



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date:12/22/2004
Comment Deadline:01/22/2005
Corps Action ID #:200510133

All interested parties are hereby advised that the Wilmington District, Corps of Engineers (Corps) has received an application for work within jurisdictional waters of the United States. Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: Mr. Terry Hairston, Environmental Manager
Nucor Steel Plate Mill, Hertford, NC
1505 River Road,
Cofield, North Carolina, 27922

Agent: Mr. Clemment Riddle,
Clearwater Environmental Consultants
224 South Grove Street, Suite F,
Hendersonville, North Carolina, 28792

Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures pursuant to Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

Location

The project area is a 7-acre wetland creation site located off of North Carolina State Road 1445, adjacent to an unnamed tributary to Brooks Creek, northeast of Harrellsville, in Hertford County, North Carolina.

Existing Site Conditions

The Nucor Steel Mill is located on an approximately 900-acre tract of land located north of the intersection of River Road and Bazemore Road, adjacent to the Chowan River and Brooks Creek, at Pilands Crossroads, east of Winton, in Hertford County, North Carolina. Nucor Steel was issued a DA permit (AID 199811324) authorizing the construction of a

river barge port facility within the navigable waters of the Chowan River and 2.92 acres of impacts to waters of the United States, including wetlands, in conjunction with the construction of a steel plate mill including railroad, natural gas line and electric utilities. Special Condition 3. of the issued permit states, "The Permittee shall fully implement the compensatory mitigation plan, entitled *Revised Compensatory Wetlands Mitigation Plan for the Nucor Steel Plate Recycling Mill, Hertford County, NC*, dated November 8, 1999, except that the 0.41 acres of wetlands with its associated highground buffer discussed in Section III.B.4 of the environmental assessment is not required to be preserved. Activities prescribed by this plan shall be initiated immediately and undertaken concurrently upon commencement of any construction activities within jurisdictional areas authorized by this permit." The wetland creation area was constructed and planting completed in February 2002.

Upon completion of the 2004 monitoring of the wetland creation site, the Permittee determined that the mean density of trees had fallen below that required in the mitigation plan, and that the site would not meet the success criteria for vegetation at the end of the 5-year monitoring period.

Applicant's Stated Purpose

The applicant is proposing to modify its Department of the Army (DA) permit, Action ID 199811324, to allow for changes to its compensatory mitigation proposal at the 7-acre wetland creation area.

Project Description

The Permittee proposes to undertake one of the following modifications to the permitted mitigation plan as remediation to bring the creation site into compliance with the permit requirements.

Option 1: Planting approximately 2,900 water tolerant trees including *Taxodium*, *Nyssa*, and *Fraxinus* species at current elevations and laurel oaks in higher areas to meet the required 320 trees per acre vegetative density. This will result in a cypress-tupelo swamp wetland. Trees will be containerized and each tree will be planted with an individual fertilizer packet. Some control of the competing vegetation may be undertaken to assure growth and development of planted species.

Option 2: Creation of elevated areas within the created wetlands to provide habitat for oak species. Areas would be elevated with the addition of topsoil to create an elevation of approximately 31 feet msl. The resulting areas would be planted with approximately 1,500 oak trees including laurel oaks, willow oaks, water oaks, and swamp chestnut oaks. In addition, Nucor proposes to plant 1,000 cypress and water tupelo trees in other portions of the wetland.

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Mr. John Hennessy (NC Department of Transportation projects) or Ms Cyndi Karoly (all other projects) by January 22, 2005.

The applicant has certified that the proposed work complies with and will be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2 (b)(2) the Corps is, by this notice, forwarding this certification to the North Carolina Division of Coastal Management (NCDCM) and requesting its concurrence or objection. Generally, the Corps will not issue a Department of the Army (DA) permit until the NCDCM notifies the Corps that it concurs with the applicant's consistency certification.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

Evaluation

The decision whether to modify the existing permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received

by the Corps of Engineers, Wilmington District, until 5pm, January 22, 2005. Comments should be submitted to Ms. Tracey L. Wheeler, Post Office Box 1000, Washington, North Carolina, 27889 (252) 075-1616 ex 24.

NUCOR
PLATE MILL

Wheeler

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REGULATORY BRANCH

October 29, 2004

Mr. David M. Lekson
US Army Corps of Engineers
Washington Regulatory Field Office
107 Union Drive, Suite 202
Washington, NC 27889

Re: Nucor Steel Plate Recycling Mill - Wetland Mitigation Area
USACE Action ID. 199811324
DWQ Project No. 990231
CAMA Permit No. 79-99
Hertford County, NC

Dear Mr. Lekson,

This correspondence is in response to your letters, dated March 22, and April 29, 2004 to Mr. Giffin Daughtridge, regarding the success criteria of the 7-acre wetland mitigation area at the Nucor Steel Site. This letter is intended to address the issues raised in your letters and provide two remedial plans, based on the completed 2004 mitigation monitoring and topographical survey, as options for the wetland mitigation area.

