of the USACE, the alternatives considered, the major conclusions regarding potential impacts of the proposed project on the human and natural environment, proposed mitigative actions, and areas of particular controversy. Section 1 will present a brief history of the Proposed Project, a description of the action requested of the USACE by the PHA, the key considerations of the USACE in evaluating a permit application under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, and the applicable federal laws, regulations, and policies which must be considered. Section 2 will present the need for and purpose of the Proposed Project as identified by the PHA, along with an evaluation of the purpose of and need for the Proposed Project by the USACE. Section 3 will include a description of the Proposed Project and the alternatives considered in the EIS, along with a summary of the comparison of the alternatives. Section 4 will include a description of the affected environment in the vicinity of the locations of the Proposed Project and the alternatives evaluated in the EIS. Section 5 will present the projected environmental consequences of the requested federal action and the Proposed Project, as well as the projected impacts of the alternatives evaluated in the EIS. Section 6 will present the program of mitigative actions proposed by the PHA to reduce the impacts of the Proposed Project. Section 7 will present a list of the persons primarily responsible for the preparation of the EIS. Section 8 will provide a list of the references cited throughout the EIS, and Section 9 will provide a glossary of acronyms and abbreviations used in the EIS. The appendices will contain technical information summarized and/or cited in the body of the EIS.

PROJECT BACKGROUND

Role of the PHA

History, Role and Mission of the PHA

The Port of Houston Authority (PHA) is an autonomous governmental entity authorized by a 1927 Act of the Texas Legislature. In 1909, the voters of Harris County approved the port as the Harris County Houston Ship Channel Navigation District. In 1971, the Texas Legislature changed the name to the Port of Houston Authority and gave it expanded powers for fire and safety protection along the 50-mile Houston Ship Channel. A board of seven commissioners governs the PHA.

The Port of Houston is a 25-mile-long (40-kilometer [km]-long) complex of diversified public and private facilities located in the southeastern part of Texas at Latitude 29°45'N and Longitude 95°20'W. The PHA owns and operates the public facilities along the Houston Ship Channel and is the channel's official sponsor. The Port of Houston area includes:

- The Houston Ship Channel and its tributary channels and basins extending from Morgan's Point, at the head of Galveston Bay, to and including a turning basin within the city limits of Houston;
- Buffalo Bayou extending from the turning basin to the Main Street bridge; and
- The port facilities at Bayport near Red Bluff on the west side of upper Galveston Bay.

All of the port lies within Harris County. The waterfront area located downstream of the Houston city limits includes the towns and communities of Baytown, Morgans Point, Lynchburg, Deer Park, Pasadena, Galena Park, and the subdivisions of Manchester, Harrisburg, and Magnolia Park within Houston.

The mission of the PHA is to:

- Provide, operate, and maintain waterborne cargo interchange facilities;
- Promote national and international trade; and
- Generate favorable economic effects upon, and contribute to the economic development of, the Port Authority, the City of Houston, Harris County, and the Gulf Coast Region at rates that provide sufficient funds to cover the Port's operational expenses and some portion of its capital investment requirement.

Role of the PHA for the Proposed Project

The PHA is the proponent for and proposed developer of the Proposed Project. The PHA is the applicant for the Rivers and Harbors Act Section 10 and Clean Water Act Section 404 permits and approvals, and will be responsible for compliance with any such permits issued and the implementation of any mitigative actions required by such permits.

Previous Port Development in Houston

Harbor and Channel Improvements by Local Interests

State-funded improvements of waterways to Houston began in 1857 with dredging of a channel across Clopper Bar in Galveston Bay at the mouth of the San Jacinto River. In 1876 the Morgan Cut and Canal was completed, providing a channel 14 feet deep and 100 feet wide across Morgans Point and about 5 miles into Galveston Bay. This channel was subsequently turned over to the federal government in association with the dredging of the 12-foot channel across Galveston Bay cited in the previous paragraph.

Local interests have dredged and maintained numerous berthing areas at the wharves and docks to be commensurate with the project depths of the Houston Ship Channel. Several private slips and channels have been created, including Union Equity Slip, Tucker Bayou, Goodpasture Slip, Milray Barge Canal, and Carpenter Bayou Barge Canal. At Barbour's Cut, the Port of Houston has created the Barbour's Cut

Ship Channel and Barbours Terminal Channel with a depth of 42 feet and a width of 300 feet. The PHA operates the Barbours Cut Terminal at this location.

