



DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF

CECW-OR

17 AUG 1989

MEMORANDUM THRU COMMANDER, NORTH ATLANTIC DIVISION

FOR COMMANDER, NEW YORK DISTRICT

SUBJECT: Permit Elevation, Hartz Mountain Development Corporation

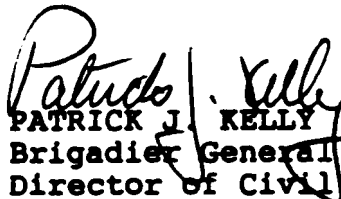
1. By memorandum dated 26 May 1989, the Assistant Secretary of the Army (Civil Works) advised me that he had granted the request of the Environmental Protection Agency (EPA) and the Department of Interior (DOI) to elevate the permit case for Hartz Mountain Development Corporation. In this regard, the case was elevated to HQUSACE for national policy level review of issues concerning the mitigation and practicable alternatives provisions of the 404(b)(1) Guidelines.

2. Based on our review of the administrative record and meetings with your staff, the applicant, EPA and DOI, we have determined certain aspects of interpreting and implementing the guidelines should be clarified. Our conclusions are stated in the enclosed report titled Hartz Mountain 404(q) Elevation, HQUSACE Findings.

3. Please re-evaluate the subject permit in light of the guidance provided in our findings and take action accordingly. In order for us to comply with paragraph 8 of the Department of the Army/EPA Memorandum of Agreement, please notify HQUSACE Regulatory Branch as soon as you reach a permit decision. Questions or comments concerning this elevated case may be directed to Mr. Michael Davis of my regulatory staff at (202) 272-0201.

FOR THE COMMANDER:

Enclosure


PATRICK J. KELLY
Brigadier General (P), USA
Director of Civil Works

MIKE DAVIS
504 4197

17 AUG 1989

MEMORANDUM FOR THE DIRECTOR OF CIVIL WORKS

SUBJECT: Hartz Mountain Permit Elevation Case

This is in reply to your memorandum of July 26, 1989, concerning the subject elevated permit case. We have reviewed your draft findings and concur with your conclusions. You should notify the New York District to proceed in light of the guidance provided in your findings.

The findings provide an excellent analysis of the issues in a complex case. We particularly like the format used to present your analysis and recommend it be used as a model in the future. Mr. Michael Davis, the case action officer, is to be commended for his efforts.

Since much of the guidance and information contained in the findings is applicable to all Section 404 permit applications, please distribute to Corps FOAs.

A handwritten signature in black ink, appearing to read "Robert W. Page".

Robert W. Page
Assistant Secretary of the Army
(Civil Works)



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CECW-OR

17 AUG 1989

Ms. Rebecca Hanmer
Acting Assistant Administrator
for Water
Environmental Protection Agency
Washington, DC 20460

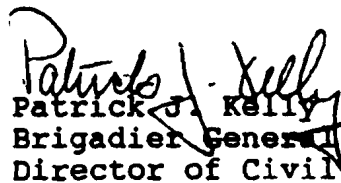
Dear Ms. Hanmer:

Pursuant to the Section 404(q) Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency, we are enclosing a copy of our "Findings" which addresses the policy issues you raised in reference to the Hartz Mountain permit case.

We have directed the Army Corps of Engineers, New York District to undertake additional review of the Hartz Mountain permit application in light of the conclusions presented in our findings. Specifically, additional information on practicable alternatives and the baseline values of the existing wetland and proposed wetland enhancement is required before a permit decision can be made. In accordance with paragraph 8 of the MOA we will notify you of the District's decision.

Your interest in this matter and the cooperation of your staff is appreciated. Questions or comments concerning this elevated case may be directed to Mr. Michael Davis of my regulatory staff at (202) 272-0201.

