



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 4 1990

OFFICE OF  
WATER

Honorable Robert W. Page  
Assistant Secretary (Civil Works)  
Department of the Army  
Washington, D.C. 20310-0103

Dear Mr. Page:

In accordance with the provisions of the Memorandum of Agreement (MOA) between the U.S. Environmental Protection Agency (EPA) and the Department of the Army under Section 404(q) of the Clean Water Act (CWA), I am formally requesting your review of the decision by Colonel Bruce A. Malson, District Engineer (DE), Jacksonville District (JD), to issue a Section 10/404 permit to Old Cutler Bay Associates (88IPG-20576). Colonel Malson's notice of intent to issue a permit for this project was transmitted by letter dated May 4, 1990, to Mr. Greer C. Tidwell, Regional Administrator (RA), EPA, Region IV. Issuance of the permit to Old Cutler Bay Associates (OCB) would authorize placement of fill material into 59.2 acres of wetlands adjacent to Biscayne Bay and Biscayne National Park, Dade County, Florida. The purpose of the wetland filling as stated by the applicant is to create uplands to facilitate the construction of a luxury residential housing/championship (Jack Nicklaus) golf course development.

After a thorough review of available information relevant to this case, we have determined that this case warrants elevation in accordance with the criteria in the MOA for elevation under Sections 5.b.1 and 5.b.3. We have determined that this referral meets the criteria in Section 5.b.3 regarding environmental issues of national importance requiring policy level review. Specifically, EPA believes that, as in the Plantation Landing Resort and Hartz Mountain Development Corporation permit applications, the Corps in reviewing this permit application has unduly deferred to the applicant's stated project purpose which is so narrowly defined as to preclude an adequate analysis of practicable alternatives. EPA is particularly concerned that the Corps' definition of project purpose in this instance appears contrary to the Corps guidance prepared as a result of the 404(q) actions on Plantation Landing and Hartz Mountain. EPA maintains that the Corps' determination that the project purpose be defined

as "an upscale residential/(Jack Nicklaus designed) championship golf course community in South Dade County" effectively precluded all potential practicable alternatives, which may have otherwise served the basic project purpose (which EPA considers, in this case, to be a residential community with a recreational amenity; however, EPA believes that with sufficient justification, a reasonable project purpose, in this case, may be a residential community with a golf course in order to ensure that the project is practicable in this particular market area). EPA believes that if the Corps method of defining project purpose in this case is applied locally or nationwide to all permits, it will result in the unnecessary and inappropriate restriction of the alternatives analysis and lead to erroneous final permit decisions as it did in this instance. Therefore, this aspect of the OCB permit determination constitutes an environmental issue of national importance requiring policy level review.

The criteria in Section 5.b.1 are also met based upon our findings that there has been a failure to resolve EPA concerns regarding compliance with the Section 404(b)(1) Guidelines, 40 CFR Part 230. Specifically, EPA believes that the presumption of available, less environmentally damaging practicable alternatives to the non-water dependent project has not been rebutted [230.10(a)]. EPA believes potential alternatives include construction of a project that satisfies the basic residential/golf course concept at a scale that does not require filling and construction activities waterward of the line established by EPA and Corps personnel delineating areas of stressed and unstressed wetlands (this line has been termed interchangeably as the "EPA development line" and "EPA's significant degradation line"; we will use the term assigned this line during the regulatory process and refer to it as the "EPA development line").

Before proceeding, I would note that EPA has been somewhat inconsistent in its communication with the Corps district and the applicant regarding whether the regional office would elevate this permit to Headquarters. I am personally committed to helping ensure that EPA clearly and timely apprise the Corps and permit applicants of the Agency's position so that any disagreements can be resolved expeditiously. However, EPA's communications were the result of several misunderstandings which, when later clarified, indicated concerns that had not been addressed. The Region immediately contacted the Corps when the misunderstandings were clarified. I believe that the Region's concerns are meritorious and warrant further review by Corps Headquarters.

