

U.S. Department  
of Transportation

United States  
Coast Guard



Commanding Officer  
U.S. Coast Guard  
Marine Safety Office

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16706  
15 July 1992

From: Commanding Officer, Coast Guard Marine Safety Office San Juan  
To: Commander, U. S. Army Corps of Engineers, Jacksonville, FL  
Via: Commander, Seventh Coast Guard District (m)

Subj: DREDGING OF FEDERAL CHANNELS WITHIN SAN JUAN BAY

1. Reductions in channel depths caused by shoaling and silting conditions in San Juan Bay, Puerto Rico are posing a safety and environmental hazard, and are reportedly resulting in economic hardship for local industry. The Coast Guard's main concern is with safety and protection of the environment. I understand that major harbor dredging and channel improvements are scheduled for fiscal year 1994 for San Juan Harbor, however it appears that emergency maintenance dredging is needed sooner. I recommend you consider rescheduling the dredging of the Army Terminal and Puerto Nuevo Channels to the earliest date possible.

2. Listed are some of the problem areas within the bay, and reasons for concern:

#### ARMY TERMINAL CHANNEL

Pilots have reported severe shoaling along the channel and turning basin. Since 1988, my office and the San Juan Bay Pilots have had to limit the draft of vessels transiting the channel to drafts less than that under normal dredged conditions. This is the most restrictive channel in the bay, yet handles the largest and potentially most dangerous cargoes. Bulk oil tankers and Liquid Petroleum Gas vessels transit the channel regularly to the Shell Oil Company Limited and Caribbean Petroleum Corporation (Gulf). The need for oil on the island of Puerto Rico has put pressure on industry and the local pilots to bring in tankers at the greatest draft possible. As a result, the possibility of a vessel grounding and oil spill has increased.

Enclosed is a Hydrographic Survey dated June 19, 1992 of a portion of the Army Terminal Channel. The survey shows that the channel depth has decreased substantially from its original project dimensions. The width of 300 ft. at a depth of 36 feet has decreased to 130 feet just north of buoy number 6.

PUERTO NUEVO CHANNEL

Pilots and vessels' masters report shoaling within the channel, the most sever being along the eastern end of the channel in the vicinity of the Q G 16 ft. buoy. A recent survey of the area is not available, however they claim that vessels that use the facilities along the channel touch bottom on a regular basis. These vessels transit this area two to three times per week.

3. Your letter dated September 12, 1991 stated that Congress has authorized navigation improvements for San Juan Harbor which include deepening and widening the bar and interior channels. In the letter you ask for a history of mishaps within the harbor to assist you in evaluating the ports needs. My response dated September 24, 1992, documented 6 known incidents in the Army Terminal Channel since 1989 that were contributed to by inadequate depths or widths of the channel. Four of these incidents involved vessels carrying petroleum.

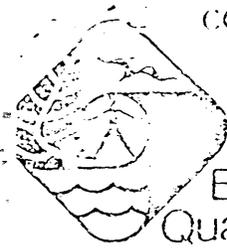
4. The Oil Pollution Act of 1990 has increased tanker operators, masters, and pilots liability. I am concerned that the present condition of the Army Terminal Channel may cause them to take undue risks. My concerns are shared by the San Juan Bay Pilots Association, which has recommended its pilots impose draft restrictions on vessels transiting the area to ensure safety and to avert an environmental disaster. However, these restrictions are affecting oil, power, and shipping companies on which the economy of the island of Puerto Rico depends. I realize the ACOE is under the same tight budgeting constraints as we are, but anything that can be done to expedite plans for dredging, and ensure regular surveys and maintenance dredging are performed before the channels again shoal to their present state would be appreciated.

5. Please let me know of your future plans regarding the federal channels of Puerto Rico, particularly San Juan Harbor. If you have any question please contact me or LT Ray Perry of my staff at 729-6800 ext. 1608.

  
G. D. MARSH

Encl: (1) Hydrographic Survey of portion of Army Terminal Channel, dated June 19, 1992.

Copy: USCG GANTSEC  
USACOE San Juan  
PR Pilots Assoc.  
Shell Oil, Catano PR

*orig*


Environmental  
Quality Board

AG/ EAL/irp

JUL 31 1979

Mr. Wilson Loubriel  
Executive Director  
Puerto Rico Ports Authority  
G.P.O.Box 2829  
San Juan, Puerto Rico 00936

RE: Water Quality Certificate  
Maintenance Dredging  
San Juan Harbor, San Juan, P.R.