Sincerely,


Patrick J. Kelly
Brigadier General (P), U. S. Army
Director of Civil Works

Enclosure

HARTZ MOUNTAIN 404(q) ELEVATION

HQUSACE FINDINGS

**PREPARED BY CECW-OR
25 JULY 1989**

HQUSACE REVIEW FINDINGS HARTZ MOUNTAIN PERMIT ELEVATION

The purpose of this document is to present the findings of the Headquarters Corps of Engineers (HQUSACE) review of policy issues associated with a permit application before the New York District (District). This review was undertaken in accordance with the 1985 Memoranda of Agreement (MOAs) between the Department of the Army and the Environmental Protection Agency (EPA) and the Department of Interior (DOI).

I. BACKGROUND

On 4 August 1986 the Hartz Mountain Development Corporation requested Department of the Army authorization to discharge fill material into 97.41 acres of tidal wetlands within the New Jersey Hackensack Meadowlands District for the purpose of constructing a 3,301 unit residential housing development. Specifically, the project involves the discharge of approximately 950,000 cubic yards of fill material into wetlands dominated by common reed (*Phragmites communis*). A public notice describing the proposal was issued on 22 May 1987, and a public hearing was conducted in June of 1987. A number of comments both for and against the project were received in response to the public notice and hearing. Three Federal agencies, EPA, Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) all objected to the issuance of a permit for the proposed project.

Interagency coordination on the permit application proceeded for approximately 18 months during which time additional information was submitted by Hartz Mountain and their consultants. In July 1988 the District completed the preliminary permit decision process and determined that the project was not contrary to the public interest provided that Hartz Mountain comply with certain restrictions and conditions aimed at minimizing the environmental impacts of the project. Since the Federal resource agencies continued to object to permit issuance, a meeting was held with each agency in accordance with the procedures of the MOAs. As a result of these meetings, each agency provided detailed written comments on their specific concerns. In general each agency's concerns centered on the application of the 404(b)(1) Guidelines practicable alternative requirements, the District's contention that the wetland was of very low value, and the adequacy of the mitigation plan to offset environmental impacts. The District forwarded these comments to Hartz Mountain for response and/or rebuttal. After considering the information contained within the

administrative record, the District completed decision-making in January 1989. Again, the District determined that the permit should be issued. In response to the District's decision, EPA, FWS and NMFS requested meetings with the North Atlantic Division Engineer (NAD) to discuss the permit decision in accordance with Paragraph 6 of the MOAs. As a result of these meetings, NAD forwarded comments and suggestions to the District on 8 March 1989. The comments and suggestions concerned the language of four special conditions which NAD recommended be reworded to increase the viability of the mitigation requirements. The District incorporated these recommendations into the permit conditions and a decision to issue the permit was made on 28 March 1989. On 28 March 1989, EPA, FWS and NMFS were given written notice of the District's "Intent to Issue" the permit.

In accordance with the MOAs, in letters of April 24 and 25, the DOI and EPA, respectively, requested that the Assistant Secretary of the Army (Civil Works) [ASA(CW)] elevate the Hartz Mountain permit decision for higher level review. NMFS, while continuing to object to the project, did not request elevation. On 26 May 1989, ASA(CW), based on recommendations from HQUSACE, granted the DOI and EPA elevation request. ASA(CW) granted the request and forwarded the action to HQUSACE for national policy level review of 404(b)(1) Guidelines issues concerning mitigation and the analysis of practicable alternatives. The elevation request was not based on insufficient interagency coordination.

The information in the following sections presents the results of the HQUSACE review of the complete administrative record of the Hartz Mountain permit application. Clarification of information contained in the record was obtained through meetings with the applicant and associated consultants, the District and NAD staff, the FWS and EPA.

In terms of environmental protection, the 404(b)(1) Guidelines (Guidelines) form an essential component of the Corps' 404 regulatory program. The Guidelines (40 CFR 230) are the substantive environmental criteria to be used in evaluating the impacts of discharges of dredged or fill material. In accordance with the Corps regulations (33 CFR 320 - 330), a 404 permit cannot be issued unless it complies with the Guidelines. HQUSACE's review of this case focused on the policy issues concerning compliance with the Guidelines.

