TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

CDR Systems Corp/Div Hubbell Power Systems

3621 Industrial Park Drive
Lenoir City, Tennessee 37771

Putnam Facility
AIRS Facility ID No. 1070031
2 Kay Larkin Circle
Palatka Fl, 32177

PROJECT

Project No. 1070031-011-AC
Fiberglass Spray Booth Installation

COUNTY

Putnam, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Air Resources Section
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

April 04, 2013

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects 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 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 activities. 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.

Facility Description and Location

CDR Systems Corporation Putnam Facility is a Rubber and Miscellaneous Plastic Products Facility that manufactures Polymer Concrete and Fiberglass Reinforced Plastic Polyester Utility Enclosures (Standard Industrial Classification No. 3089) using two basic processes with ten variations which result in VOC/HAP(s) emissions

Polymer Concrete (PC) is a blend of coarse sand, fine sand and fine filler, or aggregates, mixed with an unsaturated polyester resin in styrene monomer along with other minor additives. The facility manufactures PC under four alternate methods of operations (AMOs) using different combinations of closed or open molded, and machine or hand mixed processes.

Fiberglass Reinforced Plastics (FRP) is fabricated from liquid polyester resin reinforced with glass fibers. The facility manufactures FRP under 6 AMOs. AMOs 005 – 008 employs different combinations closed or open molded, and machine or hand wetout processes.

AMOs 009 and 010 involve using a non-atomizing gel coat spraying gun and a non-atomizing fiberglass chopping gun, which may involve either spraying a weather and UV light resistant gel coat onto a mold followed by chopping layers of structural fiberglass over the gel coat or chopping structural fiberglass onto a mold by spraying on a final layer of gel coat. Currently both these processes are carried out sequentially in one exhaust booth. Upon installation and compliance demonstation of the second spray with the requirements of this permit booth these processes will be carried out seperately in independent exhaust booth. Because Methyl Methacrylate is used as monomer in the gel coating operation in addition to styrene, Methyl Methacrylate and styrene emissions will occur during mixing, spraying, and curing.

2. SCOPE OF REVIEW

On March 4, 2013, the Department received an application for a construction permit to authorize the addition of a fiberglass chopping spray booth for Alternate Mode of Operation (AMO 009) for the separate operation of a single non-atomizing gel coat spraying gun which will be operated independently and separate from AMO 010.

The facility has a self imposed Total Facilitywide HAPs Emissions cap of 70 tons per any consecutive 12 months. (Permit No. 1070031-005-AC and No.1070031-010-AV). Based on the submitted application the Total facilitywide emissions which include emissions from the addition of the new spray booth remain the same. (ESAP application received March 4, 2013).

Potential Facilitywide Emissions Estimates

AMO	Emissions Ton /Year			
	Styrene	MMA	VOC	HAPs
001 002 003 004	50			
005			7.41	7.41
006	67.9		67.9	67.9
007			7.41	7.41
008	67.9		67.9	67.9
009	135.8		135.8	135.8
010	33.8	5.6	39.4	39.4
Total	305.4	5.6	375.82	375.82

Information base on EPSAP application and facility electronic submittal dated March 20, 2013.

Estimated potential emissions from AMOs 001 -004 Polymer casting processes are base using emissions factors from AP-42 Section 4.4 material usage and process restrictions. These processes are not subject to 40 CFR 63 Subpart WWWW.

AMOs 005 – 010 emissions are based on Emission factors from Table 1 of 40 CFR 63 Subpart WWWW, material usage and process restrictions.

Note, This facility does not perform any centrifugal casting, continuous lamination/continuous casting, Sheet Mold Compound (SMC) Manufacturing, Bulk Mold Compound (BMC) Manufacturing, mixing, filament winding, or pultrusion. The facility also does not use an add-on control device. If at a future date, the permittee decides to add any of these operations, or use an add-on control device, the permittee must request and obtain the necessary Department permit(s) prior to construction and/or addition.

3. Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate 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.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The project authorize the addition of a fiberglass chopping spray booth for Alternate Mode of Operation (AMO 009) for the separate operation of a single non-atomizing gel coat spraying gun which will be operated independently and separate from AMO 010.

This project also removes Specific Condition A.2. 9,000 TPY Production limit from Permit No. 1070031-010-AV.

Processing Schedule

March 4, 2013: Received the application for a Construction Permit Minor Modification.

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:

- 5 tons per year or more of lead;
- 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_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; 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_2 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 $\mu g/m^3$, 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.

Base on Permit No. 1070031-005-AC and Permit No. 1070031-010-AO the existing facility is considered a minor facility for PSD purposes. The Facility's VOC emissions are base on a Total Facilitywide HAPs Emissions cap of 70 tons per any consecutive 12 months.
Based on the March 4, 2013 ESAP submittal No. 3469- 1 the Total facilitywide emissions cap which includes emissions from the addition of the new spray booth remains at 70 Ton per any consecutive 12 months.

The potential VOC emission from the addition of the new spray booth is estimated at 67.9 TPY which is a minor modification to a minor facility for PSD purposes. The modification by itself is not considered a major increase therefore; the project is not subject to PSD preconstruction review.

NSPS Applicability

Based on the submitted application the facility does not operate any units or activities that are subject to NSPS.

NESHAP Applicability

This emissions unit is subject to regulation under 40 CFR 63 Subpart WWWW, - National Emissions Standards for Hazardous Air Pollutants for Reinforced Plastic Composites production and 40 CFR 63, Subpart A- General Provisions**.**

Applicability of Previous Air Permits

The conditions of this permit supplements all other previously issued air permits for this facility. These conditions are in addition to all other applicable permit conditions and regulatory requirements. The owner or operator shall continue to comply with the conditions of those permits, which include restrictions and standards regarding, operations, recordkeeping, reporting, operation of air pollution control devices, and the like. The Permittee shall also comply with the applicable Rules of 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C.

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. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Yasmin K. Enriquez is the project processor responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Northeast District Office, Air Resources Section, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256, Phone: (904) 256-1700.