In 1970 the PHA completed dredging a 12-foot-deep barge channel across San Jacinto Bay from the Houston Ship Channel to a turning basin on the west side of the Bay. In 1979 the PHA completed development of channel and turning basin to serve waterfront industrial facilities at the Bayport Industrial Development located off the west side of Galveston Bay. The channel is currently authorized for a depth of 40 feet.

Public Port Terminals

The City of Houston developed the first public wharf in Houston in 1840. During the latter half of the nineteenth century, a number of commercial wharves were developed along Buffalo Bayou by private interests. The most prominent of these were developed by Charles Morgan at the intersection of Sims Bayou and Buffalo Bayou, a location named Clinton. Development of public wharves by the predecessors of the PHA accelerated in 1913 when the City of Houston constructed new wharves and docks to complement the completion of the channel across Galveston Bay and Morgan Point. Construction of public wharves continued after this time as commerce increased.

By 1925 the City operated four docks, three warehouses, three cotton storage sheds, and over 7 miles of terminal railway. The facilities included 2,000 feet of concrete wharves on the north side of the Turning Basin. By 1930 more than 7,400 feet of public wharves could accommodate 17 vessels at once. Terminal development continued along the Ship Channel through the 1940's, 1950's, and 1960's. In 1964 the Navigation District (the immediate predecessor of the PHA) purchased the Long Reach docks and incorporated them into the Turning Basin Terminal.

In 1952 the Port Authority purchased land along Barbours Cut for future port development. In the early 1970's the Port Authority decided to use this site for the development of new intermodal terminal facilities in response to the evolution of containerization in the marine transportation industry. By 1989 this terminal included four container berths. Construction of additional container berths at this location has continued to the present time.

Previous Federal Channel Improvements

The existing project for Galveston Harbor and Channel was first authorized by the River and Harbor Act of 5 August 1886, and modified by subsequent acts, of which the latest is dated October 12, 1996. By 1889 the Corps of Engineers completed a channel 12 feet deep and 100 feet wide across Galveston Bay from Bolivar Roads at the mouth of the Bay to the Morgan Canal. The Houston Ship Channel was authorized initially by the Rivers and Harbors Act of 5 March 1905, and modified by subsequent acts, the latest of which is dated October 12, 1996. The two project areas have been deepened and improved repeatedly since authorization. By 1914 a 25-foot-deep channel was achieved, and by 1930 the channel had been deepened to 30 feet. In 1932 the Corps of Engineers approved a depth of 32 feet, and in 1947 a depth of 36 feet was recommended. Today the channels provide a project depth of 40 feet up to the I-610 Loop bridge and a depth of 36 feet from that point upstream to the Turning Basin.

Authorized Galveston Bay Ship Channel Improvements

The study for improving the deep-draft navigation channels within the Galveston Bay area was authorized by a resolution of the House Committee on Public Works adopted October 19, 1967. This resolution authorized a review of reports on the Galveston Harbor and Channel, the Houston Ship Channel, and the Texas City Channel. The Reconnaissance Report for this study was completed in January 1980. This report demonstrated that channel modifications necessary to improve the efficiency and safety of Galveston Bay channels were feasible and recommended that studies continue into the feasibility phase.

The feasibility study for the Texas City Channel was completed in 1982, and the Feasibility Study Report recommended enlarging the project from its existing dimensions of 40 feet deep and 400 feet wide to 50 feet deep and 600 feet wide and deepening and extending the entrance channel. These improvements were authorized for construction by Public Law 99-662, the Water Resources Development Act of 1986.

The feasibility study for improving the Houston and Galveston Channels was completed in July 1987. This study was called the Galveston Bay Area Navigation Study (GBANS) and a Feasibility Report recommended improving the Houston Ship Channel to include a 50-foot-deep by 600-foot-wide Houston Ship Channel from Bolivar Roads to Boggy Bayou, intermittent widening from Boggy Bayou to the Clinton Island Turning Basin, and federal assumption of maintenance dredging in Carpenters Bayou. The Galveston Channel was recommended to be enlarged to 50 feet deep and 450 feet wide in two phases. The first phase would include a depth of 45 feet and a channel width of 530 feet. These recommendations were based on the assumption that the Texas City Channel would be in place prior to constructing the improvements to the Houston and Galveston Channels, thus providing the required access to deeper water in the Gulf of Mexico.

