

**WASHINGTON STATE DEPARTMENT OF ECOLOGY
P.O. BOX 47600
OLYMPIA, WASHINGTON 98504-7600**

IN THE MATTER OF:

NUCOR STEEL]	PSD-07-02
SCRAPYARD CRANE PROJECT]	
NUCOR STEEL, SEATTLE, INC.]	DRAFT APPROVAL OF THE
2424 S.W. ANDOVER STREET]	PREVENTION OF SIGNIFICANT
SEATTLE, WA 98106]	DETERIORATION APPLICATION

Pursuant to the federal Prevention of Significant Deterioration (PSD) regulations, 40 Code of Federal Regulations (CFR) 52.21, and the Washington State Department of Ecology (Ecology) general regulations for air pollution sources, Chapter 173-400 Washington Administrative Code (WAC), Ecology now finds the following:

FINDINGS

1. Nucor Steel (Nucor) has applied to modify its scrapyard crane system and increase production in its steel mini-mill located in Seattle, Washington.
2. A PSD application was submitted on July 2, 2007. The application was found to be complete on July 31, 2007.
3. Nucor is located at 2424 S. W. Andover Street, Seattle, WA 98106. Its Universal Transverse Mercator (UTM) coordinates are 547658E, 5268471N in NAD 27.
4. Nucor is located in a Class II Area that is designated as “attainment or unclassified” for the purpose of PSD permitting for all pollutants. The distances to nearest Class I areas are shown in the following table:

Class I Area	Distance in Kilometers
Olympic National Park	57
Alpine Lakes Wilderness Area	60
Mount Rainer National Park	70
Glacier Peak Wilderness Area	110

5. The proposed project consists of upgrading one of the older single hoist cranes and reconfiguring the rail spurs in the scrapyards (scrapyard crane project). With an upgraded crane, the facility will be able to increase the annual steel production rate by increasing the number of hours the EAF operates.
6. Nucor is an existing major stationary source that emits more than 100 tons of a regulated pollutant per year.
7. The net emissions increases from this project under Chapter 173-400 WAC are shown in the following table:

Pollutant	Net Emissions Increase (tpy)	PSD Significant Emission Rate (SER)
Particulate (PM ₁₀)	10.1	15
Sulfur Dioxide (SO ₂)	15.7	40
Nitrogen Oxides (NO _x)	38.9	40
Volatile Organic Compounds (VOC)	9.1	40
Carbon monoxide (CO)	261.0	100
Lead (Pb)	0.04	0.6

This project is subject to PSD permitting for emissions of CO because the net emissions increase is greater than the PSD SER.

8. Emissions of all other pollutants are subject to Notice of Construction (NOC) permitting requirements and will be addressed by the Puget Sound Clean Air Agency (PSCAA).
9. There is no Best Available Control Technology (BACT) analysis required for this project because the debottlenecked units that produce all of the CO emitted by the facility are not being physically modified.
10. Nucor has elected to take a federally enforceable limit on the number of tons of steel produced each year.
11. Nucor's electric arc furnace was subject to New Source Performance Standard (NSPS) 40 CFR 60, Subpart A, General Provisions and 40 CFR 60 Subpart AAa, prior to this project. This project will not affect the applicability to the furnace of Subparts A or AAa.
12. Allowable CO emissions increases from the scrapyards crane project will not cause the region to exceed the CO national ambient air quality standards, as shown in the following table:

Pollutant	Averaging Period	National Ambient Standard ($\mu\text{g}/\text{m}^3$)	State Ambient Standard ($\mu\text{g}/\text{m}^3$)	Maximum Background Contribution ($\mu\text{g}/\text{m}^3$)	Maximum Off-site Concentration Due to Facility Emissions Including Project Emissions ($\mu\text{g}/\text{m}^3$)	Total Maximum Concentration ($\mu\text{g}/\text{m}^3$)
CO	1-hour	40,000	40,000	6,122	2,662	8,784
	8-hour	10,000	10,000	4,747	810	5,557

13. Proposed CO emissions increases from this project will not significantly impact ambient air quality at the Alpine Lakes Wilderness or the Olympic National Park. The CO total emissions increase from the facility will not have a significant impact beyond approximately 0.5 kilometer from the facility. Since the nearest Class I areas are each more than 50 kilometers from the facility, the project will not have a significant impact on any Class I area.
14. A Class II increment consumption analysis is not required because no increments have been established for CO.
15. The project will not have a noticeable effect on industrial, commercial, or residential growth in the Seattle area.
16. Visibility, deposition, and other air quality related values are not expected to be significantly impaired at any Class I area because CO does not impact visibility, and has no known effects on air quality related values.
17. Based upon the Technical Support Document prepared on October 12, 2007 and the application, Ecology finds all requirements for PSD have been satisfied. Approval of the PSD application is granted subject to the following conditions:

APPROVAL CONDITIONS

Production Limits

1. Nucor shall produce no more than 1.1 million tons of billets during each consecutive 12-month rolling period.

Initial Compliance

2. Because the facility and equipment is already in operation, there are no initial compliance determination requirements.

Compliance Methods

3. Compliance with Approval Condition 1 shall be determined by recordkeeping.

Monitoring Methods

4. Compliance with Approval Condition 1 shall be monitored by keeping a monthly log of monthly steel production for the previous 12-month period. Records shall be updated no later than 30 days after the end of the month.

Other

5. Nucor shall submit semi-annual reports to Ecology and PSCAA. Once the reporting requirements of this condition have been included in Nucor's Title V permit, it will no longer be necessary to send separate reports to Ecology or PSCAA.
 - 5.1 Each report shall show Nucor's compliance with Approval Condition 1 during each of the 12-month intervals that terminate during the reporting period. The first report shall be filed within 30 days of completion of the first 12-month operating period following startup of the rebuilt scrapyards crane.
 - 5.2 All records required by this permit should be retained on-site for a period of not less than five years.
6. Sampling ports and platform shall be provided on each stack, after any final pollution control device. The ports shall meet the requirements of 40 CFR 60 Appendix A-3, Method 5D, Figure 5D-2. Adequate permanent and safe access to the test ports shall be provided.
7. Nucor shall notify Ecology and PSCAA in writing at least three days prior to startup of the rebuilt scrapyards crane allowed under this permit.
8. Access to the source by Ecology, PSCAA, or the EPA shall be permitted upon request. Failure to allow such access is grounds for an enforcement action under the Federal Clean Air Act or the Washington State Clean Air Act.
9. This approval shall become invalid if construction of the project is not commenced within eighteen (18) months after receipt of the final approval or if construction of the facility is discontinued for a period of eighteen (18) months, unless Ecology extends the 18-month period, pursuant to 40 CFR 52.21(r)(2) and applicable EPA guidance.

Reviewed by:

Richard B. Hibbard, P.E.
Technical Services Section
Air Quality Program
Washington State Department of Ecology

Date

Approved by:

Stuart A. Clark, Program Manager
Air Quality Program
Washington State Department of Ecology

Date