Dear Mr. Loubriel:

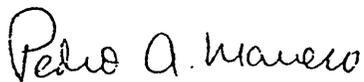
We have received and reviewed the application to the U.S. Army Corps of Engineers for a permit to conduct the referenced activity.

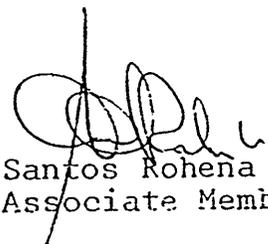
Pursuant to Section 401 (a) of the Clean Water Act, Public Law 95-217 (the Act); it is certified that, as of the date hereof there is no federal effluent limitations and/or standard formally established under Section 301, 302, 306 and 307 of the act applicable to the referenced activity.

However, the classification and standards governing the quality of water of the Commonwealth of Puerto Rico have been determined to be applicable for the purposes of the Act. The following limitations are set forth as part of this certification, as provided under Section 401 (d) of the Act, and shall become conditions of any federal permit or license subject to the provisions of this section not to be exceeded in such permit:

<u>Parameter</u>	<u>Limitations</u>
Suspended, colloidal or settleable solids	None from works or wastes which will cause depositions or be deleterious for any usage as determined by the Water Quality Standards Regulations.
Oil and floating substances	No residue attributable to any work or waste nor visible film nor globules of grease.
Turbidity	A Secchi disc shall be visible at a minimum depth of one (1) meter

This certification applies only to the effect that this activity would have on water quality as defined by the regulations and not to other ecological, biological or environmental effects which may result from the project.

  
Pedro A. Marrero  
Vice-President

  
Santos Rohená  
Associate Member

  
Pedro A. Gelabert  
President

Enclosure

cc: Director Engineer  
U.S. Army Corps of Engineer  
P.O. Box 4970  
Jacksonville, Florida 32201

MEMORANDUM FOR RECORD

SUBJECT: Statement of Findings (SOF) - PN-SJH-136 - Proposed Maintenance Dredging of San Juan Harbor, Puerto Rico

1. References.

a. 33 CFR Part 209.145 - Guidelines for Federal Projects Involving the Disposal of Dredged Material in Navigable and Ocean Waters.

b. The Rivers and Harbors Act of 3 July 1958, House Document 38, 85th Congress, 1st Session.

c. The Clean Water Act of 1977 (PL 95-217).

2. The proposed maintenance dredging consists of dredging approximately 612,733 cubic yards of silt from the following shoaled areas:

<u>Shoal</u>	<u>Quantity Cubic Yards</u>	<u>Out(s)</u>
1	126,482	Anegado Channel Cruise Ship Basins San Antonio Approach Channel
2	119,689	Deep Draft Anchorage E
3	75,410	Graving Dock Channel
4	90,330	Puerto Nuevo Basin Puerto Nuevo Channel
5	20,000	Army Terminal Turning Basin
6	181,822	Army Terminal Channel

The material will be removed by the Corps Hopper Dredge WHEELER with ocean disposal in the EPA interim-approved site. The site, approximately 600 feet deep, is defined as follows:

<u>Latitude</u>			<u>Longitude</u>			<u>Latitude</u>			<u>Longitude</u>		
<u>Deg</u>	<u>Min</u>	<u>Sec</u>	<u>Deg</u>	<u>Min</u>	<u>Sec</u>	<u>Deg</u>	<u>Min</u>	<u>Sec</u>	<u>Deg</u>	<u>Min</u>	<u>Sec</u>
18	30	10 N	66	09	31 W	18	30	10 N	66	08	29 W
18	31	10 N	65	08	29 W	18	21	10 N	66	09	31 W

CESAJ-CO-ON (11-2-240a)

SUBJECT: Statement of Findings (SOF) - PN-SJH-136 - Proposed Maintenance Dredging of San Juan Harbor, Puerto Rico

3. Based on the criteria established by the Administrator, Environmental Protection Agency (EPA), pursuant to Section 102 and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, ocean disposal of the material was determined to neither unreasonably degrade, nor endanger human health or welfare, the marine environment, or its ecological system. There are no other environmentally suitable disposal areas large enough to hold the dredged material within a reasonable distance to the work site.

