

## EXHIBIT 6

### SUPPLEMENTAL ENVIRONMENTAL PROJECT PLAN

The Board shall conduct a supplemental environmental project ("SEP"), titled "Lincoln Beach Water Quality Improvement Plan". The parties agree that the SEP is intended to meet the goals stated in Paragraph 73 of the Consent Decree. Requirements of this Exhibit supplement the requirements that are contained in the Consent Decree.

The above referenced goals are: 1) to secure significant water quality improvement and public health protection in the Lincoln Beach Area; 2) to provide public access to the project area for educational, recreational, and environmental purposes; 3) to restore, enhance, and create wetlands and submerged aquatic vegetation (SAV) beds in a wave protected area and vegetative upland buffers; 4) to mitigate and limit the effects of runoff and erosion in the beach area; and 5) to make this area both swimmable and fishable in the future.

The SAV and wetland creation/restoration/enhancement portions of this project involve the installation of approximately 650 feet of protective rip rap barriers (wave breaks) on both sides of the Lincoln Beach site to provide for a total of approximately six acres of wave protected area for planting and growth of SAV, the removal of exotic, nuisance plant species and the planting of native wetland plants. SAV, especially *Vallisneria americana*, shall be planted according to established protocols such as those described in the report entitled "The Restoration of Submersed Aquatic Vegetation in the Lake Pontchartrain Estuary, Louisiana" by John W. Burns, Jr., Michael Poirier and Jeff Waters. The restoration, enhancement and creation of wetlands through the planting of wetland species including Bald Cypress (*Taxodium disticum*), Black Willow (*Salix nigra*), Dwarf Spike Rush (*Eleocharis parvula*), Salt Marsh Cord Grass (*Spartina alterniflora*), and Black Needle Rush (*Juncus roemerianus*), will provide beneficial water quality improvements allowing for the continued growth of SAV in the lake and will assist in restoring the area to a fishable/swimmable condition. Additionally, vegetated upland buffer zones will be established to provide 1) public access through the development of nature trails and an arboretum, 2) access to the SAV areas for study, and 3) will protect the wetland and SAV areas from indirect impacts. The establishment and preservation of upland buffer zones (land areas determined to not meet the criteria of waters of the United States but provide vital protection to waters of the US) has been shown to increase success/survival rates of natural and man-induced (restored, created or enhanced) wetlands. As part of this SEP, the Board shall enter into an agreement with the Levee Board, the State and any other necessary parties to secure public access to the beach area, nature trails and arboretum, and obtain a conservation easement, servitude, or right of use.

Concurrent with the SAV/wetland restoration, the Board *may*, in conjunction with the Lake Pontchartrain Basin Foundation (LPBF), the Louisiana Department of Health and Hospitals (LDHH) and the Tulane University School of Public Health, develop, test and use a predictive model that shall assess the risks to public health from stormwater discharges. The use of this model will assist LDHH in effectively determining when the beach can be opened to the public for primary contact. The Board shall also evaluate the effectiveness of the use of fecal coliform, *E*

*coli* and *Enterococci* as credible indicators of pathogen levels.

The Board shall evaluate the project site to determine base conditions of land and submerged and wetland vegetation and summarize the findings in a report (Site Assessment Report) to be submitted to EPA within 30 days of the date of lodging of the consent decree. EPA shall review the report and shall provide comments within 60 days of receipt of the report.

**Design Plan.** The Board shall prepare a Design Plan for the landscape and engineering components of the project. The Design Plan shall include:

- a) an accurate survey of the project site including delineation of all jurisdictional waters of the US, including wetlands, with acreage calculations, meets and bounds
- b) location and size of upland buffer zones
- c) engineering plans for any recontouring of land necessary including present and proposed contours and elevation
- d) engineering plans to mitigate and limit the effects of runoff and erosion in the beach area and for any beach enhancement necessary to mitigate and limit the effects of runoff and erosion.
- e) the location and size of the wetlands to be restored, enhanced or created
- f) the location and size of the area where SAV is to be planted
- g) the type, density and location of the plant species to be planted
- h) detailed designs for the arboretum, nature walks and board walks
- i) the design, location and material for wave breaks
- j) the description of the access openings and gates at walls
- k) the description of the swimming enclosure screens
- l) Monitoring Plan
- m) Contingency Plan
- n) base water quality measurement in the SAV areas (see Monitoring Plan below)
- o) detailed, itemized cost estimates

The Board shall submit the Design Plan to EPA for approval, with a copy sent to the LPBF, no later than six (6) months after the date of lodging of the consent decree. The EPA shall review and comment, in consultation with LPBF, on the Design Plan within 60 days of receipt of the plan.

**Implementation of the Design Plan.** The Board shall implement the Design Plan and confirm the implementation in a progress report within 20 months of the date of the lodging of the consent decree.

