Carpenter Co.

Facility ID No. 1050192
Polk County

Title V Air Operation Permit Renewal

Permit No. 1050192-014-AV
(Renewal of Title V Air Operation Permit No. 1050192-011-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 632-7600
Fax: (813) 632-7668

Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

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DRAFT/PROPOSED PERMIT

PERMITTEE:
Carpenter Co.
5100 Frontage Road South
Lakeland, FL 33815

Permit No. 1050192-014-AV
Carpenter Co.
Facility ID No. 1050192
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit and incorporate the terms and conditions of construction permit No. 1050192-013-AC for the above referenced facility. The existing Carpenter Co. facility is located in Polk County at 5100 and 5150 Frontage Road South, Lakeland, Florida. UTM Coordinates are: Zone 17, 397.0 km East and 3,101.4 km North (5100 Frontage Road South), and 396.7 km East and 3,101.4 km North (5150 Frontage Road South). For 5100 Frontage Road South, Latitude is 28º 02' 05" North and Longitude is 82º 03' 01" West; for 5150 Frontage Road South, Latitude is 28º 02' 05" North and Longitude is 82º 03' 08" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: DATE, 20xx
Renewal Application Due Date: Exp. DATE -225, 20xx
Expiration Date: Eff. DATE + 5 years, 20xx

(Draft/Proposed)

_____

Cindy Zhang-Torres, P.E.
Air Permitting Manager
Southwest District

CZT/nb/pp

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

This facility is comprised of two independent manufacturing processes located in adjacent plant buildings. These two processes are: expandable polystyrene products manufacturing facility (EU No. 001; located at 5100 Frontage Road South) and flexible foam manufacturing and fabrication facility (EU No. 002; located at 5150 Frontage Road South). The independent manufacturing processes are supported by other operations, including the calcium carbonate additive storage and handling process (EU No. 003), as well as miscellaneous insignificant activities. The facility has one 244 HP diesel-fired engine (EU No. 005) that was installed on February 21, 1991. The engine's main purpose is to provide power to the fire pump during emergency situations.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Expandable Polystyrene Products Manufacturing Facility
002	Flexible Foam Manufacturing and Fabrication Facility
003	Calcium Carbonate Storage Silo
005	Existing Emergency Stationary CI RICE Engine ≤ 500 HP

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received November 7, 2011, this facility is NOT a major source of hazardous air pollutants (HAP). Because this facility operates a stationary reciprocating internal combustion engine, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 63, Subpart A, NESHAP General Provisions	002, 005
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	005
40 CFR 63 Subpart OOOOOO, National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources	002
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
[Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

a. Maintain tightly fitting covers, lids, etc., on all containers of VOC/OS's when they are not being handled, tapped, etc.
b. Prevent excessive air turbulence across exposed VOC/OS's.
c. Where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOC/OS's so that it can be covered when not in use.
d. Properly maintain all fittings, valve lines, etc.
e. Immediately attend to all VOC/OS spills and properly dispose of waste.

[Rule 62-296.320(1), F.A.C.; Construction Permit 1050192-008-AC]

FW4. 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. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.
[Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. The drive and parking areas for delivery of materials and shipment off-site of products shall be maintained and kept free of particulate matter build-up.
b. Good housekeeping practices shall be exercised at all times.
c. A responsible facility employee shall check the calcium carbonate storage silo level during filling to avoid overfilling.
d. After filling the calcium carbonate storage silo, a responsible facility employee shall check for any leaked material and promptly initiate steps to sweep up such material for proper disposal.
e. Major operational upsets shall promptly and effectively be attended to, and calcium carbonate additive unloading or transfer shall be stopped, if necessary, until the upset is corrected.
f. Accidental spills shall be addressed to prevent unconfined emissions of particulate matter.

[Rule 62-296.320(4)(c), F.A.C.; Construction Permit 1050192-012-AC]

FW6. Reasonable Precautions Requirement. As an indicator that the precautions to control unconfined particulate emissions are adequate, visible emissions at the facility property line should not exceed five percent (5%) opacity. If this value is exceeded it will not be considered a violation in and of itself, but may be a violation of the precautions stated above and serve as justification to the Department to require additional controls or work practices.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050192-012-AC]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW7. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year.
[Rule 62-210.370(3), F.A.C.]

