



South Coast Air Quality Management District



21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

June 2, 2015

Mr. Gerardo Rios
Chief – Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Dear Mr. Rios:

Subject: Insulfoam, LLC (ID 151843) – Title V Permit Revision

Insulfoam, LLC (ID 151843) needs to revise their Title V permit due to the proposed modification of their Polystyrene Foam Expansion and Molding System and Regenerative Thermal Oxidizer. Insulfoam, LLC is an EPS block molder (NAICS 326140) located at 5635 Schaefer Avenue, Chino, CA 91410. This proposed permit revision, as requested under Application No. 561754, is considered a “minor permit revision” to their Title V permit. Attached for your review are the evaluation and permit for the proposed revision. With your expected receipt of the proposed Title V permit revision today, we will note that the EPA 45-day review period begins on June 2, 2015.

If you have any questions or need additional information regarding the proposed permit revision, please call Stephen Jiang at (909) 396-3134 or Doug Gordon at (909) 396-2683.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mohan Balagopalan".

Mohan Balagopalan
Senior Manager
Chemical, Mechanical, and Ports Permitting

MB:SE:syj

Attachments



APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
PROCESSED BY S. JIANG	CHECKED BY D. GORDON

EVALUATION REPORT FOR PERMIT TO CONSTRUCT/OPERATE

Applicant's Name: INSULFOAM Facility ID: 151843

Mailing Address: 19727 57th Avenue East
Puyallup, WA 98375

Equipment Location: 5635 Schaefer Avenue
Chino, CA 91710-9041

EQUIPMENT DESCRIPTION

Modifications are shown in bold italic, original in bold strike-through.

Appl. No. 573845 Modification to Polystyrene Foam Block Mfg. (A/N: 521742 P/O: G27637), by:

the removal of:

- Pre-expanding System No. 1 (D1, D2, D23, D24, D25 & D34)

Equipment	ID No.	Connected to	RECLAIM Source Type/ Monitoring Unit	Emission and Requirements	Conditions
Process 1: Polystyrene Foam Block Mfg.					P2.1, P13.1, P42.1
System 1: Polystyrene Foam Expansion					
HOPPER, NO. 1, POLYSTYRENE BEADS A/N: 521742	D23	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1
FEEDER, NO. 1, SCREW, POLYSTYRENE BEADS A/N: 521742	D34	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1
FOAM EXPANSION, NO. 1, PRE-EXPANDER, HIRSCH, MODEL VACUTRANS 1200, WITH FILLING CAN A/N: 521742	D1	C58			D29.2, D323.1, K67.4
FEEDER, NO. 1, PRE-EXPANDED POLYSTYRENE A/N: 521742	D25	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1
DRYER, FLUIDIZED-BED, NO. 1, A/N: 521742	D2	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1
CONVEYOR, PNEUMATIC, NO. 1, PRE-EXPANDED POLYSTYRENE A/N: 521742	D24	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1
HOPPER, NO. 2, POLYSTYRENE BEADS A/N: 521742 573845	D64	C58		PM: (9) RULE 405, 2-7-1986	D29.2, D323.1



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

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FEEDER, NO. 2, SCREW, POLYSTYRENE BEAD A/N: 521742 573845	D65	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
FOAM EXPANSION, NO. 2, PRE-EXPANDER, HIRSCH, MODEL VACUTRANS PREEX 14000, WITH FILLING CAN A/N: 521742 573845	D66	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1, K67.4
FEEDER, NO. 2, PRE-EXPANDED POLYSTYRENE A/N: 521742 573845	D67	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
DRYER, FLUIDIZED BED, NO. 2 A/N: 521742 573845	D68	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR, PNEUMATIC, NO. 2, PRE-EXPANDED POLYSTYRENE A/N: 521742 573845	D69	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1

System 2: Pre-expanded Polystyrene Storage

AGING ROOM, PRE-EXPANDED POLYSTYRENE, 18 STORAGE BAGS, 3,750 CU. FT. EACH WITH BAGFARM HEATING UNIT A/N: 521742 573845	D7	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1, E193.1, E193.4
CONVEYOR, PNEUMATIC, VIRGIN PRE-EXPANDED POLYSTYRENE A/N: 521742 573845	D35			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1