**The Monitoring Plan.** The Board shall submit a Monitoring Plan as part of the Design Plan. This Monitoring Plan shall be used to determine the effectiveness of the SEP. The Monitoring Plan shall include the following measurements:

- a) for SAV areas - (i) area measurements to determine percent cover and survival rates,

(ii) various biological, physical and chemical measurements such as depth of water, photosynthetic active radiation, turbidity, Secchi disk readings, pH, alkalinity, salinity, conductivity, carbon dioxide, dissolved oxygen, and (iii) measurements to determine the presence of phytoplankton, epiphytic and macrophytic algae

b) for the wetland creation/restoration/enhancement areas - percent survival of plant species shall be measured (the percent survival shall be expressed as the number of plants species surviving from the initial date of planting to the present)

Monitoring of the SAV and wetland areas shall occur on not less than a monthly basis. The Monitoring Plan shall include criteria upon which to determine the success of the SEP. These criteria shall include percent survival of planted species. The Monitoring Plan shall also include provisions for submission of Monitoring Reports to the EPA after completion of the Progress Reviews (see below). The Monitoring Reports shall include (1) photographs taken from fixed locations depicting the planted species in specified locations and a composite of the entire project site, (2) the measurements described above along with any relevant base measurements, (3) any difficulties, successes or failures of the SEP as of the date of the report, (4) any requests for Design Plan changes due to experience learned, and (5) the need for the implementation of a Contingency Plan.

Progress Reviews and Monitoring Reports. The Board shall review the success of the SEP at the following intervals:

a) the first progress review shall be conducted thirty (30) days after the completion of the implementation of the Design Plan

b) the second progress review shall be conducted at the end of the sixth (6th) month after the first review but not later than the end of the seventh (7th) month after the completion of the implementation of the Design Plan

c) the third progress review shall be conducted at the end of the twelfth (12th) month after completion of the implementation of the Design Plan

d) all subsequent progress reviews shall be conducted at twelve (12) month intervals until the completion of the SEP

A Monitoring Report shall be submitted to the EPA for review, with a copy sent to LPBF, no later than thirty (30) days after the completion of each of the required Progress Reviews as prescribed above. If, after review of any of the Monitoring Reports by EPA, it is determined that the success criteria, as described in the Monitoring Plan, have not been met, the Board shall implement the Contingency Plan.

Contingency Plan. The Board shall submit a Contingency Plan as part of the Design Plan. This Contingency Plan shall ensure the success of the SEP during the life of the SEP. This plan should include steps to be taken (Corrective Measures) if any of the success criteria are not met. The Contingency Plan can be modified at any time, with the approval of EPA, to accommodate current difficulties. The Contingency Plan must be implemented any time the success criteria are not met, but may be implemented by the Board at any time it believes the implementation of this

plan will preclude anticipated future failures. After activation of the Contingency Plan and the implementation of the Corrective Measures, the Board shall review the progress of the Corrective Measures at one month, three month and six month intervals and shall report the findings to EPA for approval, with a copy sent to LPBF, in a fashion similar to the Monitoring Reports.

#### Predictive Model.

At a minimum, the Board shall insure that direct bacteriological testing (according to state approved protocols) is performed by the Board or others to ensure that the beach area is safe for primary body contact.

Ten (10%) percent of the SEP expenditures (\$200,000) shall initially be set aside to be used either for manual testing and assessment of water samples from Lincoln Beach and/or the development or participation in the development of a predictive model to allow local health authorities from LDHH to quickly determine, within certain confidence levels, when primary contact with Lake Pontchartrain will pose a public health risk. This predictive model will allow LDHH to ensure that appropriate notices are issued to protect public health prior to primary contact with Lake Pontchartrain.

The LPBF, LDHH, and the Tulane University School of Public Health have developed a Scope of Work for the predictive model which is attached to this SEP document. The Scope divides the model project into two primary phases. Phase I shall consist of the identification of the parameters to be used in the development and verification of the predictive model. The Board shall contribute the funding to the predictive model development and verification phase (Phase II) if the referenced entities complete Phase I of the scope of work successfully within 3 years of the entry of this decree. The Board shall contribute all remaining funding from the \$200,000 set-aside for the Phase II Model validation studies after subtracting any funds expended for routine bacteriological monitoring.

In the event that the LPBF, LDHH, and the Tulane University School of Public Health do not complete Phase I of the project within three years of entry this decree, the Board shall expend all funds remaining in the \$200,000 set-aside on other aspects of the SEP.

All reports required to be submitted in connection with this SEP shall be submitted to:

Director, Water Enforcement Division (2243A)  
U.S. Environmental Protection Agency  
401 M. Street, S.W.  
Washington, D.C. 20460