### Environmental Concerns

The project as proposed would result in the direct loss by filling of 59.2 acres of wetlands and their associated values for

development purposes. The wetlands at the proposed development fill area can be segregated into two vegetative community types: 1) approximately 47 acres of highly stressed wetland system vegetated predominantly by the exotic Brazilian Pepper, with minor components of willow, sea ox-eye, leather fern, maidencane marsh and white mangrove; and 2) the remaining 12 acres which comprise a functional white mangrove swamp.

On November 3, 1988, an EPA, Region IV wetlands ecologist, with the assistance of two Jacksonville Corps Regulatory Division biologists, conducted an inspection of the OCB project site and jointly delineated in the field a flagged line locating the demarcation between functional white mangrove wetlands and stressed Brazilian Pepper wetlands landward of the functional mangrove wetlands. The biologists utilized recent aerial infra-red and large scale black and white aerial photography of the site and noted vegetative and soil conditions indicating frequency of hydrologic inundation and flushing on the wetland soil substrate in delineating this line. This line has since been designated the "EPA development line." The Division Commander has endorsed the "EPA development line" as a line separating these two vegetative communities in his OCB memorandum for record (page 2, 2.b.).

The fish and wildlife attributes of Brazilian Pepper invaded wetlands are not entirely understood. The Jacksonville Corps District, EPA Region IV and the local U.S. Fish and Wildlife Service office generally characterize this wetland community type as stressed and having lower fish and wildlife value compared to indigenous south Florida wetland communities such as white mangrove swamps, although these areas do provide other characteristic wetland functions including water quality maintenance and erosion and storm protection. EPA estimates that Brazilian Pepper canopy coverage exceeds 90% of the wetland area landward of the "EPA development line."

The 12 acres of mangrove wetlands proposed for filling waterward of the "EPA development line" are functional wetlands of significant value to Biscayne Bay. Approximately 4 acres of the proposed 12-acre mangrove fill area lie south and outside of the old agricultural berm (agri-berm) and have direct hydrological connection to Biscayne Bay through an existing mosquito ditch system. The remaining approximate 8-acre white mangrove area proposed for filling is located landward of the agri-berm. The fact that this 8-acre white mangrove wetland area was farmed in the 1950's, and has reduced tidal inundation through a 24-inch culvert in the existing agri-berm does not significantly diminish this wetland area's ecological value. Abundant fish populations, including predator and prey fish species, were observed by EPA biologists in the ditch system landward of the agri-berm during site inspections, indicating active fish passage through the 24-inch culvert located in the agri-berm.

The proposed 12-acre white mangrove fill area wetland is a monotypic stand of white mangrove with full canopy closure, with occasional red mangroves located adjacent to the mosquito ditches. Within the 8-acre white mangrove area proposed for filling landward of the agri-berm, scattered occasional Brazilian Pepper trees comprise less than approximately 5% of the wetland tree canopy aerial coverage. Review of aerial photographs and on-site inspections indicate that there has not been significant Brazilian Pepper encroachment into this area since 1984.

This 12-acre white mangrove area performs valuable water quality purification and sediment retention functions typically attributed to south Florida mangrove systems. These water quality enhancement functions are important to the maintenance of the ecology of Biscayne Bay, because the Bay is dominated by seagrasses and algae that require good water quality and abundant light penetration through the water column. Mangrove wetlands also appear to be sinks for nutrients and elements such as nitrogen and phosphorus. This attribute is important for maintaining the water quality of the adjacent Biscayne Bay, which receives nutrient-rich runoff due to previous upland and dredge/fill development. The mangrove wetlands proposed for filling also serve as valuable floodwater retention sites during periods of coastal flooding and thereby reduce floodwater encroachment onto developed uplands.

The role of coastal mangrove wetlands in providing detritus to support a complex estuarine food web which includes ecologically valuable species of invertebrates, fish and birds is well documented. The 12-acre white mangrove area, like other coastal mangrove systems, produces and exports plant materials that are essential components of the estuarine food web (although this is probably in the form of dissolved as opposed to particulate organic materials and is less frequent due to its reduced hydrology); provide cover, forage, and nursery habitat for fish and invertebrates; and stabilize the shoreline (Odum et al., 1982; Thayer et al., 1978).

