FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

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SECRETARY

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

CDR Systems Corporation
2 Kay Larkin Circle
Palatka Fl, 32177

Authorized Representative:

Scott Martz Business Unit Director

Air Permit No. 1070031-011-AC
Permit Expires: xx/xx/xx
Issue Date:
Putnam Facility
AIRS ID No. 1070031

FiberglassSpray Booth Installation

This is the final air construction permit, which authorizes 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 proposed work will be conducted at the CDR Systems Putnam Facility, 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 existing facility is located in Putnam County at 2 Kay Larkin Circle east of St. Johns Avenue , Putnam County; UTM Coordinates: 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,

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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

Khalid AlNahdy, P. E. Date
District Air Program Administrator

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 April 4, 2013, to the persons listed below.

Mr. Scott Martz, Business Unit Director CDR Systems Corporation (sdmartz@hubbell.com)
Mr. Rick Manley, Consultant Environmental Management Consultants (rmanley@emc1.com)
Mr. Albert O. Kaeding, P.E. Engineering Consultant (aok@iag.net)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Ana Oquendo, EPA Region 4: oquendo.ana@epamail.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 manufactures Polymer Concrete and Fiberglass Reinforced Plastics polyester utility enclosure using two basic processes with ten variations. There are no physical processing units to which operating rates can be linked. Emissions from the plant are fugitive.

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 wetout 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 seperately 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.

Also included in this permit are insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received August 31, 2012, this facility is a major source of hazardous air pollutants (HAPs).

The existing facility consists of the following emissions unit.

Facility ID No. 1070031	
ID No.	**Emission Unit Description**
001	Polymer Concrete & Fiberglass Reinforced Plastic Processes

Proposed Project

The purpose of this construction permit is to authorize:

1). The removal of the 9000TPY production limit.

2). Construction of a separate Fiberglass Chopping Spray booth.

3). Separate operation of Alternate Mode of Operation (AMO) 009 and (AMO) 010

FACILITY REGULATORY CLASSIFICATION

- 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(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Air Resources Section, 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. 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
   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. Existing Permits and Regulations: 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 capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, operation of air pollution control devices, and the like. The owner or operator shall also comply with the applicable Rules of 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C.

   [Rule 62-4.070, F.A.C.]

8. 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.

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.

9. 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.]

10. 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 1070031-011-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

This section of the permit addresses the following emissions unit.

EU	**Emissions Unit Description**
001	Polymer Concrete & Fiberglass Reinforced Plastic Processes

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.

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 this 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.

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

   [Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

   EQUIPMENT

2. **Construction:** This permit authorizes the addition of a fiberglass chopping spray booth and associated equipment. 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.

   [Rules 62-4.070(3) and 62-4.160(2), F.A.C, Application No. 1070031-011-AC]

3. **Hours of Operation:** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

   [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. Title V Air Operation Permit No. 1070031-010-AV]

PERFORMANCE RESTRICTIONS

4. **Total Facilitywide HAPs Emissions**: The total HAPs emissions 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; Application No 1070031 -011 received March 4th, 2013]

5. **Emissions Limits AMO 009 & 010:** This permit does not change any or establish any new permitting emissions limits for these AMOs. The AMOs shall comply with the organic HAP emissions limits established in 40 CFR 63 Subpart WWWW Table 3 and stated in the following table:

Alternative method Number	Emissions Limit 12- Month Rolling average lbs/ton of Resin used
009	88
010	377

   [Rule 62.296.410(2)(a), F.A.C.; Permit No. 1070031-010-AV and Application No 1070031 -011 received March 4th, 2013]

6. **Work Practice Standards: 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)]

7. **Determination of Organic HAP emissions in TPY**: To calculate the organic HAP emissions in TPY for the facility as needed for Specific Conditions 4 , 5 and 6 the facility shall use the following organic HAP emissions factors:

AMO	**Emission Factors** (lbs per lb of resin or gel coat processed) **(Note 1)**	
	Resin/gelcoat containing less than 33% styrene/less than 19% organic HAP	Resin/gelcoat containing 33% or more styrene/19% or more organic HAP
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. **Facilitywide Compliance Demonstration Records: I**nitial compliance demonstration with the requirements in Specific Condition No. 4 of this permit shall be determined by recording the total Facilitywide HAPs emissions. Emissions shall be based on material balance reports. 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) Consecutive 12 month Facilitywide rolling total of VOC emissions.

   (d) Tons consecutive 12 month Facilitywide 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. Application No 1070031 -011 AC received March 4th, 2013]