II. PRACTICABLE ALTERNATIVES

A key provision of the Guidelines is the practicable alternative test which provides that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse

impact on the aquatic ecosystem" [40 CFR 230.10(a)]. In this respect, if a 404 discharge may reasonably be avoided, "it should be avoided."

In addition to the basic alternatives test, 230.10(a)(3) establishes a rebuttable presumption against discharges into "special aquatic sites" for non-water dependent activities. A non-water dependent activity does not require access or proximity to or siting within a special aquatic site to fulfill its "basic purpose." Practicable alternatives to non-water dependent activities are presumed to be available and to result in less environmental loss unless clearly demonstrated otherwise by the applicant. The Hartz Mountain project (housing) is clearly a non-water dependent activity. This fact is well documented in the District's decision documents and has not been contested by the applicant. Therefore, the burden of proving that no practicable alternative exists is the sole responsibility of Hartz Mountain, not the District or resource agencies.

A prerequisite to evaluating practicable alternatives is the establishment of the "basic purpose" of the proposed activity. It is the responsibility of the Corps districts to control this, as well as all other aspects of the Guidelines analysis. While the Corps should consider the applicant's views and information regarding the project purpose and existence of practicable alternatives, this must be undertaken without undue deference to the applicant's wishes. These general issues were discussed and guidance provided in the HQUSACE findings for the "Permit Elevation, Plantation Landing Resort, Inc." dated 21 April 1989, a copy of which has been provided to all Corps divisions and districts. Much of the legal and policy guidance in that document is generally applicable to this case, and need not be repeated herein.

In this case, Hartz has clearly stated that their project purpose was to construct 3,301 units of residential housing in the IR-2 area. In fact, a July 86 "planners report" submitted with the permit application stated that "a site geographically located outside the Meadowlands District would not fulfill the 'basic project purpose' of 401(b)(1) [sic] of the Permit program." The IR-2 site is an area designated by the Hackensack Meadowlands Development Commission's (HMDC) master plan as "Island Residential" housing. Hartz acquired ownership to 194 acres of the 238 acre site in 1979. Based on concerns of the District, Hartz ultimately modified the project purpose to expand the potential project area to New Jersey Housing Region 1 (Hudson, Passaic and Bergen Counties). However, Hartz asserts that its purpose remains the construction of a large scale (3,301 units) housing development. While it appears that the District made a conscious effort to view the project from a more basic purpose perspective, this was not the approach taken by Hartz in evaluating potential alternative sites [404(b)(1) evaluation page 5]. This was verified by Dr. Harvey

Moskowitz, Community Planner and consultant for the applicant, who conducted the analysis of alternative sites. This approach seriously flaws the validity of the alternatives analysis and is inconsistent with the Guidelines. Limiting project sites to those that can facilitate a 3,301 unit development may preclude the evaluation of otherwise practicable alternatives. Acceptance of this very restrictive alternatives analysis negates all attempts to otherwise more generically define basic project purpose. In this case, in the "Summary Discussion of the Availability of Practicable Alternatives" [404(b)(1) evaluation page 13] the District states that "There are no practicable alternative sites that are reasonably available to the applicant for the proposed construction activities within the Northeastern New Jersey Region which would meet the applicant's project purpose and the stated need for the project" (emphasis added).

The Guidelines alternatives analysis must use the "basic project purpose", which cannot be defined narrowly by the applicant to preclude the existence of practicable alternatives. On the other hand, the Corps has some discretion in defining the "basic project purpose" for each Section 404 permit application in a manner which seems reasonable and equitable for that particular case. It is recognized that this particular case may be unusual, because it involves unique issues of zoning and land use planning by the HMDC and the apparent scarcity of undeveloped land in the Region 1 area. However, federal concerns over the environment, health and/or safety will often result in decisions that are inconsistent with local land use approvals. In this respect, the Corps should not give undue deference to HMDC or any other zoning body.

