

## Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

Colleen M. Castille Secretary

## **CERTIFIED - RETURN RECEIPT REQUESTED**

November 3, 2006

Martin County Board of County Commissioners c/o Kathy FitzPatrick, P.E. Coastal Engineer 2401 S.E. Monterey Road Stuart, Florida 34996

> Permit Modification No. 0269814-001-EM Permit No. 43-294982-9, Martin County St. Lucie Inlet Sand Bypassing (Five-Year Renewal)

Dear Ms. FitzPatrick:

The Department has completed a comprehensive review of the activities authorized under Joint Coastal Permit No. 43-294982-9, pursuant to Specific Condition No. 2 of that 15-year permit. The Department has determined that a minor modification to the permit is necessary to ensure that all activities are conducted in accordance with current revisions of Chapters 161 and 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.), as well as updated Department policies and guidelines. The permittee, Martin County, may continue sand bypassing activities under the existing permit and permit modifications including the changes indicated below. The proposed permit modification includes the addition of a nearshore hardbottom monitoring plan at the beach disposal location, a revised physical monitoring plan, the introduction of shorebird monitoring conditions and supplemental turbidity monitoring stations to support plume analysis.

#### **Permit History**

On September 9, 1996, Martin County applied for a long-term permit to conduct periodic maintenance dredging of sand from the interior flood shoal, sedimentation basin and navigation channel of St. Lucie Inlet and bypass the sand to the beaches of Jupiter Island. The Department issued **Permit No. 43-294982-9** for this project on February 20, 1997, under the newly adopted Joint Coastal Permit guidelines. Dredged sand is to be placed within a beach template at erosional hotspots along roughly 13 miles of shoreline between the inlet's south jetty and the southern limits of the Town of Jupiter Island's beach nourishment project (DEP Permit Nos. **43-113908-9**, issued October 10, 1986, and **DBS 910275**, issued June 19, 1991). The Department issued a Notice to Proceed for the bypassing project on August 28, 1998, and by June of 1999

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 2 of 19

approximately 714,000 cubic yards of sand had been placed upon the beach between R-72 and R-84.

On February 20, 1997, Variance No. **VE-43-714** was issued in association with Permit No. 43-294982-9. Part of the project site lies within Outstanding Florida Waters fronting St. Lucie Inlet State Park and the Hobe Sound National Wildlife Refuge. Rule 62-4.242(2)(a)2.b., F.A.C., requires a permittee to meet background turbidity levels at the edge of a 150-meter mixing zone. The rule was waivered to allow a turbidity increase of up to 29 NTUs above background at the edge of the mixing zone.

On April 29, 1999, Permit No. 43-294982-9 was modified to allow a one-time only extension of construction into the marine turtle nesting period by 15 days, through May 15th, 1999. A second modification was issued on July 20, 1999, to allow one-time dredging of finger canals connected to the intracoastal waterway. Several of these navigational accesses along the Intracoastal Waterway experienced shoaling at their entrances, apparently due to prop scour caused by the heavy barge traffic associated with the project. In order to clear the sites, the permittee dredged the canal entrances and placed the material in the Florida Inland Navigation District (FIND) M-5 containment area. The maximum depth of dredging was -5.0 feet MLW. The volume of material dredged was approximately 5,000 cubic yards.

On February 8, 2002, the Department issued Permit No. **0186991-001-JC** to the Town of Jupiter Island. This permit succeeded Permit Nos. 43-113908-9 and DBS 910275, which expired in 1996, and continues the town's nourishment program that was first initiated in 1973. The template was designed to operate on a seven (7) year cycle; however, accelerated erosion during the hurricanes of 2004 and 2005 led to the latest nourishment in the spring of 2006.

On May 18, 1995, an application was made by the U.S. Army Corps of Engineers (USACE) for maintenance dredging of the inlet channel, with nearshore disposal to -20 feet (NGVD), under File No. **0129368-001-JC** (initially processed as File No. **43-271204-9**). The Department issued a Notice of Intent to Issue the joint coastal permit in 1996, but it was not accepted by the USACE. The USACE withdrew their request for the 25-year permit following the 1997 issuance of Permit No. 43-294982-9 to Martin County, which is being modified herein. The USACE is now able to work under the County's permit as a contractor.