Background

The USACE issued Section 404 and Section 10 permits on March 1, 2000. These permits included 6 general conditions and 27 Special Conditions. Special Condition 3 requires Nucor to implement the Compensatory Mitigation Plan for the Nucor Steel Plate Recycling Mill, Hertford County, NC dated November 8, 1999 "mitigation plan".

The mitigation plan requires the preservation of 14.46 acres of wetlands and 44.32 acres of upland buffers. The preservation of this area and recording of restrictive covenants was successfully completed on May 30, 2000.

The mitigation plan also requires the preservation of 150 acres of land adjacent to the Chowan River. This tract was purchased by Nucor and successfully donated to the North Carolina Wetland Restoration Program in 2000.

The last portion of this plan was to create a seven acre wetland creation area. This area was constructed in the spring of 2002 and we are currently monitoring for five years. The mitigation goals and success criteria that were established for the creation area were:

Wetland Creation Area - Mitigation Goals

“The goal of the proposed mitigation is to offset impacts to on-site wetlands by replacing lost functions and values with equal or higher functions and values. The primary target functions to be replaced are stormwater storage and filtration capacities, stormwater transfer, and habitat resources. The creation of the proposed wetland area will more than compensate for the stormwater storage and filtration functions that will be impacted.” Revised Compensatory Mitigation Plan for Nucor Steel Plate Recycling Mill, November 8, 1999.

Success Criteria

“Hydrologic success will be determined by documenting that water levels within the creation area are similar to the existing wetland “W/X”, or that wetland hydrology criteria as defined by the US Army Corps of Engineers 1987 Manual, is present. As such, success criteria will be determined by the establishment of wetland hydrology for 12.5% of the growing season.”

“For vegetation, the goal of the mitigation is to create a wetland ecosystem with comparable species composition and diversity to the existing wetland "W/X". Considering this, the site will be considered successful and the monitoring complete if, at the end of the five-year monitoring program, the survival rate of planted tree species is at least 320 planted and volunteer trees per acre.”

Current Conditions

The hydrologic success criteria has been met and exceeded. A review of the three years of data indicates that the wetland hydrology exceeds the success criteria and has created a semi-permanently flooded/saturated wetland. Attached is an as built survey completed by Bissell Professional Group, showing most of the site close to the target elevation of 30.5 feet msl (range 29.14 – 30.92) with the lowest elevations confined to several small depressions in the site. (The outlet pipe on Bazemore Road is set at an elevation of 29.2 feet msl.)

As noted in the USACE March 22, 2004 letter, the peizometers currently located in the wetland appear to be malfunctioning. As a result of this assumption, Nucor maintained weekly visual inspections of the wetland creation area throughout the 2004 growing season March -September. The result of the inspections indicated that the site was inundated the entire growing season. Even with this documentation, Nucor agrees to make the following adjustments to the hydrology monitoring. Nucor will purchase six new automated wells to record the hydrology in the creation area and in the reference wetland and conduct routine maintenance on an annual basis. This maintenance will include removing the wells from the creation area, washing them, replacing batteries and reinstalling in the wetlands per *ERDC TN-WRAP-00-02 entitled, Installing Monitoring Wells/Piezometers in Wetlands, dated July 2000* and the manufactures

specifications. The maintenance of the wells will be performed in March of each monitoring season.

Because the created wetland has been semi-permanently flooded over the past three years and hardwood trees, specifically oaks, have not survived well, the mean density of trees per acre has fallen to 231 which does not meet the required 320 trees per acre outlined in the original mitigation plan. However, it is important to note that tree survival rates for more water tolerant species of *Taxodium*, *Nyssa*, and *Fraxinus*, have remained high (79-89% average). The success rate for the wetland mitigation area, if planted with only these three species using these survivability rates would be 446 trees per acre. This leads us to conclude that the most significant issue with *Quercus* tree mortality is long hydroperiods. Given the success of the three tree species and nearly 100 percent herbaceous cover, we do not believe that soil compaction or poor nutrient levels are the most significant reason for the mortality of *Quercus* species. All other wetland values including water storage, pollutant removal, wildlife habitat, and aquatic life habitat are present within the existing wetland. As the created wetland matures these functions and values should continue to improve.

Below is a summary table of 2004 vegetation monitoring.