At the request of the District, Hartz conducted a search for potential alternative sites in Region 1. Ultimately, 43 sites were identified and evaluated by Hartz's consultant, Dr. Moskowitz. Each site was evaluated based on a set of criteria developed by Hartz. The District reviewed the criteria and concluded that they were "appropriate for reviewing sites for practicability with regard to the Section 404(b)(1) Guidelines." While this approach may be an acceptable method for evaluating alternative sites, we are concerned that some of the criteria were biased to the extent that only sites that meet the applicant's purpose were considered. For example, alternative sites less than 50 acres were not considered practicable because they would not facilitate a 3,301 unit development and therefore "achieve the applicant's stated project goals" [404(b)(1) evaluation page 8]. On this subject the District states:

"Based on the applicants goal's for a profit, it must be presumed that the size of a potential alternative site is of primary importance. A smaller parcel of land could be considered a practicable alternative for a residential housing project although it could not accommodate a

project nearly the size that is the subject of the present permit application." [404(b)(1) evaluation page 7]

In this case the District's administrative record gives the appearance of having given too much deference to the applicant's narrowly defined project purpose. This may have very well resulted in the exclusion of otherwise practicable alternatives.

The District goes to great length to explain the criteria utilized by the applicant and the justification for each [404(b)(1) evaluation page 8]. However, no information is provided in the decision documents on the specific sites, the ratings they received, or why they failed as practicable alternatives. At a minimum, a table of the sites listing this information should have been included in the 404(b)(1) evaluation. In regard to the actual evaluation of the 43 potential sites, we observed at least a few discrepancies in the data submitted by the applicant. For example, two adjacent sites (4 and 5) were given different ratings on accessibility to public transportation. Of more significance is the fact that the IR-2 site was not evaluated against the criteria used for the other sites. Our estimates indicate that the site may in fact not pass as a practicable alternative based on the applicant's own system for analyzing alternatives. Failing to evaluate the project site when using this type of evaluation system is inappropriate and indicates that the applicant has not rebutted the presumption against the discharge of fill material into special aquatic sites.

Throughout the decision documents the District mentions the need for housing in the Region and references New Jersey Council on Affordable Housing (COAH) information [Statement of Findings (SOF) page 14, 404(b)(1) evaluation page 11, Environmental Assessment (EA) page 2]. While the need for all types of housing in the Region may be very real, we are concerned that the administrative record does not clearly demonstrate the existence of such a need. The COAH information focuses on the need for low to moderate income housing and this portion of the housing need is not questioned. However, it appears that the District relied on the COAH data to substantiate the need for housing above the moderate income level. Admittedly the COAH information translates an actual need of 42,534 low/moderate units to an overall figure of 213,000 housing units. This is based on the number of market rate units that may be required to support the actual low/moderate housing needs. Use of this information to justify an overall housing need may not be appropriate. Further, reference to a COAH letter on page 11 of the 404(b)(1) evaluation is misleading if not inaccurate. The District states:

"The 27 September 1988 correspondence from the State of New Jersey's Council on Affordable Housing (COAH) substantiates the applicant's showing that no reasonably available

practicable alternative sites to the proposed development exist by focusing on the 'compelling need' for locating the housing in Secaucus at the Mill Creek site, at the densities mandated by the Hackensack Meadowlands Development Commission zoning regulations."

What the referenced COAH letter really states is that there is a need for 42,534 low to moderate income units and that it may take four market units per low/moderate unit to support such housing. In regard to the "compelling need" at the Mill Creek site (IR-2), the COAH letter states:

"The COAH supports the development of affordable housing units at the Mill Creek site as a meaningful step toward addressing the compelling need for such housing in Secaucus and Region 1." (emphasis added)

The proposed project will provide a maximum of 330 (10% of total) low to moderate income units at the IR-2 site. The administrative record and discussions with the applicant indicate that it is likely that only one half of the 330 units will actually be built at the IR-2 site. The decision documents consistently state that 10% to 20% of the project will be dedicated to low to moderate housing. This is clearly not the case and the record should reflect such. Further, the need for housing of any type and the zoning requirements of HMDC cannot override the Guideline's requirement to select the least damaging practicable alternative.