White mangrove swamp areas such as the area proposed for filling provide valuable refuge, feeding, roosting and nesting area for numerous species of amphibians, reptiles, birds and small mammals. Odum et al., 1982 documented utilization of south Florida mangrove swamps by 24 species of amphibians and reptiles, 181 species of birds, and 18 species of mammals.

EPA is also concerned about the adverse impact of this proposal to Biscayne Bay from a cumulative perspective. Although the Corps considered potential cumulative impacts of this proposal, its analysis was based on the potential effects on the southern portion of the Bay and focused on the potential effect of this permit decision on future permit actions. EPA believes

an adequate cumulative impacts analysis for wetland filling adjacent to Biscayne Bay, however, must assess the cumulative impacts of past resource losses on not only the entire southern portion of the Bay, but also the remainder of the Bay. This type of cumulative impact assessment is imperative because northern and southern Biscayne Bay constitute an integrated ecosystem largely dependent on shoreline mangrove systems for maintenance of balanced indigenous floral and faunal populations. Significantly, 82% of the original acres of mangroves that once occurred in northern Biscayne Bay have been lost as a result of man-induced dredge/fill impacts (Harlem, 1979). Any additional permitting of filling of functional mangroves adjacent to south Biscayne Bay must therefore evaluate the effects of the proposed project in light of the serious losses to mangroves in the northern Bay area that have already occurred.

EPA is concerned with the precedential effect the OCB permit issuance might have on the successful implementation of the Southwest (SW) Biscayne Bay ADID project. The DE's public interest evaluation indicates that it is anticipated that the ADID will delineate wetlands generally suitable and unsuitable for filling and that generally the Corps will deny future requests to fill ADID wetlands designated by EPA and the Corps as unsuitable. The joint EPA-Corps ADID delineation of suitable versus unsuitable wetlands for development will be based primarily upon an evaluation of wetland function. EPA is concerned with the DE's conclusions regarding future ADID efforts subsequent to this permit decision because we do not agree that the area's reduced hydrology should prejudice conclusions regarding its overall ecological contribution and because it does not appear that Brazilian Pepper is encroaching into the 12 acre mangrove area. EPA believes that the Corps' authorization of the filling of 12 acres of functional white mangrove swamp for non-water dependent residential/golf course development would contravene governmental efforts to implement the SW Biscayne Bay ADID project.

### Section 5.b.3 Criterion

#### A. Definition of Project Purpose

The Corps' permit decision documents defined the project purpose as "an upscale residential/(Jack Nicklaus designed) championship golf course community in South Dade County. The project's basic purpose is to realize a reasonable profit by providing luxury country club-type housing to an affluent segment of the Miami area population." The applicant has stated (and the Corps has agreed) that satisfying this project purpose requires the minimum golf course acreage that Mr. Nicklaus will "signature" to sustain a selling price for a minimum number of lots/luxury residences to make the project economically viable.

EPA believes that the District Engineer and the Division Commander unduly deferred to the applicant's narrow definition of project purpose in reviewing this permit application. EPA believes that the project purpose used by the Corps in its evaluation was more restrictive than the basic project purpose and that the Corps did not independently evaluate the applicant's definition of the basic project purpose. Therefore, EPA contends that this restrictive project purpose may have effectively precluded practicable, less environmentally damaging alternatives which would have served the basic project purpose.

The Corps' deference to the applicant's project proposal is inconsistent with §404 (b)(1) Guidelines as interpreted by the Corps in its recent findings on the Hartz Mountain and Plantation Landing cases. EPA agrees with Corps findings in the Hartz Mountain and Plantation Landing cases, that while the Corps should consider the applicant's views and information regarding the project purpose, it is the Corps' responsibility to establish the basic purpose of the proposed activity without undue deference to the applicant's wishes.