System 3: Polystyrene Block Molding

MIXER, NO. 1, PRE-EXPANDED POLYSTYRENE, PELLET MIXING STATION, WITH 3 BAGS (VIRGIN, REGRIND, AND MOLD FILL), 800 CU. FT. EACH A/N: 521742 573845	D21	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
MIXER, NO. 2, PRE-EXPANDED POLYSTYRENE, PELLET MIXING STATION, WITH 3 BAGS (VIRGIN, REGRIND, AND MOLD FILL), 800 CU. FT. EACH A/N: 521742 573845	D52	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
PRESS, BLOCK MOLDING, IDDROPRESS, MODEL 24, WITH FILL BLOWER, VACUUM EXHAUST, DRAIN VENT, AND PRESSURE EXHAUST A/N: 521742 573845	D56	C58			D29.2
PRESS, BLOCK MOLDING, NUOVA IDDROPRESS, VERTICAL BLOCK MOLD, WITH FILL BLOWER, DRAIN VENT, VACUUM AND PRESSURE EXHAUST A/N: 521742 573845	D63	C58			D29.2

System 4: Polystyrene Foam Block Molding

CUTTER, WITH ROLLER CONVEYER A/N: 521742 573845	D39			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
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CUTTER, WITH ROLLER CONVEYER A/N: 521742 573845	D41			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYER A/N: 521742 573845	D43			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYER A/N: 521742 573845	D45			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, SHAPE A/N: 521742 573845	D47			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
System 5: Polystyrene Foam Scrap Recovery					
GRINDER, SCRAP A/N: 521742 573845	D11			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
GRINDER, SCRAP A/N: 521742 573845	D12			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
SCREEN, CLASSIFYING, SCRAP FOAM A/N: 521742 573845	D57			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR A/N: 521742 573845	D62			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
BULK MATERIAL LOAD/UNLOAD STATION, 6 RECYCLING BAGS, 3,750 CU. FT. EACH, AND 2 SMALLER BAGS A/N: 521742 573845	D13			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR, PNEUMATIC, SCRAP A/N: 521742 573845	D61			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1

Appl. No. 561753 Modification to Process 2 System 1 – RTO (A/N: 468878 P/O: G1360), by:

the removal of:

- The venting of Pre-expanding System No. 1 (D1, D2, D23, D24, D25 & D34)
- Booster Blower
- Moisture knock-out tank 2 (Blue Tank)

And, the addition of:

- Ducting directly to Tank 1 (Silver Tank)

Equipment	ID No.	Connected to	RECLAIM Source Type/ Monitoring Unit	Emission and Requirements	Conditions
Process 2: Air Pollution Control					
System 1: Oxidizer					



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

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OXIDIZER, REGENERATIVE, <i>SHIP & SHORE ENVIRONMENTAL</i> , MODEL SSE-8.4K-95X-RTO, NATURAL GAS, 2 MMBTU/HR A/N: 468878 561753	C58	D1-D2 D7 D21 D23-D24 D25 D34 D52 D56 D63 D64 D65 D66 D67 D68 D69	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.2, C8.2, D29.2, E193.2, E193.3, E193.5, E193.7, H23.2
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Appl. No. 561754 – Minor Title V Facility Permit Revision

Minor Revision of Title V Facility Permit per Rule 301(l)(7)

PERMIT CONDITIONS

PROCESS CONDITIONS

P1.1 The operator shall limit emissions from this process as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 227 LBS IN ANY ONE DAY

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Processes subject to this condition: 1]

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1175

[RULE 1175, 5-13-1994; Rule 1175, 11-5-2010]

[Processes subject to this condition: 1, 2]

P42.1 The operator shall limit the raw beads used in this process as follows:

RAW BEAD TYPE	REQUIREMENT
Mid Pentane Beads	less than 40% of the annual expanded polystyrene block throughput
Low Pentane Beads	greater than or equal to 60% of the annual expanded polystyrene block throughput

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1175, 5-13-1994; Rule 1175, 11-5-2010]



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[Processes subject to this condition: 1]

P42.2 The operator shall collect and reduce the manufacturing emissions from this process as follows:

POLLUTANT	REQUIREMENT
VOC	at least 93% by weight (the product of capture and control device efficiencies)

To demonstrate compliance with this condition, the operator shall repeat a source test specified in Condition No. D29.2 once every five (5) years.