CONCLUSIONS:

1. For purposes of this case only, the basic project purpose should be defined as "construction of a large scale, high density housing project in the Region 1 area." That does not necessarily mean a project of 3,301 units in one contiguous location as proposed by Hartz. The District should determine the minimum feasible size, circumstances, etc., which characterize a viable large scale, high density housing project. The District may require the applicant to provide information that facilitates completion of this determination. Clearly Hartz has previously determined that a development of 2,748 units would be feasible. It may very well be that a smaller development (i.e., < 2,748 units) would also be viable. The permit decision documents should be corrected to reflect the project purpose noted above (i.e., references to satisfying the applicant's project purpose should be deleted).

2. Once the minimum feasible size, etc. has been determined in accordance with (1.) above, a revised alternative analysis should be completed by Hartz. The District must carefully evaluate the criteria used to compare alternative sites. The alternatives analysis must be objective and balanced, and not be used to provide a rationalization for the applicant's preferred result (i.e., that

no practicable alternative exists). The IR-2 site must be included in the alternatives evaluation and added to the administrative record.

3. The alternative site data should be made part of the decision documents. This should include a listing of all sites, their evaluation scores and a summary of the final determination of practicability.

4. Information on the need for housing must be accurately cited in the decision documents and additional information on the overall housing need (i.e., above moderate level) should be provided.

III. MITIGATION¹

As previously discussed, the Guidelines establish the substantive environmental criteria to be applied in the evaluation of potential impacts associated with discharges of dredged or fill material into waters of the United States. In addition to the "practicable alternative" test in 230.10(a), the Guidelines state that a discharge cannot be approved, except as provided under 404(b)(2), if it results in significant degradation of waters of the United States and, unless all appropriate and practicable steps have been taken to minimize potential adverse impacts on the aquatic ecosystem [230.10 (c) and (d)]. These form an important part of the current approach of requiring mitigation in the 404 regulatory program. Mitigation is also a required consideration under the Corps' Public Interest Review [33 CFR 320.4(r)].

As a general rule, once the least damaging practicable alternative has been selected, appropriate and practicable steps must be taken to mitigate the project impacts. Determining the amount and type of mitigation is often difficult at best. In particular, compensatory mitigation for wetlands loss engenders a considerable amount of controversy and discussion among regulatory and resource agencies and the development community. In order to improve consistency, Army and EPA are currently working on a 404 mitigation policy.

Pending the promulgation of the joint mitigation policy, the Corps should require mitigation measures which will provide compensation, to the maximum extent practicable, for all values and functions that are lost or adversely impacted as a result of

¹The discussion of mitigation that follows, and any subsequent requirements, have no bearing on the previous discussion and requirements concerning the availability of practicable alternatives.

a proposed development in waters of the United States. As with other permit specific Guidelines and public interest decisions, a determination of mitigation requirements will be made by the Corps. Such decisions should be made after appropriate consultation with Federal and state resource agencies. The Corps decision must be made in a manner that recognizes the ecological functions of special aquatic sites, in this case wetlands.

A prerequisite to developing a wetlands compensatory mitigation plan is the establishment of values and functions of the existing wetland system. Without the benefit of baseline information, the permit decision-maker cannot determine an appropriate mitigation level to find compliance with the Guidelines. As a matter of policy, the Corps should not make permit decisions before obtaining the necessary and appropriate information on the value of the specific resource that would be lost to a proposed discharge of dredged or fill material if the permit is granted. This information may be obtained from the applicant, in-house studies, technical assistance from experts at the Corps Waterways Experiment Station (WES) or universities and previously published reports to mention only a few sources. It is incumbent upon the Corps to review the data carefully to ensure that the information is scientifically sound and can be supported if challenged.