In June 1988 the Board of Engineers for Rivers and Harbors concurred with the basic findings of the Feasibility Report, but raised some concerns regarding the projected environmental impacts of the recommended improvements and the mitigation program proposed to offset projected impacts. In 1990 the Chief of Engineers, in accordance with an interagency agreement, directed that a limited reevaluation of the proposed channel improvement plan be undertaken to address environmental concerns. During the reevaluation process it became clear that the improvements to the Texas City channel would not be completed prior to the projected improvements to the Houston and Galveston channels and that improvements to the entrance channel would need to be incorporated into the Houston Ship Channel improvements. In addition, during the reevaluation it was found that the second phase of the proposed improvements (50 feet deep, 600 feet wide) was no longer economically justified. A reevaluation study included an extensive environmental evaluation and coordination process which addressed the environmental concerns regarding the proposed improvements, and identified a revised mitigation program and Environmental Restoration Plan. The Limited Reevaluation Report and Final Supplemental Environmental Impact Statement were completed in November 1995.

The Houston Ship Channel is currently being deepened from a depth of 40 feet to 45 feet, and widened from 400 feet to 500 feet.

History of the Bayport Terminal Proposal

The development of the Bayport Channel in the Bayport Industrial District began with a series of agreements between Humble Oil and Refining Company and the Harris County Houston Ship Channel Navigation District (now the Houston Port Authority) in 1964. The channel and the properties surrounding it are part of a 7,250-acre industrial park largely dominated by petrochemical industries. In 1965 the first stage of construction occurred, which was the dredging of a barge channel approximately 10 feet deep and 100 feet wide. This channel was completed in 1966. Subsequent to the initial agreements the interest of the Humble Oil and Refining Company were transferred to a subsidiary, the Friendswood Development Company (FDC).

The second phase of the development of the Bayport Channel started in 1972 and was completed in 1977, although the channel was opened to traffic in October 1974. The construction consisted of the Bayport Ship Channel and turning basin, aids to navigation, spoil disposal enclosures, drainage structures, access roads, and railroad modifications. The channel was dredged to a depth of 40 feet. Some material from the dredging was used to raise the elevation of surrounding property. Maintenance dredging of the channel has been conducted periodically since 1978.

The Navigation District (now PHA) received 720 acres at Bayport as part of the original agreement. Later agreements between the PHA and the FDC resulted in the swap of some properties along the south side of the channel and turning basin. The PHA currently owns 935 acres at Bayport, but has developed no facilities at this location.

In response to increasing container cargo throughput and opportunities, and recognizing that the capacity of existing facilities at Barbours Cut would soon be exceeded, the PHA in June 1997 initiated development of a Master Plan to develop new container and cruise terminal facilities at Bayport. The master plan was completed in 1998. In October 1998 the PHA applied to the USACE for permits to construct and operate the proposed facilities.

U.S. ARMY CORPS OF ENGINEERS ACTION

The Requested Action

The PHA has submitted an application to the USACE, Galveston District for permits under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act to construct and operate a marine terminal complex on approximately 1,050 acres (425 hectares [ha]) along the south side of the Bayport Ship Channel. The proposed project site is mostly within the Extraterritorial Jurisdiction of the City of Pasadena, approximately 25 miles southeast of downtown Houston. A portion of the proposed site is located in the City of Seabrook. The location of the proposed facilities is shown in attached Figure 1, and the proposed layout of the facilities is shown in attached Figure 2.

The 1,050-acre (425-ha) Bayport Container Terminal and Cruise Ship Facilities would consist of a 680-acre (275-ha) container terminal complex, a 100-acre (40-ha) cruise terminal complex, a 40-acre (16-ha) container/cruise expansion area, and 230-acres (93 ha) of light industrial co-development areas. The 40-acre (16-ha) expansion yard would be developed for either cruise or container use as the market

demands. The Port Authority currently owns 935 acres (378 ha) of the land proposed to be developed. If the complex were to be fully developed, additional properties would have to be obtained.

The proposed facilities would ultimately include 7,000 feet of new wharves and berths for container operations and approximately 5,000 feet of wharves and berths for cruise operations. The project would also include the dredging of a new 1,600-foot-wide turning basin on the south side of the Bayport Channel east of the proposed cruise terminals.

Development of the proposed terminal facilities would require improvement or new construction of 2.6 miles (1.6 km) of roads. Thirty-five acres (14 ha) of additional land would be required to add new roads. Trucks would have unimpeded access to the container terminal complex via new ramps connecting SH 146 to Port Road, and a grade separated gate entrance.

A new rail track would be added from Strang Yard to the complex within existing rail right-of-way along State Highway (SH) 146. The new rail tracks would be added in a new southern corridor that would pass under a new grade separation at SH 146 and Red Bluff Road and then to the southern end of the intermodal terminal. Cruise terminal traffic would use a new road developed in this corridor, and then an improved Todville Road, to separate them from truck traffic.