Between July and October 2000, the USACE dredged approximately 220,000 cubic yards of sandy material from the impoundment basin (and Cut 1) and placed it in the nearshore between monuments R-88 and R-99.

On April 18, 2001, the Department issued Permit No. **0129368-002-JC** in accordance with the St. Lucie Inlet Management Study, adopted by the Department in 1995. The five-year permit authorized a number of inlet improvement activities, including the excavation (deepening) of the

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 3 of 19

existing impoundment basin, extension of the south jetty, and elevation and sand tightening of the north jetty. All sand and excavated rock was to be placed in an offshore disposal site.

On May 2, 2001, Variance No. **0129368-003-EV** was issued for a mixing zone of 4000 feet, with fixed monitoring locations that were alternated based on tidal conditions. On the same date, Permit Modification No. **0129368-004-JC** authorized 24-hour use of a clamshell dredge, initially restricted to daylight hours due to manatee concerns.

On November 1, 2001, Permit Modification No. **0129368-005-JC** was issued. This modification to Permit No. 0129368-002-JC authorized maintenance dredging of the federal entrance channel, and nearshore disposal of dredged sand between DEP Monuments R-89 and R-108 from both the channel and sediment basin. Approximately 300,000 cubic yards of material was subsequently placed in the nearshore at this location.

In 2002, the County applied for a modification (File No. **0129368-006-JC**) to add maintenance dredging of the Atlantic Intracoastal Waterway to this permit in order to increase the amount of material placed along the southern shoreline. The permittee did not reply to a request for additional information for over a year, and withdrew the application on February 19, 2004, at the suggestion of Bureau staff.

On December 5, 2002, Permit No. 0129368-002-JC was modified to authorize emergency dredging under Permit Modification **0129368-007-JC**. This modification allowed one time only removal of a 10,000 cubic yard shoal at the intersection of the Intracoastal Waterway and Okeechobee Waterway using the USS Currituck (a small hopper dredge).

On August 24, 2005, Permit Modification No. **0129368-008-EM** approved one final emergency dredging of the impoundment basin with placement in the nearshore, below mean high water (MHW). The permittee did not utilize this authorization because the U.S. Army Corps of Engineers (USACE) was subsequently allocated additional funds to perform the maintenance dredging with beach placement above MHW under Permit No. 43-294982-9.

Recent surveys identified the stretch of coast between DEP reference monument R-59 and R-69 as the location that would benefit most from beach nourishment. This area was last nourished in 1997 by the Florida Inland Navigation District (FIND) under Permit No. **43-276327-9**, which was issued on November 18, 1996. FIND placed approximately 625,000 cubic yards of material on the beach from monuments R-59 to R-65 and R-75 to R-80. Sand containing less than ten (10) percent fines (i.e., passing through the #200 sieve) was selectively chosen from the MSA M-5 dredged material management site.

#### Justification/Necessity

The St. Lucie Inlet impoundment basin has performed as designed since the latest dredging event in 2002 to deepen the basin under Permit No. 0129368-002-JC. Since then, the basin has filled

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 4 of 19

and the shoal is now spreading south, blocking part of the entrance channel. Channel markers have been realigned at the direction of the U.S. Coast Guard to avoid the shoal, but channel closure in the near future is very likely unless dredging is performed. The U.S. Army Corps of Engineers is currently scheduled to begin maintenance dredging in November 2006, under the auspices of Martin County according to Permit No. 43-294982-9. However, Specific Condition No. 2 requires completion of a comprehensive review prior to commencement of construction. The review is complete, and the revisions included in this administrative modification are considered necessary for the permit to reflect current Department rules, policies and guidelines. Martin County has accepted the revisions below so that the USACE may proceed with the planned maintenance dredging.

#### **Staff Assessment**

The following paragraphs describe the topics associated with substantial alterations to the permit that the Department feels are necessary following the comprehensive five-year review.