In the Hartz Mountain case an extensive mitigation "concept" was proposed by the applicant. The District relied heavily on the potential success of this concept in reaching a decision to issue the permit. The basic premise of the Hartz mitigation concept was that the existing wetland system was highly degraded and of very low value. In this regard, Hartz maintained that they could enhance low value wetlands (both on-site and at two off-site locations) to a point where they could compensate for the direct loss of 97.41 acres. This assumption is based on a presumed "successful" mitigation project currently under way by Hartz on another part of the IR-2 site. This 63 acre mitigation project was required as part of a 1983 Department of the Army Permit to fill 127 acres of wetlands for commercial and industrial development. To date, no comprehensive evaluations have been completed to substantiate the claims of success on this mitigation project in terms of overall wetland values. For the current project, Hartz determined, using the FWS Habitat Evaluation Procedure (HEP), that they would have to enhance 93.74 acres of wetland and create 22.12 acres of open water canals to compensate for the loss of 97.41 acres. In addition, Hartz proposed 8.84 acres of "raised islands" for upland habitat and 9.40 acres of wetlands preservation.

Throughout the District's review of this case there as been significant disagreement between Hartz and the resource agencies on the actual value of the *Phragmites* dominated wetlands within the project area. The applicant's HEP, which was modified several times, concluded that the area has "relatively low existing fish

and wildlife and ecological value" (emphasis added) (EA page 6). An Advanced Identification field team from the District, EPA, FWS, NMFS, New Jersey Department of Environmental Protection and HMDC conducted a analysis of the Hackensack area using the Corps Wetland Evaluation Technique (WET). According to the District, the "draft WET documents have shown that the general regions encompassing the proposed development site and mitigation areas have high value potential for fish and wildlife, as well as the potential for having moderate to high general ecological value ..." (emphasis added) (EA page 6). The District has indicated that the WET analysis was not specific to the project area and was more of a "windshield" survey. EPA and FWS requests for permit elevation were based, in part, on the lack of definitive data on the values of the project and mitigation sites. FWS continues to question the validity of the applicant's application of the HEP (a FWS methodology) process.

Based on the decision documents for this application, it appears that the District generally concurred with Hartz on the low wetland value of the project area. Their position was based on the HEP evaluation and other environmental data collected by the applicant. However, the addition of Special Conditions (A.) and (D.) seem to indicate that their support was somewhat tacit and that questions on the wetland values remained. Condition (A.) requires Hartz to perform a site specific WET using environmental data from other agencies and the HEP generated information. This information is to be used to "confirm that the proposed wetland mitigation values compensate for the aggregate value of the wetland functions lost to the filling activities..." Special Condition (D.) requires Hartz to undertake a comprehensive sampling and data collection program which includes the establishment of baseline information for the project area. While Hartz has provided biological, chemical and physical data in the form of various surveys and studies conducted over the years, an updated comprehensive scientific report on the existing conditions does not exist in the administrative record. From a policy perspective, we believe that a valid Guidelines determination cannot be made without the benefit of an appropriate assessment of the pre-project values of the impacted resource. This information is equally important in making the Corps public interest determination. Further, this assessment should be completed before a final permit decision is reached. The level and sophistication of information required will vary from application to application depending on the size and nature of the project. It is recognized that in a small number of cases (e.g., unauthorized fill), baseline information may not be readily obtainable and best professional judgement must prevail. However, the piecemeal approach of assessing current wetland values and the reliance on such information as an "April 1986 comprehensive, natural resources survey of the subject parcels and the Hackensack River" are causes for concern.