Applicable Laws and Regulations

The USACE regulates the construction of facilities, dredging, and placement of fill in the navigable waters of the United States under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

The USACE regulates the placement of dredged or fill material into the waters of the United States under the Federal Water Pollution Control Act Amendments for 1972 (P.L. 92-500; 33 U.S.C. 1344), as amended by the Clean Water Act of 1977 (P.L. 95-217; 33 U.S.C. 1251 et seq.). The selection and use of disposal sites for dredged and/or fill material is guided by regulations at 40 CFR Part 230. The regulatory program of the USACE is contained in 33 CFR Parts 320-331.

Other federal statutes and regulations which must be considered in the USACE permitting process are listed at the end of this Introduction.

Specific USACE Considerations in the Permit Process

Under NEPA and under its regulatory authorities, the USACE must consider a wide variety of potential project impacts in order to determine if the proposed federal action (and therefore the Proposed Project) is not contrary to public interest. Factors applicable to the evaluation of the Proposed Project, which is the subject of this EIS, are described briefly in the following paragraphs. The discussions from "Public Interest" to "Mitigation" are taken from 33 CFR Part 320.4.

Need for the Proposed Project

The concept of public and private need for the proposed project is important to the balancing process of the Corps public interest review. A private applicant's proposal frequently involves a public as well as a

private need (e.g., providing the public with needed goods and services). A public sector applicant's project is presumed to address some public need (e.g., public recreation). With regard to private projects, Department of the Army regulations state that the Corps will generally not concern itself with the question of whether a proposed project will earn a profit (i.e., be economically viable), nor whether it is needed in the market place. It is assumed that the private enterprise has considered economic viability and need in the market place. In regards to public projects, the Corps can defer to a State or other government entity decision to spend public money. The Corps should never assert that this decision was incorrect for economic or policy reasons. However, the regulations indicate that the Corps should make an independent review of the public need for a project from the perspective of the overall public interest. This independent review is relevant to the Corps permit decision. The Corps will question the public need for a project, if the proposed project appears to be unduly speculative. In the public interest review, the Corps has the responsibility to balance public interest need or benefits against public interest detriments. The decision whether to authorize a proposed project, and the conditions under which it will be allowed are determined by the outcome of this general balancing process.

Purpose of the Proposed Project and Alternatives

Defining the project purpose is critical to the evaluation of any project and in evaluating project compliance with the Section 404(b)(1) Guidelines (Guidelines). Defining the purpose of a project involves two determinations: the basic project purpose, and the overall project purpose.

The decision whether to issue a Department of the Army permit is based on an evaluation of the probable impacts of a project, including cumulative impacts of the proposed activity, and includes the application of guidelines promulgated by the Administrator of the Environmental Protection Agency in conjunction with the Secretary of the Army under authority of Section 404(b) of the Clean Water Act.

These guidelines, specifically entitled, "Guidelines for Specification of Disposal Sites for Dredged or Filled Material," are found at 40 CFR 230. A portion of "Subpart B - Compliance with the Guidelines" [40 CFR 230.10.(a), (a)(1), (a)(2), and (a)(3)] states that:

"(a) 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 being 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."

It is important to note that the 404(b)(1) Guidelines use the term "practicable" alternatives and NEPA uses the term "reasonable" alternatives. These terms are described below.

As indicated in the above excerpt from the "Guidelines", 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. Further in the "Guidelines", it is stated 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.

As indicated in paragraph (a)(3) above, the issue of whether or not the discharges of dredged or fill material are "water dependent" is an important factor. This determination of water dependency must be preceded by a clear understanding of the "basic" purpose of the project.

NEPA requires that the federal agencies responsible for the action perform an assessment of all reasonable alternatives to a proposed action that will avoid or minimize adverse effects of these actions upon the quality of the human environment. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

Public Interest

The USACE decision whether to issue a permit is 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 are considered, including the cumulative effects thereof. Among those factors 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 is denied if the discharge that would be authorized by such permit would not comply with the 404(b)(1) Guidelines. Subject to the preceding sentence and any other applicable guidelines and criteria, a permit is granted unless the USACE determines that it would be contrary to the public interest.

The following general criteria are considered in the evaluation of every application:

- The relative extent of the public and private need for the proposed structure or work;
- 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
- 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.

The specific weight of each factor is determined by its importance and relevance to the particular proposal. Accordingly, how important a factor is and how much consideration it deserves will vary with each proposal. A specific factor may be given great weight on one proposal, while it may not be present or as important on another. However, full consideration and appropriate weight will be given to all comments, including those of federal, state, and local agencies, and other experts on matters within their expertise.

