TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

CDR Systems Corporation
2 Kay Larkin Circle
Palatka, Florida 32177
Putnam Facility
Facility ID No. 1070031

PROJECT

Project No. 1070031-012-AC
Application for Minor Source Air Construction Permit Modification

COUNTY

Putnam, Florida

PERMITTING AUTHORITY

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

January 27, 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

CDR Systems Corporation is an existing Rubber and Miscellaneous Plastic Products Facility that manufactures Polymer Concrete and Fiberglass Reinforced Plastic Polyester Utility Enclosures (Standard Industrial Classification No. 3089). The facility is located in Putnam County at 2 Kay Larkin Circle north of St. Johns Avenue in Palatka, Florida. The UTM coordinates of the existing facility are Zone 17, 433.1 km East and 3280.6 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.
- 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.

Alternate Methods of Operation. This Emissions Unit shall be operated in any of the following ten (10) Methods of Operation:

Alternate Method Number	Description	**NESHAP Table 1 Reference (Note 1)**
001	Closed Molded, Machine Mixed PC	AP-42 **(Note 2)**
002	Open Molded, Hand Mixed PC	AP-42 **(Note 2)**
003	Closed Molded, Hand Mixed PC	AP-42 **(Note 2)**
004	Open Molded, Machine Mixed PC	AP-42 **(Note 2)**
005	Hand Lay-up, Manual Wetout FRP	1.a.i.
006	Hand Lay-up, Machine Wetout FRP	1.c.i.
007	Manual Wetout, Closed Molded FRP	1.a.iv.
008	Machine Wetout, Closed Molded FRP	1.c.iv.
009	Fiberglass Chopping	1.c.i.
010	Gel Coating	1.g.

Note 1: Subpart WWWW, Table 1, paragraph references to relate process descriptions to the NESHAP definitions.

Note 2: From AP-42.Section 4.4 Table 4.4-2 revised with an explanatory footnote 2008.

[Rule 62-213.420(3)(j), F.A.C.; Permit No. 1070031-005-AC]

Project Description

Air construction permit, which authorizes the construction of two (2) Fiberglass Reinforced Plastic (FRP) Trim & Grind Operations Units (located in the West Building), a 500 Gallon Resin Tank, three (3) Resin Agitation Tanks and the after-the-fact Comcore Gel Coat Resin Spray Booth EP10 (located in the West Building), a 8,500 Gallon Resin Storage Tank EP09 and a Foaming/Spray Operation Booth (Binks/ 98-3162) (located in the West Building) EP07 and 08.

Processing Schedule

12/23/13 Received the application for a minor source air pollution construction permit.

01/13/14 Requested additional information.

01/13/14 Received additional information; application complete.

CDR Systems Corp - Palatka Facility

East Manufacturing Building Flow Diagram

CDR Systems Corp - Palatka Facility

West Manufacturing Building Flow Diagram

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_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 (Fl); 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.

PSD Applicability for Project

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 Facility-wide HAPs Emissions cap of 70 tons per any consecutive 12 months.**

Based on the December 23, 2013 application, the Total facility-Wide emissions cap which includes emissions from the addition of the new emission points shall remain at 70 Ton per any consecutive 12 months.

The modification by itself is not considered a major increase therefore; the project is not subject to PSD preconstruction review.

Facility-Wide Potential to Emit (PTE).

Pollutant	Total PTE (TPY)	Proposed Increase in PTE
Styrene	339.3	33.8
Methyl Methacrylate (MMA)	11.3	5.6
Methyl Isobutyl Ketone	42.2	42.2
Xylene	33.3	33.3
HAPs	426.0	115.0
VOC	429.4	118.3
4, 4'- Methylenediphenyl Isocryanate (MDI)	4.34E-04	0
PM/PM10	29.2	29.2

3. APPLICATION REVIEW

This project will add or modify the following emissions points.

Facility ID No. 1070031	
ID No.	**Emission Unit Description**
EU001	**Polymer Concrete & Fiberglass Reinforced Plastic Processes**
EP07 & 08	Foaming/ Spray Painting Operation Booth (Binks/ 98-3162) located in the West Building. The booth is used both for foaming operations and spray painting operations. Operations are not compatible and are therefore performed consecutively (not concurrently).
EP09	8,500 Gallon Polyester Resin Storage Tank
EP10	Comcore Gel Coat Resin Spray Booth (located in the West Building).
-	500 Gallon Resin Tank (No true EP- fugitive)

Continued:

Facility ID No. 1070031	
ID No.	**Emission Unit Description**
EU001	**Polymer Concrete & Fiberglass Reinforced Plastic Processes**
-	3 Resin Agitation Tanks (No true EP- fugitive)
-	Two (2) Fiberglass Reinforced Plastic (FRP)Trim & Grind Operations Units Minuteman Model Number 801105. Handheld operation with a vacuum HEPA Filter. (No true EP-fugitive).

State Requirements

This facility is subject to regulation under Rule 62-296.320(4)(b)1, F.A.C.

Federal NSPS Provisions

The facility does not operate any units or activities that are subject to NSPS.

Federal NESHAP Provisions

This facility 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**.**

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. Leslie Maybin 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, Waste and Air Resource Management Program, Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256.