[RULE 1175, 5-13-1994; Rule 1175, 11-5-2010]

[Processes subject to this condition: 1]

DEVICE CONDITIONS

B. Material/Fuel Type Limits

B59.2 The operator shall only use the following material(s) in this device:

Natural gas and the emissions from the polystyrene foam expansion, pre-expanded polystyrene storage, and polystyrene block molding systems.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: C58]

C. Throughput or Operating Parameter Limits

C8.6 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1450 Deg F.

To comply with this condition, the operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature in the oxidizer.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The operator shall not operate this equipment in the fuel injection mode.

The operator shall operate this equipment exclusively with the burner in operation.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C58]

D. Monitoring/Testing Requirements



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
VOC	Method(s) specified in District Rule 1175	District-approved averaging time	Protocol to indicate test locations for collection efficiency demonstration
VOC	Method(s) specified in District Rule 1175	District-approved averaging time	Inlet and outlet simultaneously of oxidizer

The test(s) shall be conducted to demonstrate compliance with the minimum of 93% reduction of the overall manufacturing emissions required by Rule 1175(c)(5).

The test shall be conducted at least once every five years.

Source test shall be conducted when the polystyrene foam expansion system is operating at maximum capacity.

Notwithstanding the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer at least 365 days prior to the expiration date of this Title V Facility Permit unless otherwise approved in writing by the District, and notify the District of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least 180 days prior to the expiration date of this Title V Facility Permit unless otherwise approved in writing by the District.

Source test shall be conducted in accordance with the equipment configuration and operation specified in the test protocol approved in writing by the District.

The source test shall be conducted when this equipment is operating at parameters (aging times, temperatures and differential pressures) of not less than the minimum operating parameters specified in this permit. If the operating parameters during the source test are greater than the minimum operating parameters specified in this permit, the minimum operating parameters may be increased to reflect the operating parameters during the source test.

The operator shall also provide to the District a source test report containing, at a minimum, the following information:

<u>Required data</u>	<u>Reported As</u>
Collection efficiency of emission collection system	Under actual test condition
Destruction efficiency of oxidizer	Under actual test condition
VOC emissions in ppmV and lbs/hr to support collection efficiency and destruction efficiency results	Under actual test condition
Operating temperature of oxidizer	Under actual test condition
Operating differential pressures of the Silver Tank	Under actual test condition



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~~Tank 1 the Blue Tank~~ and the Booster Blower

Operating temperature of the aging room Under actual test condition

Bead aging times Under actual test condition

The maximum raw bead blowing agent content processed Under actual test condition

The residual blowing agent content in product Under actual test condition

Notwithstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 60 days after the source test was conducted.

[RULE 1175, 5-13-1994; Rule 1175, 11-5-2010; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: ~~D1, D2~~, D7, D11, D12, D13, D21, ~~D23, D24, D25, D34~~, D35, D39, D41, D43, D45, D47, D52, D56, D57, C58, D61, D62, D63, D64, D65, D66, D67, D68, D69]

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]



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[Devices subject to this condition: ~~D1, D2~~, D7, D11, D12, D13, D14, D15, D19, D21, ~~D23, D24, D25, D34~~, D35, D39, D41, D43, D45, D47, D52, D57, D59, D61, D62, D64, D65, D66, D67, D68, D69]

E. Equipment Operation/Construction Requirements

E193.1 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The operator shall maintain the enclosed aging room under a negative pressure of at least 0.007 inches water column at all times that any pre-expander or block molding machine is in operation, or beads are stored in the aging room.

The operator shall install and maintain a differential pressure monitoring device for the enclosed aging room, which monitors the differential pressure between the inside and the outside of the aging room.

The operator shall also install and maintain a device to continuously record the differential pressure being monitored.