Effect on Wetlands

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 May 24, 1977. Wetlands considered to perform functions important to the public interest include:

- 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;
- Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;
- 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;
- 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;
- Wetlands which serve as valuable storage areas for storm and flood waters;
- Wetlands which are groundwater discharge areas that maintain minimum base flows important to aquatic resources and those which are prime natural recharge areas;
- Wetlands which serve significant water purification functions; and
- Wetlands which are unique in nature or scarce in quantity to the region or local area.

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. The particular wetland site for which an application is made is evaluated with the recognition that it may be part of a complete and interrelated wetland area. In addition, the USACE undertakes, where appropriate, reviews of particular wetland areas in consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, the Soil Conservation Service of the Department of Agriculture, and appropriate state agencies to assess the cumulative effect of activities in such areas.

No permit is granted which involves the alteration of wetlands identified as important by the above criteria unless the USACE concludes, on the basis of the public interest evaluation, that the benefits of the proposed alteration outweigh the damage to the wetland resource. In evaluating whether a particular discharge activity should be permitted, the USACE applies the Section 404(b)(1) Guidelines (40 CFR Part 230.10(a)(1),(2),(3)). In addition, to these policies, the Congressional policy expressed in the Estuary Protection Act (PL 90-454) and state regulatory laws or programs for classification and protection of wetlands are considered.

Fish and Wildlife Values

In accordance with the Fish and Wildlife Coordination Act, the USACE consults with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the state agencies responsible for fish and wildlife for the state in which work is to be performed, with a view to the conservation of wildlife resources by prevention of their direct and indirect loss and damage due to the activity proposed in a permit application. The USACE gives full consideration to the views of those agencies on fish and wildlife matters in deciding on the issuance, denial, or conditioning of permits.

Water Quality

Applications for permits for activities which may adversely affect the quality of waters of the United States are evaluated for compliance with applicable effluent limitations and water quality standards during the construction and subsequent operation of the proposed activity. The evaluation includes the consideration of both point and non-point sources of pollution. It should be noted, however, that the Clean Water Act assigns responsibility for control of non-point sources of pollution to the states. Certification of compliance with applicable effluent limitations and water quality standards issued by a state under the provisions of Section 401 of the Clean Water Act is considered conclusive with respect to water quality considerations unless the EPA advises of other water quality aspects to be taken into consideration.

Historic, Cultural, Scenic, and Recreational Values

Applications for USACE permits may involve areas which possess recognized historic, cultural, scenic, conservation, recreational or similar values. Full evaluation of the general public interest requires that due consideration be given to the effect which a proposed structure or activity may have on values such as those associated with wild and scenic rivers, historic properties and National Landmarks, National Rivers, National Wilderness Areas, National Seashores, National Recreation Areas, National Lakeshores, National Parks, National Monuments, estuarine and marine sanctuaries, archeological resources,

including Indian religious or cultural sites, and such other areas as may be established under federal or state law for similar and related purposes. Recognition of those values is often reflected by state, regional, or local land use classifications, or by similar federal controls or policies. Actions on permit applications are, insofar as possible, consistent with, and avoid significant adverse effects on, the values or purposes for which those classifications, controls, or policies were established.

Coastal Zone Plan Compliance

Applications for USACE permits for activities affecting the coastal zones of those states having a coastal zone management program approved by the Secretary of Commerce are evaluated with respect to compliance with that program. No permit is issued to a non-federal applicant until certification has been provided that the proposed activity complies to the maximum extent practical with the coastal zone management program and the appropriate state agency has concurred with the certification or has waived its right to do so. However, a permit may be issued to a non-federal applicant if the Secretary of Commerce, on his own initiative or upon appeal by the applicant, finds that the proposed activity is consistent with the objectives of the Coastal Zone Management Act of 1972 or is otherwise necessary in the interest of national security. federal agency and Indian tribe applicants for USACE permits are responsible for complying with the Coastal Zone Management Act's directives for assuring that their activities directly affecting the coastal zone are consistent, to the maximum extent practicable, with approved state coastal zone management programs.

Impacts on Marine Sanctuaries

Applications for USACE authorization for activities in a marine sanctuary established by the Secretary of Commerce under authority of Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, are evaluated for impact on the marine sanctuary. No permit will be issued until an applicant provides a certification from the Secretary of Commerce that the proposed activity is consistent with the purposes of Title III of the Marine Protection, Research and Sanctuaries Act of 1972, as amended, and can be carried out within the regulations promulgated by the Secretary of Commerce to control activities within the marine sanctuary.

