

APPENDIX A

LETTER AND QUESTIONNAIRE SENT TO DREDGING CONTRACTORS

February 12, 2003

Jan De Nul Group
Tragel 23
9308 Hofstade-Aalst
Belgium

Gentlemen:

W.F. Baird and Associates have been retained by the U.S. Department of the Interior, Mineral Management Service to conduct studies relative to the mining of sand for beach nourishment and construction aggregates from borrow areas located on the Outer Continental Shelf under Federal jurisdiction.

The National Historic Preservation Act requires federal agencies to protect historic and cultural resources. Potential submerged cultural resources in coastal zones include ship wrecks as well as fortifications, early historic coastal settlements, and prehistoric sites that have become inundated through coastal subsidence, migration of shorelines and beaches, and the rise in global sea levels since the end of the last ice age.

As a Federal Agency, the Material Management Service ensures that its undertakings do not adversely affect potentially significant historic properties. As a part of this study, the MMS is interested in developing a buffer or exclusion zone around known submerged Archaeological and Cultural Resources when delineating dredge borrow areas for beach nourishment projects.

Our current study is focused on Atlantic and Gulf Coast borrow sites. The sites range from 5 kilometers to 20 kilometers off shore. The water depth at these sites varies from 5 meters to 25 meters deep.

We expect that dredges engaged in mining sand off shore would be equipped with a Differential Global Positioning System that is accurate to plus or minus 30 meters. In developing the buffer zone around an archaeological or cultural site, the MMS is also interested in additional influences on the positioning of dredging equipment such as adverse weather conditions, loss of power, temporary loss of communication with satellites, failure of anchoring systems and similar interruptions in the normal operation of the equipment.

We would greatly appreciate your answering the enclosed questions. Please feel free to include any comments you feel are germane.

Sincerely,
W. F. Baird and Associates

Thomas F. Kenny

We appreciate you taking the time to answer our questions concerning the accuracy of dredge location and operation.

- 1) Which types of dredges would you use to mine sand offshore? The borrow area may be from 5 km to 20 km offshore in 5 meters to 25 meters of water.
- 2) Are there any other types of dredge that may be considered for this work in addition to hopper, cutterhead and cutterhead loading barges?
- 3) What is the make and model of your dredge positioning system and what is the accuracy of this system? How and how often do you check equipment accuracy?
- 4) Considering the difficulties working offshore in the ocean, adverse weather conditions, mechanical failures, loss of communication, failure of the dredge anchors and other interruptions in the normal operation of the dredge, what distance would you consider adequate for a buffer or exclusion zone to fully protect the historic and cultural resources in the coastal zone? Also, please consider that the Employer may impose considerable fines for disturbance of historic or cultural resources.
- 5) How did you determine the distance recommended above?
- 6) Are you aware of any instances where archeological resources have been impacted by dredging? Please provide details. We want to be able to dispel unfair perceptions, in addition to establishing realistic buffer or exclusion zones.
- 7) What is the best system to convey the limits of the buffer zone? Lat-Long, etc?
- 8) Do you foresee the use of larger or different dredges in the aggregate mining business offshore?
- 9) What methods have you used to mitigate disturbance of historical resources?
- 10) Will you please give us the organization responsible for preserving Archeological Resources in the areas you work and a possible contact in that organization? Are you required to complete post-dredging hydrographic surveys of the borrow area?
- 11) Can you identify existing and emerging dredging technologies that aim to lessen or avoid potential adverse effects on the offshore biological and physical environment?

Thank you for your time and consideration in this matter.

Please respond by e mail if possible to:

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