



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

Canam Steel Corporation  
140 South Ellis Road  
Jacksonville, Florida 32254  
Jacksonville Plant  
Facility ID No. 0310319

**PROJECT**

Project No. 0310319-015-AC  
Application for Air Construction Permit  
Semiannual Reporting

**COUNTY**

Duval, Florida

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Waste & Air Resource Management  
Northeast District Office  
8800 Baymeadows Way West, Suite 100  
Jacksonville, Florida 32256

November 3, 2014

## **1. GENERAL PROJECT INFORMATION**

### **Air Pollution Regulations**

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

### **Glossary of Common Terms**

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

### **Facility Description and Location**

Canam Steel Corporation is a steel fabrication operation (Standard Industrial Classification No. 3441). The facility is located in Duval County at 140 South Ellis Road in Jacksonville, Florida. The UTM coordinates are Zone 17, 427.4 km East, and 3353.5 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

### **Facility Regulatory Categories**

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C. and Rule 2.501, JEPB.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C. and Rule 2.401, JEPB

### **Project Description**

Air Construction Permit authorizing the removal of the requirement to submit quarterly reports describing the usage of solvents, coatings and VOC/HAP contents and emissions. The semiannual compliance reporting requirements shall remain in effect.

### **Processing Schedule**

October 30, 2014: Received the application for an air pollution construction permit.

November 3, 2014: Application deemed complete

## 2. PSD APPLICABILITY

### General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO<sub>x</sub>); sulfur dioxide (SO<sub>2</sub>); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H<sub>2</sub>S); total reduced sulfur (TRS), including H<sub>2</sub>S; reduced sulfur compounds, including H<sub>2</sub>S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO<sub>2</sub> and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m<sup>3</sup>, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

### **New Source Review Applicability**

Federal permitting programs comprise requirements for construction of new sources or modification of existing sources under NSR. NSR requires that construction of a new emission sources or modifications to existing emission sources be evaluated when significant net emission increases result. Two distinct NSR permitting programs apply depending on whether the facility is located in an attainment or nonattainment area for a particular pollutant; nonattainment NSR (NNSR) permitting is required for facilities located in nonattainment areas, while PSD permitting is required for facilities located in attainment areas.

The FDEP has adopted the federal NSR permitting program by reference in Chapter 62-212 of Florida Administrative Code (F.A.C.), and FDEP has full authority to implement this program through its U.S. EPA authorized State Implementation Plan (SIP).

The facility is located in Duval County which is designated by U.S. EPA as “unclassifiable/ attainment” for all pollutants, except TSP and SO<sub>2</sub> which have the designation of “not classified” and “Better than National, respectively.<sup>1</sup> Therefore, the facility is not subject to NNSR permitting requirements for any criteria pollutants. The facility is potentially subject to PSD permitting requirements.

### **Major Source Status at the Facility**

Section 52.21(b) (1) (i) (a) of 40 CFR lists the PSD source categories with a 100 tpy “major” source threshold. The Canam Steel Corporation facility is not an industry type on this list of the 28 source categories identified. Therefore, the facility is subject to a 250 tpy threshold (e.g. - PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO, NO<sub>2</sub>, VOC) for classification as a PSD major source. Because the facility’s potential emissions are greater than 250 tpy for VOCs, it is considered an existing major source with respect to the PSD program for these pollutants.

### **Establishing Applicability of PSD and NSR**

If a source will undergo a physical change or change in the method of operation, the applicant must review that project to determine if the project results in a significant net emissions increase of a regulated air pollutant. If a significant net emissions increase results, then PSD is required. As the proposed project does not involve any physical changes or changes in methods of operation, PSD is not applicable to this project.

## **3. APPLICATION REVIEW**

The applicant has requested authorizing the removal of the requirement to submit quarterly reports describing the usage of solvents, coatings and VOC/HAP contents and emissions. The semiannual reporting requirements shall remain in effect. Although Rule 62-213.440(1)(b), F.A.C., only requires semiannual reporting, quarterly reporting requirements had been established as reasonable assurance to more closely monitor VOC emissions from solvent-based coatings, since emissions caps had been implemented to avoid triggering PSD requirements. However, now that the facility primarily uses water-based coatings, the Department has determined that the less stringent semiannual reporting requirements already in the permit will suffice for tracking VOC emissions. The facility has requested to continue to be permitted to use solvent-based coatings in case a job specially requires the use of such coatings rather than water-based coatings. No emissions limitations or standards are being changed in this project.

Permit modifications were made only as far back as permit no. 0310319-007-AC, as it was in this construction permit that EU 005 was established as the EU ID No. for the Dip Tank Coating Process. Modifications to conditions regarding the dip tanks in earlier permits would constitute modifications to conditions regarding EUs 003 and 004, both of which are currently inactive.

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<sup>1</sup> 40 CFR §81.310.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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### State Requirements

Rule 62-210.200, F.A.C., Definitions - potential to emit (PTE), Rule 62-296.500 – VOC and NO<sub>x</sub> RACT, Rule 62-296.513 – Surface Coating of Miscellaneous Metal Parts and Products

### Federal NESHAP Provisions

Subpart M MMM – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, and 40 CFR 63 Subpart A – General Provisions.

### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Brent Steele is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Northeast District Office, Florida Department of Environmental Protection (Department), 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256 or by e-mail at [brent.c.steele@dep.state.fl.us](mailto:brent.c.steele@dep.state.fl.us).