## Nearshore Hardbottom

An extensive nearshore hardbottom community exists immediately south of St. Lucie Inlet and north of DEP monument R-87. Bathymetry obtained in 2005 and aerial photographs taken in 2003 indicate that the rock outcrops emerge between 250 feet and 1000 feet seaward of the mean low water (MLLW) line (-1.14 feet NGVD), and can extend seaward for thousands of feet. When the permit was first issued, the Department accepted assurances from the applicant that the beach template could be designed such that the hardbottom would not be impacted (i.e., covered) by the equilibrium toe of fill. The Department has had increasing experience with nourishment projects and their potential to impact nearshore reef beyond the theoretical equilibrium toe. Staff now feels that pre and post-construction monitoring of the hardbottom in the vicinity of the current template (R-59 to R-69) is warranted. A hardbottom monitoring plan has been reviewed, approved and is attached to this modification. Given the historically poor water clarity south of the inlet, several contingency actions are considered in the hardbottom monitoring plan to help ensure that some level of useful information is obtained when visibility is persistently low. For future bypassing events, a change in the transect locations may be necessary because placement locations may change. Thus, the submittal of an updated monitoring plan is required prior to issuance of the Notice to Proceed.

## Turbidity Variance

Variances to Rule 62-4.242(2)(a)2.b., F.A.C., to allow an elevation of the water quality standard for turbidity within Outstanding Florida Waters, had been made in association with several older permits for beach projects. Subsequent review of this practice revealed that other legal citations maintain that water quality standards must be achieved outside the mixing zone (e.g., 62-302.500(2)(a), F.A.C.). Therefore, Variance No. VE-43-714 is not sufficient basis to maintain a turbidity compliance threshold of 29 NTUs above background at the edge of the mixing zone. However, for short-term permits the Department has typically honored the intent of such variances by allowing the temporary elevation to Class III (non-OFW) standard at the edge of the mixing zone until the variance expiration date. Nonetheless, because the

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 5 of 19

comprehensive review detailed in this permit was designed to bring all practices into accordance with current rules and policies, the Department will consider Variance No. VE-43-714 void as of January 1, 2008. This will allow the 2006 bypassing event to proceed without delay under the old variance. After that event, the permittee will need to meet background turbidity levels outside the 150-meter mixing zone. If this cannot be achieved, the permittee may apply at any time for a variance from Rule 62-4.244(5)(c), F.A.C., to allow an expanded mixing zone. To justify the extent of an expanded mixing zone, the Department is requiring supplemental turbidity measurements during the upcoming dredging event(s).

## Physical Monitoring

The Department determined that the hydrographic monitoring requirements in Monitoring Condition No. 2 were inconsistent with current guidelines. A new physical monitoring plan has been reviewed, approved and is attached to this modification.

## **Shorebird Monitoring**

Monitoring conditions designed to protect nesting shorebirds will be implemented as recommended by the Florida Fish and Wildlife Conservation Commission (FWC). It is now standard Department policy to include such conditions in beach nourishment permits and is required for consistency under the migratory bird act. Often, the work can be accomplished by the same individual that conducts the sea-turtle monitoring after that person has received appropriate training.

The project description shall be revised as follows (strikethroughs are deletions, <u>underlines</u> are additions):

### **ACTIVITY DESCRIPTION:**

The activity is to perform the periodic bypassing of sand from the interior flood shoal, sedimentation basin, and navigation channel of St. Lucie Inlet to the beaches of Jupiter Island. Dredge material will either be immediately placed at the disposal site or stored temporarily in the Florida Inland Navigation District's MSA-M5 dredged material management site. Storage at the site would take place for dredging events when it would be necessary to avoid beach placement during marine turtle nesting season. Beach disposal will be authorized from the inlet's south jetty (DEP monument R-45) to the south limits of the Town of Jupiter Island's beach restoration project identified under Permit No. 0186991-001-JC (approximately R-117). The specific location of beach placement within this area will be determined prior to each event. Sand will be bypassed to areas most in need of sand based on monitoring surveys.

The specific conditions shall be revised as follows:

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 6 of 19

#### **SPECIFIC CONDITIONS:**

- 1. Prior to commencement of each sand bypassing event, the permittee must obtain a written notice to proceed from the Department. The following items are required prior to issuance of the notice to proceed.
  - Prior to issuance of the notice to proceed the permittee shall submit two a. copiesOne (1) paper copy and one (1) electronic copy of detailed final construction plans and specifications for all authorized structures or excavation, including all appurtenant structures and utilities. These documents shall be signed and sealed by the design engineer, who must be registered in the State of Florida, and shall bear the certifications specified in Rule 62B-41.007(4), F.A.C. For plans created by the U.S. Army Corps of Engineers (USACE), only the signature of a professional engineer (P.E.) registered in any state is necessary to certify the plans. The plans and specifications shall include a description of the beach construction methods to be utilized and drawings and surveys which show all work spaces (e.g. anchoring area, pipeline corridors, staging areas, boat access corridors, etc.) to be used for this project. The drawings shall include mapping of any significant natural resources located in and within 1,000 feet of the work spaces and a detailed description of any significant natural resources within these areas. Significant natural resources include hardbottom areas, rock outcroppings, and algal and seagrass beds. This submittal shall also include a discussion of the feasibility of using alternate corridors and staging areas that cross less significant habitat.
  - b. The requisite fee for (subsequent) maintenance dredging required by Rule 62B-41.0085, F.A.C.

    For each sand bypassing event, prior to commencement of construction, the permittee shall submit the names and qualifications of the individuals familiar with beach construction techniques and turbidity monitoring who shall be present at the sand disposal sites at all times when fill material is discharged onto the beaches. These individuals shall serve as site supervisor and shall have authority to alter construction techniques or shut down the dredging or beach construction operations if turbidity exceeds 29 NTUs above natural background levels outside of the designated mixing zone. Any individual who performs this function shall be approved by the Department before beginning to serve in this capacity.
  - c. An update to the attached Nearshore Hardbottom Monitoring Plan to be reviewed and approved by the Department. See Monitoring Condition No. 3

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 7 of 19

- 2. Every <u>five (5)</u> years from the date of issuance of the final permit<u>or</u>, <u>subsequently</u>, the last comprehensive review, the permittee shall make a written request for the Department to<del>will</del>-conduct a comprehensive review of the authorized activities and determine if work may continue under the existing permit. If changes to the permit and the conduct of the authorized activities are required, then a minor modification of the permit shall be required. At the time of review, the applicant shall provide any additional information that the Department requests in order to assess the effects of the project. Work may not commence until after the permittee receives a written authorization stating that the permittee may continue sand bypassing activities under the existing permit or receives a formal minor modification of the permit.
- 3. For each sand bypassing event, prior to commencement of construction, the permittee shall submit the names and qualifications of the individuals familiar with beach construction techniques and turbidity monitoring who shall be present at the sand disposal sites at all times when fill material is discharged onto the beaches. These individuals shall serve as site supervisor and shall have authority to alter construction techniques or shut down the dredging or beach construction operations based on the turbidity monitoring results. Any individual who performs this function shall be approved by the Department before beginning to serve in this capacity.

A monitoring program shall be conducted in accordance with the minimum specifications described in the hydrographic monitoring section below. All monitoring data required under the program and an engineering report summarizing the monitoring results and project performance shall be submitted to the Bureau of Beaches and Coastal Systems within 90 days of completion of each annual survey.

- 7. No-final permit for the beach nourishment shall be issued and no work shall be conducted until and unless the Department issues a Final Order of Variance from Rule 62-4.242(2) (a)2.b., F.A.C. The variance would allow a temporary elevation of turbidity, not exceeding 29 nephelometric turbidity units (NTUs) above background conditions, within Outstanding Florida Waters (OFW) at the edge of a 150 meter mixing zone, along the beachfront of St. Lucie State Park and the Hobe Sound National Wildlife Refuge. After January 1, 2008, the original variance will not be considered valid. The permittee shall apply for a new variance from Rule 62-4.244(5)(c), F.A.C., to define the boundaries of an expanded mixing zone if previous monitoring reveals that the permittee cannot practicably achieve background turbidity levels at the edge of a 150-meter mixing zone within OFW.
- 11. In order to ensure that marine turtles are not adversely affected by the

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 8 of 19

construction activities authorized by this permit, the permittee shall adhere to the following conditions:

- b. If work associated with this permit is performed during the early part of marine turtle nesting season (March 1 to April 30), or during the latter portion of the marine turtle nesting season (November 1 through November 30) the following marine turtle protection measures shall be implemented:
  - 10) No construction activity may commence on any previously undisturbed section of adjacent beach more than 50 feet from the active work site until completion of the marine turtle survey each day unless the permittee has made provisions for nighttime marine turtle surveys of the area prior to any work, including movement of equipment or pipes, in that area.
- c. A pre-work conference shall be held between representatives of the contractor, the permittee, the individuals responsible for all nest marking and manipulation and the Department. At least <u>710</u> days advance notice shall be provided prior to conducting this meeting.
- An annual written report containing; compaction measurements, results of g. escarpment surveys, daily surveys enumerating nesting activity, nesting success rates, hatching success of all relocated nests, hatching success of a statistically valid sample set of *in situ* nests, dates of construction, names of all personnel involved in marine turtle activities and any actions taken by the permittee regarding removal of escarpments and tilling for compaction shall be submitted to the FWC Imperiled Species Management Section Department. A report shall be provided to the FWC-ISMS Department for the year of construction and the two consecutive marine turtle nesting seasons immediately following the construction year. Each report shall be provided to the FWC-ISMS<del>Department</del> by January 15 of the year<del>December 31,</del> after the completion of each nesting season that surveys are conducted in association with this permit. All annual turtle-related reports shall be submitted to the FWC Imperiled Species Management Section, 620 South Meridian Street, Tallahassee, Florida 32399-1600, with copy to the FWC Tequesta Field Office, PO Box 3478, Tequesta, Florida 33469FDEP, 3900 Commonwealth Boulevard, MS-245, Tallahassee, Florida 32399-3900.
- 12. The permittee shall comply with the following manatee protection construction conditions:

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 9 of 19

- f. Any collision with and/or injury to a manatee shall be reported immediately to the Florida Marine Patrol at 1-800-DIAL FMP (1-800-342-5367). Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-232-2580) for north Florida or Vero Beach (1-772407-562-3909) in south Florida.
- Temporary signs concerning manatees shall be posted prior to and during g. all construction/dredging activities. All signs are to be removed by the permittee upon completion of the project. A sign measuring at least 3 ft. by 4 ft. which reads *Caution: Manatee Area* will be posted in a location prominently visible to water related construction crews. A second sign should be posted if vessels are associated with the construction, and should be placed visible to the vessel operator. The second sign should be at least 81/2" by 11" which reads Caution: Manatee Habitat. Idle speed is required if operating a vessel in the construction area. All equipment must be shutdown if a manatee comes within 50 feet of operation. Any collision with and/or injury to a manatee shall be reported immediately to the Florida Marine Patrol at 1-800-DIAL FMP (1-800-342-5367). The U.S. Fish and Wildlife Service should also be contacted in Jacksonville (1-<del>904-232-2580) for north Florida or</del> in Vero Beach (1-<u>772</u><del>407</del>-562-3909) for south Florida.
- 13. If sediments will be transported by barge to the Peck Lake transfer site, the applicant shall contact The <a href="FWC Imperiled Species Management">FWC Imperiled Species Management</a> Section Department's Bureau of Protected Species Management to determine if additional special conditions for the protection of manatees are necessary. Additional conditions may include but are not limited to; a dedicated onboard manatee observer during all in-water work or transport of sediments and no nighttime sediment transport by barge.
- 15. In order to ensure that shorebirds are not adversely affected by the construction activities authorized by this permit, the permittee shall adhere to the following conditions:
  - a. Shorebird Monitors. Shorebird surveys should be conducted by trained, dedicated individuals (Shorebird Monitor) with proven shorebird identification skills and avian survey experience. Credentials of the Shorebird Monitor will be submitted to the Florida Fish and Wildlife Conservation Commission (FWC) Regional Biologist (South Region, 561-625-5122) for review and approval. Shorebird Monitors will use the survey protocols below.
  - b. **Nesting Season Surveys.** Shorebird Monitors should review and become

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 10 of 19

familiar with the general information and data collection protocols outlined on the FWC's Beach-Nesting Bird Website
(http://myfwc.com/shorebirds/). An outline of what data should be collected, including downloadable field data sheets, is available on the website.