4. Cultural, historical, or archeological resources. The National Register of Historic Places and the latest supplement to the register were consulted. El Morro Castle is in the vicinity of the project. However, the channel adjacent to it is not scheduled to be dredged and the proposed project operations should not affect it. No other cultural, historical, or archeological resources have been identified in the project area. If during maintenance activities, the contractor observes resources that might have historical or archeological value, these resources shall be reported. Work shall proceed in a manner to prevent any harm to these resources.

5. An Environmental Assessment and Section 103 Report were prepared and the findings are summarized below:

a. Impacts from dredging and disposal will be minor and short-term. Results of the bioassays, published in the Public Notice dated 29 April 1985, indicate the material is ecologically acceptable for ocean disposal and should not pose any significant adverse environmental impacts.

b. The project does not involve waters designated as critical habitat for any listed species. Existing habitats at the dredging and disposal areas will be altered. These alterations will not significantly affect the structural and functional capabilities of the existing biological communities. Threatened and endangered species are not expected to be affected by the maintenance activity.

c. The maintenance activity will assist in the continued functional capability of the Federal project.

6. The proposed work was coordinated with all Federal and local agencies, as well as concerned individuals, by Public Notice dated 29 April 1985. A Biological Assessment was prepared by the Corps of Engineers pursuant to Section 7(a) of the Endangered Species Act and forwarded to the National Marine Fisheries Service on 12 December 1988. Response to the public notice and responses to Section 7 coordination were as follows:

CESAJ-CO-ON (11-2-240a)

SUBJECT: Statement of Findings (SOF) - PN-SJH-136 - Proposed Maintenance Dredging of San Juan Harbor, Puerto Rico

a. Federal Agencies.

(1) The Fish and Wildlife Service, Caribbean Islands Field Office, by letter dated 4 January 1989, stated no objection to the proposed project provided the Corps of Engineers consult the National Marine Fisheries Service concerning potential impacts on sea turtles in the water.

(2) The National Marine Fisheries Service, by telephone on 21 January 1989, notified Rea Boothby of CESAJ-PD-ES that they did not anticipate any problems with the proposed project.

b. Local Agencies. There were no objections from any local agencies. The Environmental Quality Board of Puerto Rico issued a water quality certification for maintenance dredging in San Juan Harbor on 3 August 1979. There is no expiration date for this certification.

c. Concerned Individuals or Groups. There were no objections from the general public.

7. All documented information, data, and stated views of interested agencies and the concerned public pertaining to the subject project have been reviewed by the undersigned in accordance with my responsibilities outlined under the above-referenced regulation. Particular recognition has been given to those aspects of the project concerning effects on navigation safety, water quality, endangered species, fish and shellfish resources, and economic factors of local and regional interest. Investigations have utilized existing data which has been supplemented by field investigations in the project area. The effects of this project have been sufficiently evaluated to determine the expected results and impact on the human and marine environment. Various alternative courses of action have been considered in meeting the needs for this waterway. The project is consistent with national policy, Federal statutes, and administrative directives.

8. In summary, based on a review of the foregoing facts and entire record concerning this project, I have determined that the proposed maintenance dredging will not adversely affect the quality of the human environment and further, that the work is in the best interests of the Federal Government and general public, and should be performed.

SIGNED: Robert L. Herndon

ROBERT L. HERNDON  
Colonel, CE  
Commanding

*PAH* Hanson/CESAJ-CO-0  
kp/3729 1/25  
Ashton/CESAJ-CO-ON  
Hilton/CESAJ-CO-0  
DiChiara/CESAJ-CO  
Gren/CESAJ-CO  
Burns/CESAJ-DX  
Brown/CESAJ-DD  
Herndon/CESAJ-DE

CESAJ-CO-ON (11-2-240a)  
PN-SJH-136

Findings of No Significant Impact (FONSI) with  
Accompanying Environmental Assessment (EA), Maintenance  
Dredging San Juan Harbor, San Juan, Puerto Rico

D.O. Files

CESAJ-DE

27 January 1989  
Hanson/kp/3729

1. Project Description: The proposed work consists of removing approximately 613,000 cubic yards of shoal material from San Juan Harbor. The predominantly silty clay material will be deposited in the EPA interim-approved ocean disposal site. This maintenance dredging will provide the project depths of:

