

# APPENDIX E

*United States and the Commonwealth of Virginia*

v.

*Atlantic Wood Industries, Inc., et al*

## APPENDIX E

### NATURAL RESOURCE DAMAGE RESTORATION PROJECT

*Overview of Restoration Project:* The planned restoration project (described below) is intended to provide compensation for injuries to natural resources and their services from the release of hazardous substances at or near the Site”), as per the terms of this Consent Decree. Pursuant to Paragraph 35.c of this Consent Decree, the Settling Federal Defendant shall pay One Million, Five-Hundred Thousand dollars (\$1,500,000) to the Commonwealth of Virginia toward the construction, maintenance, and monitoring of oyster reef habitat in either or both of the Southern Branch (“SBER”) and the Eastern Branch of the Elizabeth River (“EBER”). Oyster restoration is both feasible and cost-efficient in the Elizabeth River due to current and ongoing reef construction projects. In addition, oyster restoration provides high ecological benefits, including improvement of water quality, habitat for fish and other aquatic organisms, a food source for other animals in the riverine environment, and an overall high level of ecological service. A combination of project qualities, including site availability, ecological benefits, cost effectiveness and availability of state oversight make oyster restoration a highly viable and valued restoration project.

*Description of Restoration Project:* Work required to complete the oyster restoration project includes, but may not be limited to: 1) review of available bottom mapping data for initial site selection; 2) final site survey of bottom conditions; 3) permitting; 4) contract oversight for substrate acquisition, transport, and placement; 5) seeding with oyster spat; and 6) site monitoring for project success. Substrate may include various proportions of dredge shell, shuck-house shell, crushed concrete, or stone, depending on availability and specific site limitations, with an end goal of establishing a persistent living oyster population and no net loss of substrate. Some locations within the proposed project areas receive sufficient natural spat set such that initial seeding is not necessary. Locations would be selected to the extent possible to ensure that the areas that be closed for harvest as long as possible. The restoration project will be implemented and overseen by staff from the Virginia Marine Resources Commission (“VMRC”), which have experience with prior similar projects in the immediate area, with support from the Virginia Institute of Marine Science (“VIMS”). The Commonwealth will update and provide information on the project and expenditure of funds to trustees and stakeholders.

*Feasibility of Restoration Project:* Oyster restoration project feasibility and cost efficiency have been demonstrated through previous project studies on the Elizabeth River. Bottom mapping, including detailed bathymetry, sediment grab points, bottom type polygons, and side-scan mosaic showing bottom hardness data exist for the areas targeted for oyster restoration. Over 123 acres within the Elizabeth River near the Site have been identified as potentially suitable for on-bottom oyster restoration, with a number of specific areas of different acreage within the river that can accommodate restoration. Because of previously completed planning and implementation of similar projects, expertise from VMRC and VIMS staff scientists, as well as the availability of qualified contractors and appropriate substrate material, oyster restoration in the Elizabeth River watershed can proceed with cost efficiency.

On-bottom oyster restoration projects have been completed in the SBER in proximity to the AWI Site. However, challenges associated with long-term oyster habitat survival in the SBER, potentially from residual metal toxicity, require that the project area include both the SBER and EBER to ensure adequate compensation for the injured resources.

*Restoration Project Site Selection.* Final selection of an oyster restoration project(s) shall be consistent with the terms provided in this Consent Decree and premised on best professional judgment of VMRC and VIMS staff for a reasonable likelihood of success of the project(s).