FW8. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm.
[Rule 62-213.205, F.A.C.]

FW9. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective.
[Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW10. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

d. Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to: Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9921, Fax: (850) 488-1739.

e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Department of Community Affairs, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149.

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

Subsection A. Emissions Unit No. 001 – Expandable Polystyrene Products Manufacturing Facility

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-001	The expanded polystyrene products manufacturing facility receives expandable polystyrene beads, which typically contain "as received" a maximum of 7.0% by weight of pentane. The "as received" pentane content of the beads is approximately 91% of the "as manufactured" content of the beads and pentane is a volatile organic compound (VOC). The beads, which may include previously expanded beads, are injected into an expander at a typical total raw bead maximum input rate of 12,000 pounds/hour (calculated as a daily average). Inside the expander, steam from the natural gas fired boiler, having a maximum heat input rate of less than 10 mmBtu/hr, is used to expand the polystyrene to approximately 1/8" diameter (*Note: the boiler is an insignificant emissions unit pursuant to Rule 62- 213.430(6), F.A.C.*). The expanded polystyrene is then discharged through a fluidized bed to storage bags. After aging and stabilizing in the storage bags, the now called "prepuff" is transferred to up to two (2) molds (Shape Mold PROMASS 1515 and/or IDRO Block Mold), which may include recycled expanded polystyrene. The typical total combined maximum input rate (inclusive of recycled expanded polystyrene) to the two (2) molds is 15,000 pounds/hour (calculated as a daily average) where steam from the boiler is used to further expand the prepuff/beads and fuse them together into a block/billet/shape form. The blocks/billets/shapes are then transferred from the molds to a storage area for aging and stabilization. After aging and stabilization has taken place, the blocks are then cut into specific dimensions for shipment. Pentane emissions are exhausted as follows:

Stack No.	Source
103	Batch expander (IDRO)
101A, 104, 105	IDRO Block Mold
106	Shape Mold
201-202	Bag/Bead storage area
401-412	Unconfined emissions – Block/Billet/Shape storage area, bag/bead storage area, and insignificant activities: hot melt laminator, cutting expanded polystyrene with hot wire

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200(PTE), F.A.C.; Construction Permit No. 1050192-008-AC]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.2. VOC Emissions. VOC emissions from this emissions unit shall not exceed 471 tons per any consecutive 12-month period.
[Rule 62-210.200(PTE), F.A.C.; Construction Permit 1050192-008-AC]

Excess Emissions

A.3. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.4. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Recordkeeping and Reporting Requirements

A.5. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
PSD Applicability Report	March 1 of each year (*see Compliance Note for Specific Condition No. A.8.*)	A.8.

[Rule 62-213.440, F.A.C.]

A.6. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

A.7. Daily and Monthly Logs. In order to verify compliance with Specific Condition No. A.2., the permittee shall maintain appropriate daily records of materials used and monthly calculate and record the actual VOC emissions in accordance with the following:

$V = \Sigma (P_i \times W_i \times O)$

where: V = VOC (pentane) emissions in pounds;

i = each unique bead batch at the expanders;

P = adjusted nominal % pentane content (91% of manufacturer's analysis);

W = weight of beads in pounds (does not include reground or regrind material);

O = 100% - R

where: residual VOC in finished unit as % of P_i

$R_{block\ mold} = 24\%$

$R_{shape\ mold} = 15\%$

These records shall be kept at the facility for a minimum of 5 years and made available to the Department upon request. Daily records shall be completed by the end of the following 14th business day and monthly records shall be completed by the end of the following month. Where appropriate, the monthly values recorded in "lbs" shall be converted to "tons" in order to demonstrate compliance. The permittee shall also maintain documentation (such as all MSD sheets, purchasing records, etc.) that includes sufficient information to determine VOC emissions.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050192-008-AC]

A.8. PSD Applicability Report.

a. Before March 1st of each year, the permittee shall submit a report to the Compliance Authority summarizing the actual annual VOC emissions from Emissions Unit 001 for the previous calendar year. These reports shall be used to verify the permittee's projected actual emissions as presented in the information submitted to the Department on February 28, 2007. The reports shall be submitted for five (5) consecutive years following the initial operation of the new shape mold.

b. Each report shall contain the following:

1. The name, address and telephone number of the owner or operator of the facility;

2. Facility ID No. (i.e., 1050192), permit No. (i.e., 1050192-008-AC), and emissions unit No. (i.e., 001);
3. Reporting period (e.g., 01/01/2008 – 12/31/2008)
4. The Baseline Actual Emissions for Emissions Unit 001 (i.e., 245.91 tons/year);
5. The actual annual emissions in tons per year for the previous calendar year. The actual annual emissions shall be calculated based on the daily and monthly records required in Specific Condition No. A.7. Calculations shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns. Calculations shall exclude that portion of the unit's emissions following the new shape mold installation that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth;
6. Comparison between the actual annual emissions and the baseline actual emissions.

c. If the difference between the current actual emissions and baseline actual emissions is equal to or greater than the PSD significant emission rates defined in Chapter 62-212, F.A.C. (in this case, it is 40 tons per year of VOC), the mold replacement project shall be subject to the requirements of subsections 62-212.400(4) through (12), F.A.C., as though the mold had not yet been replaced.

[Rules 62-212.300(1)(e), F.A.C.; Construction Permit 1050192-008-AC]

{<u>Compliance Note</u>: The permittee has submitted PSD applicability reports for calendar years 2007, 2008, 2009, and 2010. The final report will be for calendar year 2011 and is due by 03/01/2012. No subsequent reporting is required.}

Subsection B. Emissions Unit No. 002 – Flexible Foam Manufacturing and Fabrication Facility

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-002	The flexible foam manufacturing and fabrication facility fabricates polyurethane foam, polyester fiber battings, and occasional textile materials into semi-finished comfort cushioning products for furniture, bedding, home furnishings, and recreational product manufacturers. In the foam production line, Carpenter can utilize a blowing agent, or blowing agents, to produce different grades of foam, although not all foam grades require that a blowing agent be utilized. Carpenter uses carbon dioxide and pentane as blowing agents. The foam production process is fully automated such that the rate of blowing agents is accurately metered controlled, and monitored. The pentane usage varies based on foam grade being produced, and can be adjusted even while continuously pouring foam. Because of the variation in short-term usage, Carpenter tracks pentane usage on a 12-month rolling total basis. Pentane is delivered to the facility via tanker truck. The received pentane is stored in a 2,000 gallon horizontal pressurized tank. Additionally, polyurethane foam is fabricated into protective cushioning for the packaging industry. The primary means of fabrication is cutting the foam to customer specified sizes and shapes, and when necessary assembling the pieces of foam by gluing them together. The gluing/adhesive application is typically accomplished by using 3 adhesive stations consisting of no more than 3 in-drum, pneumatically powered drum pumps feeding no more than a total of 15 compressed-air atomized, hand-held spray guns. Emissions from the adhesive spray guns are discharged fugitively to the ambient air through natural building ventilation and dock door openings. This emissions unit, which does not produce "molded foam", is subject to the requirements of Title 40, Code of Federal Regulations (CFR), Part 63, Subpart OOOOOO – National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources. VOC emissions result from adhesive application and the use of pentane as a blowing agent.

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. This emissions unit only produces slabstock flexible polyurethane foam, rebond foam, and flexible polyurethane foam. The flexible polyurethane foam process may contain a loop slitter and the emissions unit does not produce "molded foam".
[Rule 62-210.200 (PTE), F.A.C.; Construction Permit 1050192-013-AC]

B.2. Operational Limitation. This emissions unit shall not use materials containing methylene chloride as stipulated in 40 CFR 63.11416 and 40 CFR 63.11417 of Title 40, Code of Federal Regulations (CFR), Part 63, Subpart OOOOOO – National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources.
[Rule 62-204.800(11), F.A.C.; Construction Permit 1050192-013-AC]

B.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200(PTE), F.A.C.; Construction Permit No. 1050192-013-AC]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.4. VOC Emissions. Emissions from this unit shall comply with the following:

Pollutant	**Emission Limit** (tons per any consecutive 12-month period)
VOC Emissions Excluding Emissions from Usage of Pentane as an Auxiliary Blowing Agent	25
VOC Emissions Exclusively from Usage of Pentane as an Auxiliary Blowing Agent	39
Total VOC Emissions	64

[Rule 62-210.200(PTE), F.A.C.; Construction Permit 1050192-013-AC]

Excess Emissions

B.5. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

B.6. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Recordkeeping and Reporting Requirements

B.7. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	**Reporting Deadline**	**Related Condition**
PSD Applicability Report	March 1 of each year	B.10.