<u>September 2004</u>	<u># Trees</u>	<u>Percent Tree Survival</u>	
Bald Cypress	39*	85%	
Nyssa biflora	38	79%	
Water Oak	0	0	
Swamp Chestnut Oak	0	0	
Willow Oak	0	0	
Green Ash	25*	89%	Average Tree Density per acre = 231
Laurel Oak	2	5%	

* 1 Cypress, 1 Green Ash discovered in 2004, obscured by heavy herbaceous vegetation in 2003

Prior to determining the most suitable remedial action, ClearWater Environmental Consultants, Inc. and Soil, Water, & Environment Group reviewed the status of the creation Area. A copy of the 2004 Annual Mitigation Report is attached:

Remediation Plan

Based on the recommendations from Clearwater Environmental and Soil, Water, & Environment Group, Nucor believes it can pursue either of two options to bring the site into compliance.

1. After three years of monitoring, we believe that the mitigation area is a semi-permanently flooded wetland rather than seasonally flooded wetland. This classification is based on "Classification of the Natural Communities of North Carolina" Third Approximation by Shafale and Weakley of the North Carolina Natural Heritage Program. We believe that the semi-permanent state of flooding does not diminish the quality of the wetland. Therefore, for remedial option 1., we recommend planting additional water tolerant trees *Taxodium*, *Nyssa*, and *Fraxinus*, (approximately 2,900 trees) at current elevations and laurel oaks within selected areas over 30.5 feet, the original goal of 320 trees per acre can be met, thus satisfying the vegetation success criteria. This will result in a cypress-tupelo swamp

community wetland. Trees will be containerized and each tree will be supplemented with an individual fertilizer packet. Broadcast fertilizer is not recommended as it may increase competition from herbaceous plants. Some limited control of the competing dense herbaceous vegetation may be undertaken to assure the growth and development of planted tree species.

Wildlife values for cypress-tupelo swamp communities are considered high. Upon forest maturity the wetland will contain standing water with good cover, cone bearing cypress trees, fruit bearing gum trees, reptiles, small fish, amphibians, and aquatic insects. These factors are important for rare and endangered birds such as wood storks, limpkins, herons, egrets, and neo-tropical migrant songbirds. Cypress-tupelo swamp communities provide nesting and feeding habitat for Wood ducks and tree dependent mammals.

2. Given that our creation area has little topographic variation, Nucor can selectively create small micro habitats for oak species. These small areas would be graded with additional topsoil to create an elevation of approximately 31 feet msl. These micro habitats would be planted with approximately 1,500 oak trees (laurel, willow, water, and swamp chestnut). In addition, Nucor will plant 1,000 additional cypress and water tupelo trees in other portions of the site. This option requires minimal grading activities (See attached proposed grading plan, Figure 5 of Annual Report), and will provide both seasonally flooded habitat for oak species and retain the semi-permanently flooded cypress-tupelo sloughs.

Conclusion

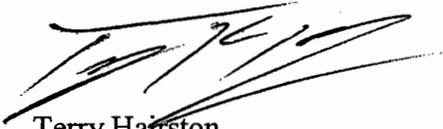
In conclusion, it is our opinion that the wetland mitigation area at Nucor Steel is semi-permanently flooded with a vegetation community growing towards a mature Cypress-Tupelo swamp. The site was constructed at the proper elevations, as indicated by the as built survey completed by Bissell Professional Group, showing most of the site close to the target elevation of 30.5 feet msl.

Based on the success of the water tolerant species and dense herbaceous vegetation, Nucor believes that either of the minor adjustments recommended above should allow Nucor to meet the tree density per acre and all of the mitigation goals as stated in the Revised Compensatory Mitigation Plan for Nucor Steel Plate Recycling Mill, November 8, 1999. Nucor believes that option 1 provides the greatest opportunity and as such we request approval to proceed accordingly.

Furthermore, as addressed in the accompanying report, Nucor will purchase six new automated wells to record the hydrology in the creation area and in the reference wetland and conduct routine maintenance on an annual basis. This maintenance will include removing the wells from the creation area, washing them, replacing batteries and reinstalling in the wetlands per *ERDC TN-WRAP-00-02 entitled, Installing Monitoring Wells/Piezometers in Wetlands, dated July 2000* and the manufactures specifications. The maintenance of the wells will be performed in March of each monitoring season.

Nucor Steel appreciates your comments regarding the status of the wetland mitigation site and looks forward to working with the USACE to further the success of this mitigation project. Please contact me at 252-356-3707 should you have further questions or wish to discuss these two options.

Sincerely,



Terry Hairston
Environmental Manager

Enclosure:

cc:

Mr. Terry Moore
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