Other Federal, State, or Local Requirements

Processing of an application for a USACE permit normally proceeds concurrently with the processing of other required federal, state, and/or local authorizations or certifications. Final action on the USACE permit is normally not delayed pending action by another federal, state or local agency. However, where the required federal, state and/or local authorization and/or certification has been denied for activities which also require a USACE permit before final action has been taken on the USACE permit application, the USACE may, after considering the likelihood of subsequent approval of the other authorization and/or certification and the time and effort remaining to complete processing the USACE permit application, either immediately deny the USACE permit without prejudice, or continue processing the application to a conclusion. If the USACE continues processing the application, it concludes by either denying the permit as contrary to the public interest, or denying it without prejudice indicating that except for the other federal, state or local denial the USACE permit could, under appropriate conditions, be issued. Denial without prejudice means that there is no prejudice to the right of the applicant to reinstate processing of the USACE permit application if subsequent approval is received from the appropriate federal, state

and/or local agency on a previously denied authorization and/or certification. Even if official certification and/or authorization is not required by state or federal law, but a state, regional, or local agency having jurisdiction or interest over the particular activity comments on the application, due consideration shall be given to those official views as a reflection of local factors of the public interest.

Generally speaking, land use restrictions stemming from zoning and planning, property ownership, covenants, contracts, permitting requirements, and the like do not render an otherwise available alternative unavailable for purposes of the NEPA process. In typical cases, processes or means exist for the removal or alteration of such restrictions. Examples (to name a few) of such processes or means are rezoning or appeals for variances from zoning, condemnation or acquisition of property, judicial extinguishment of covenants, amendment or modification of contracts, and appeal of permit denials. Until these (or other) processes or means have been exhausted, it is difficult to assess the permanent impact of the land use restrictions in question. In addition, since it is well settled that NEPA does not mandate that agencies reach particular substantive results, the consideration of a particular alternative that involves land use restrictions does not mean that decision-makers will be compelled to select that alternative. It is also possible that land use restrictions might be imposed in an attempt to limit consideration of alternatives under NEPA.

This general rule does not mean that a land use restriction can never render an alternative unavailable. NEPA does not require the consideration of alternatives that are remote and speculative, unreasonable, or infeasible. Where a land use restriction rises to this level (including with all processes or means of removal or alteration exhausted), an otherwise available alternative may need to be deemed unavailable. Consideration should also be given to limitations placed on the federal actions which are the subject of the NEPA analysis by legal authorities other than NEPA. In this case, the federal actions include the issuance of a permit by the USACE. USACE guidance has provided that where a process for removing or altering a land use restriction has been exhausted so that the restriction remains in place, the evaluation of a permit application for an activity which conflicts with the restriction may be terminated. (Regulatory Guidance Letter No. 88-12, Regulatory Thresholds (Sept. 9, 1988; expired Dec. 31, 1990)).

The primary responsibility for determining zoning and land use matters rests with state and local governments. The USACE will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance. Such issues would include but are not necessarily limited to national security, navigation, national economic development, water quality, preservation of special aquatic areas, including wetlands, with significant interstate importance, and national energy needs. Whether a factor has overriding importance will depend on the degree of impact in an individual case.

A proposed activity may result in conflicting comments from several agencies within the same state. Where a state has not designated a single responsible coordinating agency, the USACE asks the Governor to express his views or to designate one state agency to represent the official state position in the particular case.

In the absence of overriding national factors of the public interest that may be revealed during the evaluation of the permit application, a permit will generally be issued following receipt of a favorable state determination provided the concerns, policies, goals, and requirements as expressed in 33 CFR Parts

320-324, and the applicable statutes have been considered and followed: e.g., the National Environmental Policy Act; the Fish and Wildlife Coordination Act; the Historical and Archeological Preservation Act; the National Historic Preservation Act the Endangered Species Act; the Coastal Zone Management Act; the Marine Protection, Research and Sanctuaries Act of 1972, as amended; the Clean Water Act; the Archeological Resources Act; and the American Indian Religious Freedom Act.

Floodplains

Floodplains possess significant natural values and carry out numerous functions important to the public interest. These include:

- Water resources values (natural moderation of floods, water quality, maintenance, and groundwater recharge);
- Living resource values (fish, wildlife, and plant resources);
- Cultural resource values (open space, natural beauty, scientific study, outdoor education, and recreation); and
- Cultivated resource values (agriculture, aquaculture, and forestry).