[Rule 62-213.440, F.A.C.]

B.8. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

B.9. Daily and Monthly Logs. In order to verify compliance with Specific Condition No. B.4., the permittee shall maintain appropriate daily records of materials used and monthly calculate and record the actual VOC emissions in accordance with the following:

For VOC Emissions Excluding Emissions from Usage of Pentane as an Auxiliary Blowing Agent

$V = \Sigma (P_i \times W_i)$

where: V = VOC emissions in pounds;
i = each unique material used;
P = % VOC content (this value may be reduced by the % of VOC retained in the product);

W = weight of material used in pounds.

For VOC Emissions Exclusively from Usage of Pentane as an Auxiliary Blowing Agent

V = Q x D

where: V = VOC emissions in pounds;
Q = Quantity of pentane used in gallons;
D = Density of pentane in pounds per gallon.

These records shall be kept at the facilities for a minimum of 5 years and made available to the Department upon request. Daily records shall be completed by the end of the following 14th business day and monthly records shall be completed by the end of the following month. Where appropriate, the monthly values recorded in "lbs" shall be converted to "tons" in order to demonstrate compliance. The permittee shall also maintain documentation (such as all MSD sheets, purchasing records, etc.) that includes sufficient information to determine VOC emissions.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050192-013-AC]

B.10. PSD Applicability Report.

a. Before March 1st of each year, the permittee shall submit a report to the Compliance Authority summarizing the actual annual VOC emissions from usage of pentane as an auxiliary blowing agent for the previous calendar year. These reports shall be used to verify the permittee's projected actual emissions as presented in the information submitted to the Department on December 20, 2010. The reports shall be submitted for five (5) consecutive years following the initial use of pentane as a blowing agent in Emissions Unit 002.

b. Each report shall contain the following:
   1. The name, address and telephone number of the owner or operator of the facility;
   2. Facility ID No. (i.e., 1050192), permit No. (i.e., 1050192-013-AC), and emissions unit No. (i.e., 002);
   3. Reporting period (e.g., 01/01/2011 – 12/31/2011);
   4. The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix TV of this permit;
   5. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference;
   6. Any other information that the owner or operator wishes to include in the report.

c. If the difference between the current actual emissions and baseline actual emissions is equal to or greater than the PSD significant emission rates defined in Chapter 62-212, F.A.C. (in this case, it is 40 tons per year of VOC), this project (usage of pentane as an auxiliary blowing agent) shall be subject to the requirements of subsections 62-212.400(4) through (12), F.A.C., as though pentane had not yet been used as a blowing agent.

[Rules 62-212.300(1)(e), F.A.C.; Construction Permit 1050192-013-AC]

{Compliance Note: Pentane was first used as a blowing agent on 05/10/11. Therefore, the first PSD applicability report for Emissions Unit 002 is due by 03/01/2012 for calendar year 2011.}

Other Requirements

B.11. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 63 Subpart OOOOOO (National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources), as adopted by reference in Rule 62-204.800(11)(b), F.A.C.; as well as Subpart A (General

Provisions) for 40 CFR 63, adopted by reference in Rule 62-204.800(11)(d), F.A.C. The applicable provisions of Subpart OOOOOO are listed below:

§ 63.11414	Am I subject to this subpart? (a), (b)(1), (b)(3), (b)(4), (c)
§ 63.11415	What are my compliance dates? (a), (b)
§ 63.11416	What are the standards for new and existing sources? (b)(2), (d), (e), (f)
§ 63.11417	What are the compliance requirements for new and existing sources? (b)(2), (b)(3), (c)(2), (c)(3), (d)
§ 63.11418	What General Provisions apply to this subpart?
§ 63.11419	What definitions apply to this subpart?
§ 63.11420	Who implements and enforces this subpart?

Table 1 to Subpart OOOOOO of Part 63—Applicability of General Provisions to Subpart OOOOOO

[Rules 62-204.800 and 62-213.440, F.A.C.]

