FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

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HERSCHEL T. VINYARD JR.
SECRETARY

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

CDR Systems Corporation/Division of Hubbell Power Systems
2 Kay Larkin Circle
Palatka, Florida 32177

Authorized Representative:

Scott Martz, Business Unit Director

Air Permit No. 1070031-012-AC
Permit Expires: xx/xx/xx

CDR Systems Corporation
Minor Source Air Construction Permit Modification

This is the final 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. The proposed work will be conducted at the CDR Systems Corporation, which is a 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 are Zone 17, 433.1 km East and 3280.6 km North.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

(DRAFT)

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Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on (DRAFT) to the persons listed below.

Mr. Scott Martz, Business Unit Director CDR Systems Corporation/Division of Hubbell Power Systems (sdmartz@hubbell.com)
Mr. Rick Manley, Consultant Environmental Management Consultants (rmanley@emc1.com)
Mr. Wei Lin, Consultant Environmental Management Consultants (wlim@emc1.com)
Mr. Albert O. Kaeding, P.E. Engineering Consultant (aok@iag.net)
Ms. Natasha Hazziez, U.S. EPA Region 4: Hazziez.natasha@epa.gov
Ms. Ana Oquendo, EPA Region 4: oquendo.ana@epa.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(DRAFT) _____
(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

CDR Systems Corporation/Division of Hubbell Power Systems manufactures Polymer Concrete and Fiberglass Reinforced Plastics polyester utility enclosure using two basic processes with ten variations. 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. After mixing and placing in a mold, the PC hardens to an inert solid article, taking the shape of the mold. Under ideal conditions, all of the unsaturated polyester resin and the styrene polymerize to form the hardened plastics that in turn act as binder to hold the aggregates together. During processing, the styrene containing resin is exposed to air for a period of time during which some of the styrene evaporates producing styrene emissions. The facility manufactures PC under four alternate methods of operations 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. With hand lay-up, the reinforcement is manually fitted to a mold wetted with catalyzed resin mix, after which it is saturated with more resin. The reinforcement is in the form of either fiberglass mat or a woven fabric. Layers of reinforcement and resin are added to build the desired laminate thickness. Squeegees, brushes, and rollers are used to smooth out and compact each layer as it is applied. With mechanical non-atomized application, a mechanical fluid delivery system, in this case the flow coater or the injection gun is employed to apply resin to the glass reinforcement without atomizing the resin fluid stream. In most cases, the mixing, applying and curing are taken place with open molds, which is called open molded process, and styrene emissions occur during those processes. The closed molding process is vacuum bag molding, in which the surface is covered with a plastic film and vacuum is applied before rolling and styrene emissions are significantly reduced. The facility manufactures FRP under four alternate methods of operations using different combinations of closed or open molded, and machine or hand wet-out processes.

Two processes 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. Both these processes will be carried out separately in independent exhaust booth. Particulate matter emissions are controlled by a filter. 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.

There are no physical processing units to which operating rates can be linked. Most emissions from the plant are fugitive. However, the chop shop and gel coat booths are ventilation controlled.

Existing Facility

Facility ID No. 1070031	
ID No.	**Emission Unit Description**
EU001	**Polymer Concrete & Fiberglass Reinforced Plastic Processes**
EP01	Chop Process (One booth with four (4) vertical stacks) located in the East Building.
EP02	
EP03	
EP04	
EP05 & 06	Two EPs for one (1) Gel Coat Spray Booth (East Building)
EP07 & 08	Foaming/Spray Operation Booth (Binks/ 98-3162) located in the West Building.
-	Insulating Foam process in the East Building (Insignificant EP)

Proposed Project

Air construction permit, which authorizes the construction 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. This project will add or modify the following emissions points.

The total HAPs emissions (all HAPs are VOCs) from the facility shall not exceed 70 tons per any consecutive 12 months.

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)
-	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).

FACILITY REGULATORY CLASSIFICATION

- 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 (CAA).
- 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(PSD), F.A.C.

Note: Department has determined that sections of the 40 CFR 63, Subpart WWWW are not applicable to this facility. Such sections are not included as conditions of the Title V Permit.

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.

Alternate Methods of Operation: This Emissions Unit shall be operated in any of the following ten 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]

1. Permitting Authority: The permitting authority for this project 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. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office. The Permitting Authority's telephone number is (904) 256-1700.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office, Compliance Assurance. The mailing address and phone number of the District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is (904) 256-1700.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Condition No. 7 continued:

(b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

9. Annual Operating Report. The owner or operator shall submit an annual report, as specified in Appendix C – Common Conditions of this permit, which summarizes the actual operating rates and emissions from this facility. The Annual Operating Report for Air Pollutant Emitting Facility (DEP form number 62-210.900(5)) shall be completed each year and shall be submitted to the Compliance Authority by April 1 of the following year.

[Rule 62-210.370(3), F.A.C.

For this project, the Department requires the annual reporting of actual VOC, PM, PM_{10}, and HAP(s), Facility-Wide emissions

[Application 1070031-012-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. EU001 Polymer Concrete & Fiberglass Reinforced Plastic Processes

This section of the permit addresses the following emissions unit.