<u>Shoal</u>	<u>Required Depth</u>	<u>Project Depth</u>	<u>Cut (s)</u>
38	40	Anegado Channel	
32	36	Cruise Ship Basins	
37	38	San Antonio Approach Channel	
38	38	Deep Draft Anchorage E	
32	40	Graving Dock Channel	
34	40	Puerto Nuevo Basin	
34	40	Puerto Nuevo Channel	
38	40	Army Terminal Turning Basin	
38	40	Army Terminal Channel	

2. Analysis of Pertinent Data in Environmental Assessment and the Specific Project Activity.

a. Impacts from the work on water quality will be minor and short term.

b. Existing habitats at the dredging and disposal areas will be altered. These alterations will not significantly affect the structural and functional capabilities of the existing biological communities. Threatened and endangered species are not expected to be affected by the maintenance activity. However, if such species present themselves during project operations, the activity will be performed in such a manner to avoid any harm to these species.

c. The activity will not affect the value of any known archeological or historical resource. If during maintenance activities, the Contractor observes resources that might have historical or archeological values, and these resources may be affected by further work activities, these resources shall be reported. Work shall proceed in a manner to prevent any harm to these resources.

d. The maintenance activity will assist in the continued functional capability of the Federal project.

3. Conclusion: Based on the information analyzed in the EA and summarized above, I conclude that the considered action will have no significant impact on the quality of the human environment and that the subject action does not require an Environmental Impact Statement (EIS).

Atchs

SIGNED: Robert L. Herndon  
ROBERT L. HERNDON  
Colonel, CE  
Commanding

Hanson/CESAJ-CO-ON  
Hanson/CESAJ-CO-ON  
Hilton/CESAJ-CO-0  
Dichtara/CESAJ-CO-A  
Gren/CESAJ-CO  
Burns/CESAJ-DX  
Brown/CESAJ-DD  
Herndon

ENVIRONMENTAL ASSESSMENT  
 MAINTENANCE DREDGING AND DISPOSAL OPERATIONS  
 SAN JUAN HARBOR, SAN JUAN, PUERTO RICO

1.0 Project Description. The proposed work consists of removing approximately 613,000 cubic yards of shoal material from San Juan Harbor to provide the required mean low water (MLW) depths of:

<u>Required Depth</u>	<u>Project Depth</u>	<u>Cut(s)</u>
38	40	Anegado Channel
32	36	Cruise Ship Basin
37	38	San Antonio Approach Channel
38	38	Deep Draft Anchorage E
32	40	Graving Dock Channel
34	40	Puerto Nuevo Basin
34	40	Puerto Nuevo Channel
38	40	Army Terminal Basin
38	40	Army Terminal Channel

The shoal material, approximately 613,000 cubic yards of predominantly silty clay, will be removed by the Corps Hopper Dredge WHEELER and placed in the EPA interim-approved 600-foot deep disposal area for San Juan Harbor. Disposal site coordinates, as published in the Code of Federal Regulations, 40 Part 228.12, revised 1 July 1984, are:

<u>Latitude Deg Min Sec</u>	<u>Longitude Deg Min Sec</u>	<u>Latitude Deg Min Sec</u>	<u>Longitude Deg Min Sec</u>
18 30 10 N	66 09 31 W	18 30 10 N	66 08 29 W
18 31 10 N	66 08 29 W	18 31 10 N	66 09 31 W

A final EIS was filed with the Council of Environmental Quality (CEQ) on 11 April 1975.

1.1 The project is authorized by the Rivers and Harbors Act of 3 July 1958, House Document 38, 85th Congress, 1st Session.

2.0 Environmental Setting Without the Project.

2.1 Water Quality. Dredging operations will result in some temporary changes in water quality. Elevated turbidity levels will be evident during operations at the dredging and disposal sites. Locally depressed photosynthetic rates could occur as a result of diminished light penetration at both sites. The elevated turbidity levels are not expected to result in any long-term adverse impacts to resident biotic communities at the dredge or disposal sites. No significant long-term effects on any of the water quality parameters are expected.