Subsection C. Common Conditions for Emissions Unit Nos. 001 – Expandable Polystyrene Products Manufacturing Facility and 002 – Flexible Foam Manufacturing and Fabrication Facility

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-001	Expandable Polystyrene Products Manufacturing Facility
-002	Flexible Foam Manufacturing and Fabrication Facility

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.1. HAP Emissions. Combined total HAP emissions from Emissions Unit Nos. 001 and 002 shall not exceed 2.5 tons per any consecutive 12-month period.
[Rule 62-210.200(PTE), F.A.C.; Construction Permit 1050192-008-AC]

Recordkeeping and Reporting Requirements

C.2. Daily and Monthly Logs. In order to verify compliance with Specific Condition No. C.1., the permittee shall maintain appropriate daily records of materials used and monthly calculate and record the actual HAP emissions in accordance with the following:

Material Usage Rate x Individual HAP Concentration x Emission Factor = Individual HAP Emissions
Sum of Individual HAP emissions = Total HAP Emissions

These records shall be kept at the facilities for a minimum of 5 years and made available to the Department upon request. Daily records shall be completed by the end of the following 14th business day and monthly records shall be completed by the end of the following month. Where appropriate, the monthly values recorded in "lbs" shall be converted to "tons" in order to demonstrate compliance. The permittee shall also maintain documentation (such as all MSD sheets, purchasing records, etc.) that includes sufficient information to determine HAP emissions.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050192-008-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-003	A calcium carbonate storage silo with a capacity of approximately 60 tons pneumatically receives a maximum of 2,000,000 pounds/year of calcium carbonate by truck at a maximum transfer rate of 33,400 pounds/hour. Particulate matter emissions from the filling of the silo are vented to a Camfil Farr dust collector (Model GS2, rated at 750 dscfm) before being exhausted to the atmosphere. From the silo, the additive powder is transferred to a Camfil Farr filter/receiver (Model GS2HV, rated at 700 dscfm) to remove the additive from the air stream and collect particulate matter before being added to the polyol (polypropylene glycol) liquid product in a mix tank. The displaced air is vented to the filter/receiver as a cross-flow against additive being transferred into the mix tank. This mixture is used to fabricate polyurethane foam products. The filter/receiver is located inside the manufacturing building adjacent to the mix tank, and exhausts inside the building. The calcium carbonate is dropped from the filter/receiver onto a screw conveyor which transfers the material to the mix tank. The screw conveyor is sealed; therefore, no fugitive emissions occur.

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The storage silo shall not receive more than 2,000,000 pounds (1,000 tons) of calcium carbonate per any consecutive 12-month period.
[Rules 62-4.160(2) and 62-210.200(PTE); Construction Permit 1050192-012-AC]

D.2. Operational Limitation. The maximum transfer (filling) rate of calcium carbonate from trucks to the storage silo shall not exceed 33,400 pounds/hour.
[Rule 62-210.200 (PTE), F.A.C.; Construction Permit 1050192-012-AC]

D.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200(PTE), F.A.C.; Construction Permit No. 1050192-012-AC]

D.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging time for Specific Condition No. D.5. is based on the specified averaging time of the applicable test method.

D.5. Visible Emissions. Visible emissions from the silo's dust collector (baghouse) shall not exceed 5% opacity.
[Rules 62-4.070(3) and 62-210.650, F.A.C.; Construction Permit 1050192-012-AC]

Excess Emissions

D.6. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

D.7. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.; Construction Permit 1050192-012-AC]

D.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

D.10. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), the silo's dust collector (baghouse) shall be tested to demonstrate compliance with the emissions standards for visible emissions.
[Rule 62-297.310(7), F.A.C.; Construction Permit 1050192-012-AC]

D.11. Additional Compliance Test Requirements. The test observation period shall be at least 30 minutes in duration and include the period during which the highest opacity can reasonably be expected to occur. The test report shall include a statement of the transfer rate in pounds/hour for the test period along with copies of the daily and monthly records for the test period as required by Specific Condition No. D.13.
[Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

D.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

D.13. Daily and Monthly Logs. In order to demonstrate compliance with Specific Condition Nos. D.1. and D.2., the permittee shall record the following:

Daily (when silo filling occurs)

a. Facility name (i.e., Carpenter Co.), facility ID No. (i.e., 1050192), and emissions unit No. (i.e., 003).
b. Date.
c. Name of material being transferred (i.e., calcium carbonate).
d. Start and end time of silo filling operation, and the resulting silo filling (operating) time, in hours.
e. Total quantity of material transferred, in pounds.
f. Transfer rate in pounds/hour.