Although a particular alteration to a floodplain may constitute a minor change, the cumulative impact of such changes may result in a significant degradation of floodplain values and functions and in increased potential for harm to upstream and downstream activities. In accordance with the requirements of Executive Order 11988, the USACE, as part of its public interest review, attempts to avoid to the extent practicable, long- and short-term significant adverse impacts associated with the occupancy and modification of floodplains, as well as the direct and indirect support of floodplain development whenever there is a practicable alternative. For those activities which in the public interest must occur in or impact upon floodplains, the USACE ensures, to the maximum extent practicable, that the impacts of potential flooding on human health, safety, and welfare are minimized, the risks of flood losses are minimized, and, whenever practicable, the natural and beneficial values served by floodplains are restored and preserved.

In accordance with Executive Order 11988, the USACE avoids authorizing floodplain developments whenever practicable alternatives exist outside the floodplain. If there are no such practicable alternatives, the USACE considers, as a means of mitigation, alternatives within the floodplain which will lessen any significant adverse impact to the floodplain.

Water Supply and Conservation

Water is an essential resource, basic to human survival, economic growth, and the natural environment. Water conservation requires the efficient use of water resources in all actions which involve the significant use of water or that significantly affect the availability of water for alternative uses including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements. Actions affecting water quantities are subject to Congressional policy as stated in Section 101(g) of the Clean Water Act which provides that the authority of states to allocate water quantities shall not be superseded, abrogated, or otherwise impaired.

Navigation

Section 11 of the Rivers and Harbors Act of 1899 authorized establishment of harbor lines shoreward of which no individual permits were required. Because harbor lines were established on the basis of navigation impacts only, the USACE published a regulation on 27 May 1970 (33 CFR 209.150) which declared that permits would thereafter be required for activities shoreward of the harbor lines. Review of applications is based on a full public interest evaluation and harbor lines serve as guidance for assessing navigation impacts. Protection of navigation in all navigable waters of the United States continues to be a primary concern of the federal government. The USACE protects navigational and anchorage interests in connection with the National Pollution Discharge Elimination System (NPDES) program by recommending to EPA or to the state, if the program has been delegated, that a permit be denied unless appropriate conditions can be included to avoid any substantial impairment of navigation and anchorage.

Economics

When private enterprise or a state or local government entity makes application for a permit, it is generally assumed that appropriate economic evaluations have been completed, the proposal is economically viable, and is needed in the marketplace. However, the USACE, 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), that is, the increase in the net value of the national output of goods and services.

Mitigation

Mitigation is an important aspect of the review and balancing process on many Department of the Army permit applications. Consideration of mitigation occurs throughout the permit application review process and includes avoiding, minimizing, rectifying, reducing, or compensating for resource losses. Losses must be avoided to the extent practicable. Compensation may occur on-site or at an off-site location.

Project modifications to minimize adverse project impacts are discussed with the applicant at pre-application meetings and during application processing. As a result of these discussions and as the USACE evaluation proceeds, the USACE may require project modifications. 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 sensitivity to environmental quality within the context of the work proposed.

Further mitigation measures may be required to satisfy legal requirements. For Section 404 applications, mitigation is often required to ensure that the project complies with the 404(b)(1) Guidelines. Such mitigation is assessed in accordance with a 1990 Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency. Under this agreement, the applicant

must demonstrate that potential impacts to wetland resources have been first avoided, then minimized, to the extent practicable prior to the consideration of possible compensatory mitigation to offset unavoidable impacts to wetland resources. Possible mitigation measures are enumerated at 40 CFR 230.70 through 40 CFR 230.77 (Subpart H of the 404(b)(1) Guidelines).

Additional mitigation measures may be required as a result of the public interest review process. Mitigation is developed and incorporated within the public interest review process to the extent that the mitigation is found by the USACE to be reasonable and justified. Only those measures required to ensure that the project is not contrary to the public interest may be required.

All compensatory mitigation must 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 must be directly related to the impacts of the proposal, appropriate to the scope and degree of those impacts, and reasonably enforceable. The USACE can require all forms of mitigation, including compensatory mitigation, only to ensure that the project is not contrary to the public interest. Additional mitigation may be added at the applicant's request.

THE SECTION 404 PERMIT AND NEPA PROCESSES

Previous and Future Actions

Application for Permit

On October 8, 1998 the PHA submitted to the USACE-Galveston District an application for a permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act to construct the proposed facilities at the Bayport Channel.

Notice of Intent

A Notice of Intent to prepare an EIS was published in the *Federal Register* on June 2, 1999.

Scoping Meeting

A Scoping Meeting to solicit public input on the topics to be addressed in this EIS will be conducted at the Pasadena Convention Center, Pasadena, Texas on August 17, 1999, beginning at 7:00 PM. It will be preceded by a Public Information Workshop at the same location, beginning at 5:00 PM. Both written and oral comments will be received at, and in association with, this meeting. These comments will be used to develop the scope of the EIS.