According to Hartz, completing the proposed mitigation would result in a 20% net increase in overall estuarine value in the project area. For purposes of the mitigation discussion the project area is defined as the 231.51 acre universe of the IR-2 site and the two off-site mitigation areas. The existing estuarine value of the project area was estimated at 38% of its potential. A 20% increase would result in a project area that functions at 46% of its potential estuarine value. When the 97.41 acres of project fill, 8.84 acres of "islands" and the 9.40 acres of preservation are removed from the project area², 115.86 acres remain for marsh enhancement and open water. In order to obtain their estimated 20% overall increase Hartz will have to enhance the 115.86 acres to 91% of their potential estuarine value. In this respect, we are concerned about Hartz's, or anyone's, ability to increase values to such a level. If the open water is subtracted, the remaining 93.74 acres of wetland would have to be enhanced to 113% of its potential estuarine value. Clearly, this would not be possible. In either case additional acreage may be required to achieve the 20% net increase in values required.

Another issue that is of concern is the inclusion of "fringe" wetlands and open water in the mitigation plan. Over 33 acres of the mitigation credit consist of a series of canals and adjacent narrow strips (fringe) of intertidal plantings among 3,301 housing units. The overall wetland value of this part of the mitigation should be documented. The HEP evaluation looked at this area as one 33.85 acre tract and not as one that was dissected by a large residential development. The applicant's main purpose for this part of the plan may very well be aesthetics.

An issue that was initially discussed in the HQUSACE permit elevation recommendations to ASA(CW), was the proposed issuance of the Hartz permit prior to receipt of a detailed mitigation plan. In this case, permit conditioning appears sufficient to ensure that a detailed plan will be submitted for District approval prior to the discharge of fill material. However, at a minimum, the permit plans should have provided enough information to accurately reflect the work proposed (e.g., typical cross sections, etc.).

CONCLUSIONS:

1. Hartz should be required to complete a comprehensive baseline study of the IR-2 site, off-site mitigation areas, and the previous 63 acre mitigation site before a final permit decision is made. The District, in consultation with FWS, EPA and NMFS will determine the scope of the study and the methods used. The final call on the study will be the District's.

²Correctly, these areas were not counted by the applicant or the District in determining the amount of marsh enhancement required.

2. The District, not Hartz, should complete a site specific WET evaluation before making a permit decision. We strongly encourage the District to utilize experts from WES to undertake this task. Funding for work of this nature has previously been provided to WES by HQUSACE and initial discussions have confirmed the availability of the appropriate WES staff.

3. The wetland replacement value of the fringe wetlands and open water at the IR-2 site should be reevaluated. Documentation of its value should be included in the record.

4. Once information is obtained from the studies noted in paragraphs one through three above, a determination of the value of the existing *Phragmites* marsh and, as appropriate, the amount of compensatory mitigation required to compensate for the lost resource should be completed. Based on those determinations, a final permit decision should be made.

5. After completion of the above, if a decision is made to issue the permit, Hartz should be required to submit more detailed permit plans. While we do not expect final drawings, basic information such as access between islands at the IR-2 site and typical pre and post project cross sections at all mitigation sites should be included.

IV. GENERAL CONCLUSIONS

A review of the voluminous administrative record reveals the extensive amount of effort on the part of the District to evaluate this application. Severely understaffed and working in a difficult geographic area, they should be commended for their overall accomplishments in the regulatory program.

From the guidance presented in this document, the general conclusion should be drawn that the Army Corps of Engineers is serious about protecting waters of the United States, including wetlands, from unnecessary and avoidable loss. The Corps districts should interpret and implement the Guidelines in a manner that recognizes this. Further, the Corps should inform developers that special aquatic sites are not preferred sites for development and that non-water dependent activities will generally be discouraged in accordance with the Guidelines. When unavoidable impacts do occur, the Corps will ensure that all appropriate and practicable action is required to mitigate such impacts. The mitigation must be properly planned with stringent permit conditions to ensure that it accomplishes stated objectives. Compliance monitoring by Corps districts must be an integral part of this process.