Monthly (for the silo)

g. Facility name (i.e., Carpenter Co.), facility ID No. (i.e., 1050192), and emissions unit No. (i.e., 003).

h. Month and year.

i. Total amount of calcium carbonate transferred to the silo, in pounds.

j. The most recent consecutive 12-month period total amount of calcium carbonate transferred to the silo, in pounds.

k. The most recent consecutive 12-month period total hours of transferring calcium carbonate to the silo.

Daily records shall be completed by the end of the 3rd business day and monthly records shall be completed by the end of the following month. The records shall be maintained at the facility for at least 5 years and made available to the Department upon request.
[Rules 62-4.070(3) and 62-210.370(3), F.A.C.; Construction Permit 1050192-012-AC]

Subsection E. Emissions Unit No. 005 – Existing Emergency Stationary CI RICE Engine ≤ 500 HP

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-005	The facility has one 244 HP diesel-fired engine that was installed on February 21, 1991. The engine's main purpose is to provide power to the fire pump during emergency situations.

{Permitting Notes:

(1) The engine is exempt from the construction permit requirements of Rule 62-210.300(1), F.A.C., in accordance with the provisions of Rule 62-210.300(3)(a)35., F.A.C. (Stationary RICE).

(2) NSPS 40 CFR 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) does not apply to this engine based on the construction date (prior to 07/11/2005).}

IMPORTANT REGULATORY CLASSIFICATIONS – This engine is regulated under NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), as amended in the 08/20/10 Federal Register, as existing stationary Reciprocating Internal Combustion Engines (RICE) at an area source of hazardous air pollutants (HAPs).

Operation Requirements

E.1. Operating Hours. There are no specific limitations on operating hours for this existing stationary engine.

{Permitting Note: In order to be considered an emergency RICE subject to the 40 CFR 63 Subpart ZZZZ requirements for emergency CI RICE, the engine must be operated in accordance with the requirements specified in 40 CFR 63.6640(f) (see Appendix NESHAP Subpart ZZZZ).}

Applicable Federal Requirements

E.2. Federal 40 CFR 63 NESHAP Subpart ZZZZ Requirements. The engine in this section is subject to the applicable requirements of NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)), which is attached to this permit as Appendix NESHAP Subpart ZZZZ, as it applies to existing RICE at area sources of hazardous air pollutants (HAP). The applicable requirements are shown in the Summary of NESHAP 40 CFR Part 63 Subpart ZZZZ Applicable Requirements for Existing Stationary Reciprocating Internal Combustion Engines (RICE) at Area Sources of HAP, attached to this permit, under the category Emergency CI ≤500 HP.
[Rule 62-4.070(3), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

{Compliance Note: The final compliance date for the applicable Subpart ZZZZ requirements for the existing compression ignition (CI) RICE engine at this area source of HAP is 05/03/13. (40 CFR 63.6595(a)(1).}

E.3. Federal NESHAP 40 CFR 63 Subpart A General Provisions Requirements. The engine in this section is subject to the applicable requirements of NESHAP 40 CFR 63 Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rule 62-204.800(11)(d), F.A.C., which is attached to this permit as Appendix NESHAP Subpart A. The applicable requirements of Subpart A are shown in Table 8 to 40 CFR 63 Subpart ZZZZ.
[Rule 62-204.800(11)(d), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary

Appendix I, List of Insignificant Emissions Units and/or Activities

Appendix NESHAP Subpart A, General Provisions

Appendix NESHAP Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Appendix NESHAP Subpart OOOOOO, National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources

Appendix RR, Facility-wide Reporting Requirements

Appendix TR, Facility-wide Testing Requirements

Appendix TV, Title V General Conditions

Summary of NESHAP 40 CFR Part 63 Subpart ZZZZ Applicable Requirements for Existing Stationary Reciprocating Internal Combustion Engines (RICE) at Area Sources of HAP