Public Information Process

The Galveston District will conduct additional public meetings during the process of preparing this EIS. These meetings will be announced through additional public notices, media announcements, and through the Galveston District Internet home page. These announcements will be distributed to persons on the mailing list as it exists at the time of distribution. The public is invited to have their name added to the EIS

mailing list by contacting the Galveston District project manager, Mr. Mark King as indicated on the cover sheet of this announcement. In addition, the USACE, Galveston District will develop a new portion of its Internet home page devoted to providing the same information distributed through the announcements.

Draft Environmental Impact Statement

A draft EIS will be prepared by the USACE, Galveston District, and is expected to be released in mid-2000.

Public Hearing

A Public Hearing will be held to receive oral and written comments on this draft EIS as well as on the requested permits and the Proposed Project. This hearing will be conducted approximately 45 days following the release of a draft EIS. A public information workshop will be conducted at the same location immediately prior to the hearing to provide the public additional opportunity to gain information about the project, the permit applications, and the EIS study.

Final Environmental Impact Statement

Following the Public Hearing and close of the comment period established by the USACE at the Public Hearing, the USACE will prepare a final EIS which will include responses to all comments submitted on the draft EIS, and any modifications made to the EIS in response to those comments. The release of the final EIS will be published in the *Federal Register*.

Record of Decision

Following the publication of the final EIS, the USACE will prepare its Record of Decision in regard to its decision on the permit applications submitted by the PHA.

The Scope of This EIS

This EIS will be prepared to disclose the potential environmental impacts associated with the proposed construction of a marine cargo terminal and marine passenger terminal by the PHA along the Bayport Channel, Harris County, Texas. This EIS will address all reasonably foreseeable developments associated with the proposed terminal complex, including roadway and rail access to the terminals and associated navigation improvements. The EIS will address a 20-year planning and development timeframe from 2000 to 2020.

Environmental Regulations That Must Be Considered

The Proposed Project must be developed in accordance with all applicable federal environmental laws and regulations. Applicable laws and regulations include, but are not necessarily limited to, the following:

Federal Statutes

The National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*)
The Clean Air Act (42 U.S.C. 7401 *et seq.*)
The Noise Control Act of 1972 (42 U.S.C. 4901 *et seq.*)
The National Historic Preservation Act of 1966, Section 106 (16 U.S.C. 470(f))
The Archaeological and Historic Data Preservation Act of 1974 (16 U.S.C. 469 *et seq.*)
The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*)
The Rivers and Harbors Act of 1899 (33 U.S.C. 403)
The Federal Water Pollution Control Act Amendments for 1972 (33 U.S.C. 1251 *et seq.*)
The Marine Protection, Research and Sanctuaries Act of 1972, Section 103 (33 U.S.C. 1413)
The Fish and Wildlife Act of 1956 (16 U.S.C. 742a *et seq.*)
The Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g)
The Fish and Wildlife Coordination Act (16 U.S.C. 661-666c)
The Wild and Scenic Rivers Act (16 U.S.C. 1279 *et seq.*);
The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 *et seq.*)
The Coastal Barrier Resources Act of 1982 (16 U.S.C. 3501 *et seq.*)
The Water Bank Act (P.L. 91-559; 16 U.S.C. 1301 *et seq.*)
The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601)
The Farmland Protection Policy Act (7 U.S.C. 4201 *et seq.*)
The Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 *et seq.*)
The Department of Transportation Act (49 U.S.C. 301 *et seq.*)
The Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 *et seq.*)
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*)
The Community Environmental Response Facilitation Act of 1992 (42 U.S.C. 9601 *et seq.*)

Federal Regulations

7 C.F.R. 657.1 *et seq.*
33 C.F.R. 114.01 – 168.60
33 C.F.R. 230.1 *et seq.*
33 C.F.R. 320.1 *et seq.*
40 C.F.R. 220-1 – 230.80
40 C.F.R. 1500.1 – 1508.28
49 C.F.R. 18.1 *et seq.*
49 C.F.R. 24.1 *et seq.*

Executive Orders

Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 13, 1971;
Executive Order 11988, Floodplain Management (43 FR 6030);
Executive Order 11990, Protection of Wetlands;
Executive Order 123772, Intergovernmental Review of Federal Programs, July 14, 1982;
Executive Order 11514, Protection and Enhancement of Environmental Quality, March 4, 1970;

Executive Order 11296, Flood Hazard Evaluation Guidelines; and
Executive Order 12898, Federal Actions Address Environmental Justice in Minority Populations and Low-
Income Populations, February 11, 1994.