- nesting season is generally 1 April 1 September, but some nesting may occur through September. In addition, the imperiled snowy plover (Charadrius alexandrinus) may nest as early as February along the west coast and panhandle of Florida. Nesting season surveys shall begin on April 1 (or February 15 in snowy plover habitat) or 10 days prior to project commencement (including surveying activities and other pre-construction presence on the beach), whichever is later, and be conducted daily throughout the construction period or through August if no shorebird nesting activity is observed.
- ii. Nesting season surveys shall be conducted in all potential beachnesting bird habitats within the project boundaries that may be impacted by construction or pre-construction activities during the nesting season. Portions of the project in which there is no potential for project-related activity during the nesting season may be excluded.
- iii. Surveys for detecting new nesting activity will be completed on a daily basis prior to movement of equipment, operation of vehicles, or other activities that could potentially disrupt nesting behavior or cause harm to the birds or their eggs or young.
- iv. Surveys should be conducted by walking the length of the project area and visually inspecting, using binoculars or spotting scope, for the presence of shorebirds exhibiting breeding behavior. If an ATV or other vehicle is needed to cover large project areas, the vehicle must be operated at a speed <6 mph, shall be run at or below the high-tide line, and the Shorebird Monitor will stop at no greater than 200 meter intervals to visually inspect for nesting activity.
- v. Once breeding is confirmed by the presence of a scrape, eggs, or young, the Bird Monitor will notify the Regional Nongame
  Biologist of the FWC (Attachment 6) within 24 hours. All breeding activity will be reported to the Beach-Nesting Bird website within one week of data collection.

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 11 of 19

- vi. Observations of non-breeding shorebirds should be reported to the Shorebird-Seabird Occurrence Database, as described below.
- c. Non-Breeding Shorebird Surveys. Data collected on non-breeding shorebirds should be compatible with, and reported to, the Shorebird-Seabird Occurrence Database (http://myfwc.com/shorebirds).
  - i. Surveys for non-breeding shorebirds should begin 14 days prior to construction commencement and be conducted once every 2 weeks for at least one year post-construction. Data collected during these surveys will provide valuable information on the use of nourished beaches to shorebirds.
  - ii. Survey for non-breeding shorebirds will include all potential shorebird habitats within the project boundary.
  - iii. Data should be entered into the database within one month of collection.
- d. Buffer Zones and Travel Corridors. Within the project area, the permittee shall establish a 300-foot wide buffer zone around any location where shorebirds have been engaged in nesting behavior, including territory defense. Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone.
  - i. The width of the buffer zone shall be increased if birds appear
     agitated or disturbed by construction or other activities in adjacent
     areas.
  - ii. Site-specific buffers may be implemented upon approval by FWC as needed. Reasonable and traditional pedestrian access should not be blocked where nesting birds will tolerate pedestrian traffic.

    This is generally the case with lateral movement of beach-goers walking parallel to the beach at or below the highest tide line.

    Pedestrian traffic may also be tolerated when nesting was initiated within 300 feet of an established beach access pathway. The permittee shall work with FWC staff to determine if pedestrian access can be accommodated without compromising nesting success.
  - iii. Designated buffer zones must be posted with clearly marked signs around the perimeter. If pedestrian pathways are approved within

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 12 of 19

- the 300-foot buffer zone, these should be clearly marked. These markings shall be maintained until nesting is completed or terminated. In the case of solitary nesters, nesting is not considered to be completed until all chicks have fledged.
- iv. No construction activities, movement of vehicles, or stockpiling of equipment shall be allowed within the buffer area.
- v. FWC-approved travel corridors should be designated and marked outside the buffer areas. Heavy equipment, other vehicles, or pedestrians may transit past nesting areas in these corridors.

  However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the nesting site.
- vi. Where such a travel corridor must be established within the project area it should avoid critical areas for shorebirds (known nesting sites, wintering grounds, FWC-designated Critical Wildlife Areas, and critical piping plover habitat designated by the US Fish and Wildlife Service) as much as possible, and be marked with signs clearly delineating the travel corridor from the shorebird buffer areas described above.
- vii. To the degree possible, the permittee should maintain some activity within these corridors on a daily basis, without directly disturbing any shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction. Passive methods to modify nesting site suitability must be approved by FWC Regional Nongame Biologist for that region.
- e. Notification. If shorebird nesting occurs within the project area, a bulletin board will be placed and maintained in the construction area with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that "BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE STATE and FEDERAL MIGRATORY BIRD ACTS".
- f. Beach Contours. Tilling and scarp removal shall not be conducted during shorebird nesting season unless written approval has been granted by FWC. Unless otherwise specified in the written approval from FWC, neither tilling nor scarping shall be conducted within 300 feet of shorebird

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-Year Renewal) Modification No. 0269814-001-EM Page 13 of 19

#### <u>nests</u>

- i. A relatively even surface, with no deep ruts or furrows, shall be created during tilling. To do this, chain-linked fencing or other material shall be dragged over those areas as necessary after tilling.
- ii. The slope between the mean high water line and the mean low water line must be maintained in such a manner as to approximate natural slopes.