2.2 Impact on flora and fauna. Dredging will result in the loss of benthic organisms in the sites designated for maintenance. These communities will reestablish upon completion of the work. Temporary disruption of normal activity of marine life in both the dredging and aquatic disposal areas is

possible but not expected to be of extended duration. No fish nursery or productive fishing area is known to be associated with the proposed disposal area. Also, the prevailing currents at the disposal area move in a westerly direction and will tend to carry dissolved and suspended materials away from the shoreline and reef sites.

2.3 Environmental Impact of the proposed action. Results of bioassays and bioaccumulation tests, published in Public Notice PN-SJH-136 dated 29 April 1985, indicate the material meets the criteria established by EPA for ocean dumping and should not release contaminants which would significantly damage the environment.

2.4 Threatened and Endangered Species. Threatened animals possibly occurring in the project area include the:

West Indian manatee	(Trichechus manatus)
brown pelican	(Pelecanus occidentalis)
green turtle	(Chelonia mydas)
hawksbill turtle	(Eretmochelys imbricata)
leatherback turtle	(Dermochelys coriacea)
loggerhead turtle	(Coretta caretta)
Kemp's Ridley	(Lepidochelys kemii)
finback whale	(Balaenoptera physalus)
humpback whale	(Megaptera novaeangliae)
sei whale	(Balaenoptera borealis)
sperm whale	(Physeter macrocephalus)

The proposed project should have no adverse effects on the above listed species. Because of the location of this project and the EPA interim approved disposal site, neither manatees or sea turtles are expected to suffer adverse effects. No special precautions to protect sea turtles will be required.

2.5 Cultural, Historical, and Archaeological Resources. The National Register of Historic Places published in the Federal Register of 6 February 1979 and the Register's latest supplement were consulted. Several resources are listed in the project area. El Morro Castle is in the vicinity of the project, however, the channel adjacent to it is not scheduled to be dredged and the historical, or archeological resources have been identified in the project area. If during maintenance activities, the captain observes resources that might have historical or archeological value, these resources shall be reported. Work shall proceed in a manner to prevent any harm to these resources.

3.0 Adverse Impact which Cannot be Avoided Should the Project be Implemented. Some loss of benthic organisms at the dredging and aquatic disposal sites will occur. Temporary degradation in water quality at the dredging and disposal sites will also occur.

4.0 Alternatives to the Proposed Project. The no-action alternative would result in the gradual reduction of depth of San Juan Harbor thus limiting ship traffic. This is not considered to be a reasonable alternative. A second alternative would be to dredge the channel deeper than is currently proposed. This would require additional funds.

5.0 Disposal alternatives. Disposal in wetland areas on the island is not acceptable due to the significant impact the discharge would have on the sites ecological structure. Upland sites are not available due to the dense urbanization of the area and the acreage required to handle the large volume of material to be dredged. Further, the silty clay composition of the material may preclude an upland site from further development. This would unnecessarily burden an area pressed for space.

6.0 The relationship between local short-term uses of man's environment and the enhancement of long-term productivity. The immediate impact of the proposed project operations will be a reduction of hazardous navigation and increased commercial availability of the harbor to large vessels. Maintenance of the project will provide the continuing benefits for which the harbor deepening was originally designed.

7.0 Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action Should it be Implemented. Some benthic organisms at both the dredge and disposal sites will be lost. However, the benthic communities should re-establish themselves after completion of the project.

8.0 Water Quality Certification. The Environmental Quality Board of Puerto Rico issued a water quality certification for maintenance dredging in San Juan Harbor on 3 August 1979. There is no expiration date for this certification.

9.0 Coordination with Others. Coordination for the current project was achieved by public notice, PN-SJH-136, dated 29 April 1985 and Section 7 Consultation, dated 12 December 1988.

## References

1. Ecological Evaluation of Proposed Oceanic Discharge of Dredged Material from San Juan Harbor, Puerto Rico. Final Report prepared by ERCO/ENSECO, Inc., 3 April 1985.
2. Findings of No Significant Impact (FONSI) with Accompanying Environmental Assessment (EA) Concerning Periodic Maintenance Dredging Operations at San Juan Harbor, San Juan, Puerto Rico, 5 July 1985.
3. Section 103 Ocean Disposal Evaluation Report, San Juan Harbor, San Juan, Puerto Rico, 5 July 1985.
4. Final EIS, San Juan Harbor Maintenance Dredging, San Juan, Puerto Rico, September 1974.
5. Correspondence and data on file concerning maintenance dredging of San Juan Harbor.

# DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL SAJCO-ON PN-SJH-136	SUBJECT Findings of No Significant Impact (FONSI) with Accompanying Environmental Assessment (EA), Concerning Periodic Maintenance Dredging Operations at San Juan Harbor, San Juan, Puerto Rico
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TO D. O. Files FROM SAJDE DATE 5 July 1985 CMT 1  
Berry/mg/1131

1. Project Description. The work consists of removing approximately 1.2 million cu. yds. of shoal material from San Juan Harbor. The predominantly silty clay material excavated from the channel will be deposited in the EPA interim-approved ocean disposal site. This maintenance dredging will provide the project depth of 30 feet in the Graving Dock Basin, 36 feet in the Army Terminal Channel and Turning Basin, and 32 feet in Puerto Nuevo Channel and Turning Basin. The project is authorized by the Rivers & Harbors Act, 3 July 1958, House Document 38, 85th Congress, 1st Session.

2. Analysis of Pertinent Data in Environmental Assessment and the Specific Project Activity.

a. Impacts from the work on water quality will be minor and short-term in degree.

b. Existing habitats at the dredging and disposal areas will be altered. These alterations will not significantly affect the structural and functional capabilities of the existing biological communities. Threatened and endangered species are not expected to be affected by the maintenance activity. However, if such species present themselves during project operations, the activity will be performed in a manner to avoid any harm to these species.

c. The activity will not affect the value of any known archeological or historical resources. If during maintenance activities, the contractor observes resources that might have historical or archeological value, and these resources may be affected by further work activities, these resources shall be reported. Work shall proceed in a manner to prevent any harm to these resources.

d. The maintenance activity will assist in the continued functional capability of the federal project.

3. Conclusion. Based on the information in the EA and summarized above, it has been concluded that the considered action will have no significant impact on the quality of the human environment and that the subject action does not require an Environmental Impact Statement.

Encl

  
CHARLES T. MYERS III  
Colonel, Corps of Engineers  
Commanding

ENCL 3

ENVIRONMENTAL ASSESSMENT  
MAINTENANCE DREDGING  
AND DISPOSAL OPERATIONS  
SAN JUAN HARBOR, SAN JUAN, PUERTO RICO

1.0 Project description. The proposed project consists of maintenance dredging 1.2 million cubic yards of shoal material from San Juan Harbor to provide the following project MLW depths: Graving Dock Basin, 30-ft. depth; Army Terminal Channel, 36-ft. depth; Army Terminal Turning Basin, 36-ft. depth; Puerto Nuevo Channel and Turning Basin, 32-ft. depth. The material to be excavated is predominately silty clay. Approximately 3.2 million cubic yards of shoal material has been dredged from the harbor under federal contract since 1974. Dredging and disposal will be accomplished by a hopper dredge. The EPA interim approved disposal area coordinates for San Juan Harbor, as published in the Code of Federal Regulations, 40 Part 228.12, are as follows: 18°30'10"N, 66°09'31"W; 18°30'10"N, 66°08'29"W; 18°31'10"N, 66°08'29"W; 18°21'10"N, 66°09'31"W. The ocean depth at the disposal site is approximately 600 ft. It is estimated that 4.3 million cubic yards of material has been placed at this site by federal and nonfederal projects since 1974. A final EIS was filed with the Council of Environmental Quality (CEQ) on 11 Apr 75.

1.1 The project is authorized by the Rivers and Harbors Act of 3 July 1958, House Document 38, 85th Congress, 1st Session.

2.0 Probable impact of the proposed action on the environment.

2.1 Water quality. Dredging operations will result in some temporary changes in water quality. Elevated turbidity levels will be evident during operations at the dredging and disposal sites. Locally depressed photosynthetic rates could occur as a result of diminished light penetration at both sites. The elevated turbidity levels are not expected to result in any long term adverse impacts to resident biotic communities at the dredge or disposal sites. No significant long term effects on any of the water quality parameters are expected.