EPA agrees with Corps findings on the Hartz Mountain case that the alternatives analysis must use a "basic project purpose" which cannot be defined so narrowly by the applicant as to preclude the existence of practicable alternatives, as it did in this particular case. EPA believes that basic project purpose that should have been the cornerstone of the alternatives analysis is simply a residential development with an accompanying recreational amenity; however, EPA believes that with sufficient justification, a reasonable project purpose, in this case, may be a residential community with a golf course in order to ensure that the project is practicable in this particular market area. In this case, instead of independently determining the basic project purpose, the DE and District Commander have apparently deferred to the applicant's definition of project purpose.

#### Section 5.b.1. Criterion

##### A. Practicable Alternatives

Section 230.10(a) of the Section 404(b)(1) Guidelines requires that no discharge of dredged or fill material 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. Furthermore, this alternatives test is applied more rigorously (i.e., alternatives are presumed to exist) for projects that are proposed to be located in special aquatic sites when the project is not water dependent, as is the case with this particular project proposal. Section 230.10(a)(3) of the Guidelines states that where the activity associated with a discharge into a

special aquatic site (such as a white mangrove swamp) does not require access or proximity to or siting 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.

EPA  
Project  
Purpose

The Corps' permit decision documents define the project purpose as "an upscale residential/(Jack Nicklaus designed) championship golf course community in South Dade County" and that "the project's basic purpose is to realize a reasonable profit by providing luxury country club-type housing to an affluent segment of the Miami area population." On the other hand, we believe that the project purpose is to construct a residential community with a recreational amenity; however, we believe that with sufficient justification, a reasonable project purpose, in this case, may be a residential community with a golf course in order to ensure that the project is practicable in this particular market area. EPA does not disagree that residential development in conjunction with a recreational amenity is a reasonable project purpose in this instance and would not contest or debate the applicant's desire for profit. However, we do not believe that terms such as luxury, upscale, or (Jack Nicklaus designed)/championship, are controlling, or that these terms should be accepted to rebut the presumption of the existence of available practicable alternatives. As a result, EPA believes that the alternatives analysis was biased towards the applicant's purpose and only addressed the potential for alternatives to provide optimal property use and not others that would result in the applicant's basic development concept at a scale that does not require filling of wetlands resources but that would still be profitable. It is EPA's position that the alternatives analysis should have been based simply on potential for alternatives to meet the basic project purpose (that is, providing residential housing with an accompanying recreational amenity; however, with sufficient justification, a reasonable project purpose, in this case, may be a residential community with a golf course in order to ensure that the project is practicable in this particular market area.) Therefore, we believe that the presumption that practicable and less environmentally damaging alternatives exist has not been rebutted by the applicant.

First, the use of the applicant's narrow project purpose by the Corps resulted in the use of criteria/parameters which appeared to favor the selection of the proposed site out of 21 sites and may have excluded, by setting too high a standard of practicability, other sites that otherwise may have indeed served the basic project purpose. For example, the size parameter was restricted by minimum acreage needed for a residential community with an accompanying (Jack Nicklaus)/championship golf course development. Likewise, the applicant's parameters limiting the number of owners, adjacency to industrial/commercial zoning

inappropriately limited the choice of upland properties of adequate size which may have served the general project purpose. In addition, considering that other sites were eliminated based on the wetlands parameter, EPA believes that a comparison of these sites with the OCB site should have been conducted to demonstrate that the OCB site was indeed the least damaging, practicable alternative. Lastly, EPA believes that the selection of the OCB site as the least environmentally damaging, practicable alternative (which necessitated the filling of 125 acres of wetlands as originally proposed) suggests that the project purpose may be incompatible with the environmental as well as development oriented constraints imposed by the geographic area of consideration.