The monitoring requirements shall be revised as follows:

## **MONITORING REQUIRED:**

## 1. Water Quality

Parameter: Turbidity - Nephelometric Turbidity Units (NTUs)

#### **BORROW SITE:**

Frequency: The first sampling event shall occur within one hour of dredging

commencement and continue Eevery four hours thereafter during

dredging.

Location: Background: At least 500 meters upcurrent from the dredge,

outside of any visible turbidity plume, at mid-depth.

Compliance: No more than 150 meters downcurrent from the dredge, in the densest portion of any visible turbidity plume, at

mid-depth.

#### **BEACH DISPOSAL SITE:**

Frequency: Every four hours during beach fill placement. <u>Supplemental</u>

measurements may be conducted during daylight hours only.

Location: Background: At least 1000 meters upcurrent from the discharge

point, outside of any visible turbidity plume, at mid-depth.

Compliance: No more than 150 meters downcurrent of the discharge point within the densest portion of any visible turbidity

plume, at mid-depth.

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 14 of 19

<u>Supplemental:</u> At 400 meters, 700 meters and 1000 meters downcurrent of the discharge point within the densest portion of any visible turbidity plume, at mid-depth.

# ENTRANCE CHANNEL ACCESSES ALONG INTRACOASTAL WATERWAY:

Frequency: The first sampling event shall occur within one hour of dredging commencement and every four hours thereafter.

Location Background: At least 500 meters upcurrent from the dredge, outside of any visible turbidity plume, at mid-depth.

Compliance: No more than 150 meters downcurrent of the dredge within the densest portion of any visible turbidity plume, at middepth.

Weekly summaries of all monitoring data shall be submitted to the Bureau of Beaches and Coastal Systems and to the Southwest District Office within one week of analysis with documents containing the following information: (1) permit number; (2) dates and times of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations; and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall also include the following information for each sample that is taken: a) time of day samples taken; b) depth of water body; c) depth of sample; d) antecedent weather conditions; e) tidal stage and direction of flow; and f) wind direction and velocity.

The compliance locations given above shall be considered the limits of the temporary mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the beach compliance site greater than 29 NTUs above the associated background turbidity levels (and 0 NTUs above background within Outstanding Florida Waters after January 1, 2008), construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

Monitoring reports shall be submitted to the Bureau of Beaches and Coastal Systems in Tallahassee. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 15 of 19

DEP, please clearly include, at the top of each page or as a cover page to the submittal: "This information being provided in partial fulfillment of the monitoring requirements in Permit No. 43-294982-9."

2. **Physical.** The permittee shall adhere to the attached Physical Monitoring Plan, approved by the Department on October 4, 2006. The permittee shall acquire written approval from the Department prior to implementing any substantial revisions to this plan.

## Hydrographic

The hydrographic monitoring program shall include the following:

- a. Beach and offshore profile surveys of the fill and adjacent area shall be conducted immediately prior to and following completion of each sand transfer event. Additional profile surveys of the designated beach disposal area between the south jetty of St. Lucie Inlet and DEP reference monument R-117 shall be conducted annually. The profile surveys shall extend seaward from the each DEP reference monument along the bearing previously established at each monument to the depth of closure or a minimum of 3000 feet offshore.
- b. Bathymetric and topographic surveys of the flood shoal and adjacent area shall be conducted immediately following completion of the initial sand transfer event and annually thereafter.
- c. The survey data shall be submitted immediately following the data collection on 3.5 inch double sided high density floppy disk in an ASCII format. The data shall be arranged according to the DEP/DBS specifications and shall include all of the information required by the DEP/DBS specifications.
- d. Rectified aerial photography of the designated beach disposal area and the St. Lucie Inlet shall be taken immediately following completion of the intitial sand transfer event and anually thereafter. The photography shall be stereoscopic, near vertical and centered on the local shoreline, and taken at approximate low water and as close to the date of the annual topographic surveys as possible. The photography shall be submitted as 9-inch by 9-inch contact prints.
- e. The permittee shall submit an annual engineering report summarizing the monitoring data and project performance to the Bureau in accordance with the approved monitoring plan within 90 days of completion of each annual

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 16 of 19

survey. The engineering summary shall include an analysis of changes for both the designated beach disposal area and the flood shoal and shall be quantified in terms of both volumetric and elevation contour changes.