2.2 Impact of flora and fauna. Dredging will result in the loss of benthic organisms in the sites designated for maintenance. These communities will proceed to reestablish upon completion of work. Temporary disruption of normal activity of marine life in both the dredging and aquatic disposal areas is likely but not expected to be of extended duration. No fish nursery or productive fishing area is known to be associated with the proposed disposal area. Also, the prevailing currents at the disposal area move in a westerly direction and will tend to carry dissolved and suspended materials away from the shoreline and reef sites.

2.3 Environmental impact of the proposed action. An examination of the dredged material proposed for ocean disposal was undertaken to assess the potential for creating significant undesirable effects due to constituents within the harbor sediments. Specific prohibitions have been established for ocean disposal of certain materials which would cause unacceptable adverse effects on human health and the marine environment. Restrictions have been set for the ocean disposal of sediments which contain constituents whose presence <sup>which</sup> may be environmentally damaging. Dredged material from San Juan Harbor does not contain high level radioactive waste, materials produced or used for radiological, chemical, or biological warfare, or persistently inert material which may interfere with legitimate uses of the ocean. A determination of compliance with criteria established for toxicological and bioaccumulative impacts was sought by performing bioassays and bioaccumulation tests. The results of these tests have been published in the public notice for this project. Based upon the results of these tests and the criteria established by EPA for ocean dumping, the material to be disposed should not release contaminants which would significantly damage the environment.

2.4 Threatened and endangered species. A Section 7 consultation was initiated to determine the impact on threatened and endangered species which may inhabit the project areas. It was determined that the following listed species may occur in the vicinity of the proposed activity: West Indian manatee (Trichechus manatus); brown pelican (Pelecanus occidentalis); green turtle (Chelonia mydas); hawksbill turtle (Eretmochelys imbricata); leatherback turtle (Dermochelys coriacea); loggerhead turtle (Caretta caretta); finback whale (Balaenoptera physalus); humpback whale (Megaptera novaeangliae); sei whale (Balaenoptera borealis); sperm whale (Physeter macrocephalus). The Corps of Engineers has determined with the concurrence of the National Marine Fisheries Service and the U.S. Fish and Wildlife Service that the proposed project should have no adverse affect on the above listed species. Precautions will be taken during construction activities to insure the safety of manatees and sea turtles. To insure the contractor and his personnel are aware of the potential presence of these animals in the project area, their endangered status, and the need for appropriate precautionary measures, the contract specifications will include the standard protection clauses concerning manatees and sea turtles. However, because of the location of this project and the disposal at the EPA interim approved site, neither manatees or sea turtles are expected to suffer adverse effects.

Manatees/sea turtles. The contractor will instruct all personnel associated with construction of the project about the presence of manatees/sea turtles in the area and the need to avoid collisions with them. All vessels associated with the project shall operate at "no-wake" speeds at all times while in shallow waters, or channels, where the draft of the boat

provides less than three feet clearance of the bottom. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits. Vessels transporting personnel between the landing and any work boat shall follow routes of deep water to the extent possible. Shore crews or personnel assigned to the construction site for the workshift shall use upland road access if available. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees/sea turtles, which are protected under the Endangered Species Act and the Marine Mammal Protection Act. The contractor shall be held responsible for any manatee/sea turtle harmed, harassed, or killed as a result of the construction of the project.

The contractor shall keep a log detailing sightings, collisions, damage, or killing of manatees/sea turtles which have occurred during the contract period. Any collision with a manatee/sea turtle will be reported immediately to the Authorized Representative of the Contracting Officer, and the Fish and Wildlife Service (Mayaguez Area Office) for investigation so the appropriate course of action can be taken. Following project completion, a report summarizing the above incidents shall be submitted to the Authorized Representative of the Contracting Officer.

2.4 Cultural, historical or archeological resources. There are historical resources listed in the National Register of Historic Places that appear in the project area. El Morro Castle is in the vicinity of the project, however, the channel adjacent to it is not scheduled to be dredged and the proposed project operations should not affect it. No other cultural, historical, or archeological resources have been identified in the project area. If during maintenance activities, the contractor observes resources that might have historical or archeological value, these resources shall be reported. Work shall proceed in a manner to prevent any harm to these resources.

3.0 Adverse impacts which cannot be avoided should the project be implemented. Some loss of benthic organisms at the dredging and aquatic disposal sites will occur. Temporary degradation in water quality at the dredging and disposal sites will also occur.