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)
-	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).

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.

EQUIPMENT

1. **Construction**. The permittee is authorized to install two (2) Fiberglass Reinforced Plastic (FRP) Trim & Grind Operations Units (located in the West Building), 500 Gallon Resin Tank, and three (3) Resin Agitation Tanks. This project also authorizes 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. The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

   [Application No. 1070031-012-AC and Rules 62-4.070(3) and 62-4.160(2), F.A.C]

PERFORMANCE RESTRICTIONS

2. **Relation to Other Permits.** The conditions of this permit will supplement and comply with conditions of all existing, valid, Department permits.

EMISSIONS STANDARDS

3. **Total Facility-wide HAPs Emissions**. This permit does not change any or establish any new permitting emission limits. The total HAPs emissions (**all HAPs are VOCs**) from the facility shall not exceed 70 tons per any consecutive 12 months.

   [Title V Air Operation Permit No. 1070031-010-AV; Construction Permit No. 1070031-005-AC and Application No. 1070031-012-AC]

4. Hours of Operation. The hours of operation of are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Work Practice Standards. The permittee shall meet the work practice standards stated in 40 CFR 63 Subpart WWWW Table 4.

[40 CFR 63.5805(b)]

6. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement.

[Rule 62-296.320(4)(b)1, F.A.C.]

7. Determination of Organic HAP emissions in TPY. To calculate the organic HAP emissions in TPY for the facility as needed for **Specific Conditions 3** the facility shall use the following organic HAP emissions factors:

AMO	**Emission Factors** (lbs per lb of resin or gel coat processed) **(Note 1)**	
	Materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat)	Materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat)
001	1.5% of styrene **(Note 2)**	1.5% of styrene **(Note 2)**
002	3.0% of styrene **(Note 2)**	3.0% of styrene **(Note 2)**
003	2.0% of styrene **(Note 2)**	2.0% of styrene **(Note 2)**
004	2.0% of styrene **(Note 2)**	2.0% of styrene **(Note 2)**
005	0.126 x % HAP	0.286 x % HAP – 0.0529
006	0.107 x % HAP	0.157 x % HAP – 0.0165
007	(0.126 x % HAP) x 0.5	(0.286 x % HAP – 0.0529) x 0.5
008	(0.107 x % HAP) x 0.55	(0.157 x % HAP – 0.0165) x 0.55
009	0.107 x % HAP	0.157 x % HAP – 0.0165
010	0.185 x % HAP	0.4506 x % HAP –0.0505

Note 1: Emission factors for alternate methods 5 through 10 are from Table 1 of 40 CFR 63 Subpart WWWW.
Note 2: Polymer casting processes are not subject to 40 CFR 63 Subpart WWWW. Emission Factors are from AP-42. Section 4.4. revised with an explanatory footnote 2008.
[40 CFR 63.5799(b)(1) and (c) Table 1 of 40 CFR 63 Subpart WWWW, Permit No. 1070031-010-AV]

RECORD KEEPING REQUIREMENTS:

8. **Facility-wide Compliance Demonstration Records.** Initial compliance demonstration with the requirements in **Specific Condition No. 3** of this permit shall be determined by recording the total Facility-Wide HAPs emissions. Emissions shall be based on material balance reports. **The facility must submit these records along with the application for the operating permit.** The permittee shall maintain a monthly log at the facility of the following:

(a) The rolling, 12-month total of the facility wide material usage records for all AMOs.

(b) Organic HAP(s) and VOC content

(c) Tons consecutive 12 month Facility-wide rolling total of VOC emissions.

(d) Tons consecutive 12 month Facility-wide rolling total of HAP(s) emissions.

Records of operation where the resin is used if any organic HAP emissions limits based on an organic HAP emissions limit in 40 CFR 63 Subpart WWWW Tables 3 are met.

Records of operation where the resin is used if any organic HAP emissions limits based on an organic HAP emissions limit in 40 CFR 63 Subpart WWWW Table 7 are met if the averaging of organic HAP contents is used. Resin use records may be based on purchase records if it can be reasonably estimated how the resin is applied.

The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier.

[40 CFR 63.5895(c); Permit No. 1070031-010-AV]

9. **Facility Records Duration**. This information shall be retained for at least 3 years from the date of measurement or recording, and be readily assessable for onsite review by the Department.

[Rule 62-4.070(3), F.A.C., Rule 62-210.200(PTE), F.A.C.]

10. **Commencement of Construction/Operation.** The permittee shall submit to the Air Compliance Authority of this Office written notification of the date of commencement of construction/ operation of **EP07/EP08, EP09 and EP10**. This notification shall be submitted or postmarked within as many days prior to the date of construction/ operation commencement as practical, but no later than one (1) business day following commencement of construction/operation.

[Rule 62-4.070(3), F.A.C.]

11. This Facility is subject to SECTION 2. Administrative Requirements of this permit and also, the attached Combined Appendices.