Second, another potential alternative excluded from the Corps' restrictive alternatives analysis would be to reduce the project size to avoid impacting 12 acres of white mangrove swamp. EPA believes that, to date, reconfiguration of the project to accommodate construction of a smaller scale residential/golf course development on the 257 acres of OCB property landward of the "EPA development line" as a practicable, less environmentally damaging alternative has not been rebutted. This is the practicable alternative that EPA has supported since its letter to the Jacksonville Corps on November 30, 1988. Although I recognize that the project as originally proposed had undergone major reductions (the second of which resulted in a significant change in the configuration of both residential and recreational project elements) in the project footprint in response to wetlands concerns raised by resource agencies, the Corps was convinced by the applicant that construction of a residential/golf community within a 257 acre (210 upland and 47 wetland) project site footprint is not a practicable alternative. The District Engineer states that a smaller non Jack Nicklaus golf course would not generate the high costs for single family residential lots and golf club membership fees necessary to make the project economically feasible. This implies that the practicability determination was based upon the DE's deference to the applicant's definition of the specific project purpose, which is too narrowly defined. In addition, the Division Commander stated in his OCB Memorandum for Record (page 4, 3.c) his deference to the applicant's definition of project purpose in rejecting the practicable alternative of a smaller residential/golf course community located entirely landward of the "EPA development line." As more fully discussed in Section 5.b.3, such deference is inconsistent with the Section 404(b)(1) Guidelines as interpreted by recent Corps findings established in the Plantation Landing and Hartz Mountain 404(q) referral decisions.

Therefore, it is EPA's position that the presumption that practicable, less environmentally damaging alternatives are available has not been successfully rebutted by the applicant. I

would like to point out that the Corps permit decision document indicates that the Corps attempted to follow the sequence of avoiding, minimizing, and mitigating the environmental impacts of the project. However, EPA believes that since the presumption that less environmentally damaging, practicable alternatives exist has been not rebutted due to an analysis constrained by a project purpose too specific to the applicant's proposal, the sequence was not followed. EPA believes that it would be inappropriate, therefore, to approve the proposed project based upon the offered mitigation given EPA's finding that the applicant has not rebutted the presumption that practicable, less environmentally damaging alternatives exist.

Furthermore, EPA indicated by letter of November 13, 1989, to the Jacksonville Corps, that the proposed mitigation plan is inadequate to offset the impacts associated with the filling of the 12 acres of functional mangroves waterward of the "EPA development line." The proposed mitigation plan would be acceptable to EPA, however, if the activity proposed would not include the filling of the 12 acres of functional mangrove wetlands as part of the Corps permit.

In closing, I wish to summarize EPA's major concerns regarding the proposed Old Cutler Bay development. First, EPA believes that the alternatives analysis did not conclusively demonstrate that there are no practicable, less environmentally damaging alternatives, largely because the analysis was unnecessarily limited by the overly narrow definition of project purpose. This has precluded the existence of alternative locations and designs because of the significant restrictions in the alternative site analysis. Second, EPA believes that the Corps' conclusions with respect to the values of the wetlands at issue (specifically, the 12 acres of white mangrove swamp) are not supported by the current information and that the loss of this area would result in significant site-specific and cumulative losses to the Biscayne Bay aquatic ecosystem. EPA believes that the goal of the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation's waters is best served in this case by the Corps' reevaluation of its decision on Old Cutler Bay for the reasons stated above. We are concerned by matters of interpretation of the Guidelines as applied by the Jacksonville District and the potential for site specific and cumulative environmental impacts as well as impacts on the integrity of the Section 404 program. Therefore, I believe that the decision to issue the permit warrants additional review. I look forward to your response to our concerns. If my staff can be of further assistance during your evaluation of our request, please have your staff direct their questions to Mr. Kirk Stark in the Office of Wetlands Protection at 475-7799. Data which we used to reach our decision in this matter are available for review through Mr. Stark. You should also, of course, feel free to contact me at 382-5700, or

David G. Davis, Director of the Office of Wetlands Protection, at  
475-7791.

Sincerely yours,

*LaJuana S. Wilcher*

LaJuana S. Wilcher  
Assistant Administrator