4.0 Alternatives to the proposed project. The only alternative is to not perform the maintenance work. This would result in the gradual reduction of harbor and channel ship traffic, increased hazards to navigation, and eventual closing of the federal project.

5.0 Disposal alternatives. Other alternatives to the proposed ocean disposal have been considered with this and previous maintenance dredging projects in San Juan Harbor. Disposal in wetland areas on the island is not

considered acceptable due to the significant impact the discharge would have, both short term and long term, on the sites ecological structure. Upland sites have not been found available due to the dense urbanization of the area and the acreage required to handle the large volume of material to be dredged. Further, the composition of the material, being silty clay, may preclude an upland site from further development which would unnecessarily burden an area pressed for space.

6.0 The relationship between local short term uses of man's environment and the enhancement of long term productivity. The immediate impact of the proposed project operations will be a reduction of hazardous navigation and increased commercial availability of the harbor to large vessels. Maintenance of the project will provide the continuing benefits for which the harbor deepening was originally designed.

7.0 Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. The project operations will result in the loss of some benthic organisms at both the dredge and disposal sites. The benthic communities should reestablish themselves after completion of the project.

8.0 Coordination with others. Coordination with the Fish and Wildlife Service and National Marine Fisheries has taken place with a concurrence of no effect for listed threatened or endangered species. The project was also reviewed by EPA Region II. After analysis of the bioassays and public notice, EPA stated they had no objection to the ocean disposal of the dredged material provided that the hopper barge/dredge be stationary when dumping at the disposal site. No other comments were received.

References

1. Ecological Evaluation of Proposed Oceanic Discharge of Dredged Material from San Juan Harbor, Puerto Rico. Final Report prepared by ERGO/ENSECO, Inc., 3 April 1985.
2. Findings of No Significant Impact (FONSI) with Accompanying Environmental Assessment (EA) Concerning Maintenance Dredging Operations at San Juan Harbor, Puerto Rico, 21 May 1981.
3. Section 103 Ocean Disposal Evaluation Report, San Juan Harbor, San Juan Puerto Rico, 10 May 1979.
4. Final EIS, San Juan Harbor Maintenance Dredging, San Juan, Puerto Rico, September 1974.
5. Correspondence and data on file concerning maintenance dredging of San Juan Harbor.

over  
for EPA letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

MAY 31 1985

Colonel Charles T. Meyers III  
District Engineer  
U.S. Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Dear Colonel Meyers:

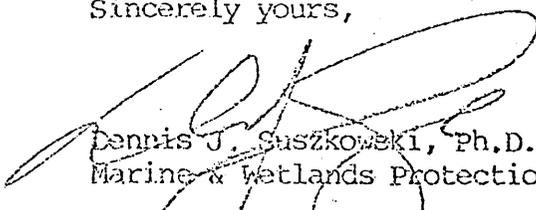
The U.S. Environmental Protection Agency (EPA) has reviewed the following public notices:

<u>Public Notice No.</u>	<u>Applicant</u>	<u>Activity</u>
AH-137	Jacksonville COE	Maintenance dredge Arecibo Harbor with ocean disposal.
SJH-136	Jacksonville COE	Maintenance dredge <u>San Juan</u> Harbor with ocean disposal.

EPA has no objection to the authorization of the maintenance dredging activities with ocean disposal for Arecibo and San Juan Harbors provided that point dumping be used to promote rapid deposition of the dredged materials. For other future ocean disposal of dredged material EPA will require the Jacksonville COE or any applicants to adhere to the EPA/COE guidance document Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters. The procedures used in the sampling and testing of the San Juan sediments were deficient in the following areas: 1) sampling did not categorize the proposed dredged material to project depth; and 2) the reference sediment was obtained from Massachusetts and not from the vicinity of the dump site. We also request the Jacksonville COE to coordinate with EPA Region II sampling plans for other dredging projects with ocean disposal in the future. In this way potential problems could be avoided at the time of public notice.

If you have any questions, please contact Mr. Edward Ambrogio of my staff at FTS 264-5170.

Sincerely yours,

  
Dennis J. Suszkowski, Ph.D., Chief  
Marine & Wetlands Protection Branch

cc: W. Clevenger, 200  
C. Nelson, NMFS  
R. Pace, USFWS

RECEIVED  
JUN 10 1985

EPA BRANCH