A Hardbottom. The permittee shall adhere to a Nearshore Hardbottom Monitoring Plan, first approved by the Department on October 26, 2006 (attached). The permittee shall acquire written approval from the Department prior to implementing any substantial revisions to this plan. For each dredging event, the most recent version of the Hardbottom Monitoring Plan must be submitted to the Department prior to issuance of the Notice to Proceed, in accordance with Specific Condition No. 2. Hardbottom impacts due to burial or sedimentation by beach sand will be solely attributed to the project, and will require mitigation, unless the Department makes a written determination to the contrary.

After thorough review of your application, staff finds that the proposed modification is not expected to adversely affect water quality and is expected to be clearly in the public interest. Staff has also determined that the proposed alteration does not increase the potential for adverse impact on the coastal system, public beach access seaward of the mean high water line or nesting sea turtles and hatchlings and their habitat, and that the proposed alteration does not reduce the design adequacy of the project. Since the proposed modification is not expected to result in any adverse environmental impact or water quality degradation, the **permit is hereby modified** as stated above. By copy of this letter and the attached drawings, we are notifying all necessary parties of the modifications.

This letter of approval does not alter the **February 20, 2012** expiration date, other Specific or General Conditions, or monitoring requirements of the permit. This letter and the accompanying drawings must be attached to the original permit.

This permit is hereby modified unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, Florida Statutes, as provided below. The procedures for petitioning for a hearing are set forth below. Mediation under Section 120.573, F.S., is not available for this proceeding.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Because the administrative hearing process is designed to redetermine final agency action on the application, the filing of a petition for an administrative hearing may result in further

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 17 of 19

modification of the permit or even a denial of the application. If a sufficient petition for an administrative hearing or request for an extension of time to file a petition is timely filed, this permit modification automatically becomes only proposed agency action on the application subject to the result of the administrative review process. Accordingly, the applicant is advised not to commence construction or other activities under this permit modification until the deadlines noted below for filing a petition for an administrative hearing or request for an extension of time has expired.

Under Rule 62-110.106(4), Florida Administrative Code, a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding judge upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S.

In accordance with Rule 28-106.201, F.A.C., a petition that disputes the material facts on which the Department's action is based must contain the following information:

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 18 of 19

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision:
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Under Sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

This permit modification constitutes an order of the Department. The applicant has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

When there has been no publication of notice of agency action or notice of proposed agency action as prescribed in Rule 62-110.106, F.A.C., a person may request a copy of the agency

Notice of Permit Modification St. Lucie Inlet Sand Bypassing (Five-year Renewal) Modification No. 0269814-001-EM Page 19 of 19

action. The Department shall upon receipt of such a request, if agency action has occurred, promptly provide the person with notice. The Department does not require notice of this agency action to be published. However, the applicant may elect to publish notice as prescribed in Rule 62-110.106, F.A.C., which constitutes notice to the public and establishes a time period for submittal of any petition.

If you have any questions regarding this matter, please contact me at the letterhead address (add Mail Station 300), by telephone at (850) 414-7728, or Steven MacLeod at (850) 414-7806.

Sincerely,

Martin K. Seeling

**Environmental Administrator** 

Bureau of Beaches & Coastal Systems

MKS/smm

Enclosures: Comprehensive Inlet and Coastal Physical Monitoring Plan

Nearshore Hardbottom Monitoring Plan

cc:

Clay Bryant, Gahagan & Bryant Associates Rick McMillan, USACE, CESAJ-DP-C Jim McAdams, USACE, CESAJ-PD-EA Robbin Trindell, FWC, ISMS Mary Duncan, FWC, ISMS Major Brett Norton, FWC, South Region Georgia Vince, DEP, SE District Mark Taynton, BBCS-CCCL Vladimir Kosmynin, BBCS-JCP Cheryl Miller, BBCS-JCP Steven MacLeod, BBCS-JCP Robert Brantly, BBCS-CE James LaGrone, BBCS-BECP Paden Woodruff, BBCS-BECP BBCS Permit File

#### FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Deputy Clerk

Date