[**RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition: D7]

E193.2 The operator shall construct, operate, and maintain this equipment according to the following requirements:

A differential pressure gauge shall be installed across the main blower located at the inlet to the oxidizer.

The operating range for the differential pressure shall be determined during the initial source test for the oxidizer.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002**]

[Devices subject to this condition: C58]

E193.3 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The combustion chamber temperature shall be maintained at a minimum of 1,450 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy of within plus or minus 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications using an applicable AQMD or EPA approved method.

For the purpose of this condition, a deviation shall be defined as when a combustion chamber temperature of less than 1,400 degrees Fahrenheit occurs during normal operation of the equipment it serves. The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the combustion chamber temperature at or above



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1,400 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective action taken.

All deviations shall be reported to the AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with an Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]

[Devices subject to this condition: C58]

E193.4 The operator shall operate and maintain this equipment according to the following requirements:

The enclosed aging room shall be maintained at a 24-hour average temperature of no less than 85 degrees Fahrenheit at all times when there are beads present in the Bead Aging Operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the air temperature in the enclosed aging room. Such recorded results shall include, but not be limited to, electronic recordings of the operating temperature for the Bead Aging Operation. The temperatures will be measured and recorded no less frequently than hourly, and the electronic recordings shall clearly indicate the dates and times of each temperature measurement.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D7]

E193.5 The operator shall operate and maintain this equipment according to the following requirements:

The operator shall operate this equipment at a set point temperature of at least 1,570 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature. Such recorded results shall include, but not be limited to, circular chart recordings containing the oxidizing chamber operating temperature. The circular chart recordings



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shall clearly indicate the dates and times of continuous temperature recordings, and each individual chart recording shall be for a maximum of seven consecutive calendar days.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C58]

E193.7 The operator shall operate, and maintain this equipment according to the following requirements:

The operator shall continuously operate fixed magnehelic gauges designated as the ~~Silver Tank Tank 1~~ magnehelic ~~and the Blue Tank magnehelic~~ during all times that a pre-expander and/or a block mold is in operation.

The operator shall operate and maintain the ~~Silver Tank Tank 1~~ magnehelic at a minimum negative pressure of 1.0 inches of water (with an allowable variance of +0.5 inches of water).

~~The operator shall operate and maintain the Blue Tank magnehelic at a minimum negative pressure of 1.0 inches of water (with an allowable variance of +0.5 inches of water).~~

The operator shall continuously operate a Booster Blower magnehelic gauge during all times that a pre-expander and/or a block mold is in operation and/or when there are beads present in the Bead Aging Operation.

The operator shall operate and maintain the Booster Blower magnehelic at a minimum negative pressure of 1.0 inches of water (with an allowable variance of +0.5 inches of water).

During the times that a magnehelic is required to be operated, the operator shall monitor negative pressure readings of the magnehelic once daily, by manually reading and recording, or by electronically recording, the magnehelic every 10 seconds for a 5 minute period. The 10 second magnehelic readings shall be averaged and the result recorded as a 5 minute average.

The operator shall maintain records of the daily 5 minute average readings for each magnehelic and these recordings shall clearly indicate the date and time of each set of magnehelic readings.

The operator shall determine monthly the accuracy of the magnehelics with an electronic manometer that measures the static pressure at a second port located adjacent to the magnehelic's port. Any magnehelic that shows a static pressure deviation from the electronic manometer of greater than 10% shall be immediately removed and replaced.

Records of all accuracy testing, removal and replacement of magnehelics shall be maintained. The records shall be signed by the person conducting the testing and the person removing or replacing the magnehelics.

[RULE 1175, 5-13-1994; Rule 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D7]



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H. Applicable Rules

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOx	District Rule	1147

[RULE 1147, ~~12-5-2008~~ 9-9-2011]

[Devices subject to this condition: C58]

K. Record Keeping/Reporting

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Certificate of Analysis showing blowing agent content for each lot of expandable polystyrene beads processed in this equipment.

Annual consumption of low-pentane beads and mid-pentane beads (in lbs per year)

Annual production of polystyrene foam blocks (in lbs per year)

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: ~~D1~~, D66]

BACKGROUND/HISTORY

Insulfoam manufactures polystyrene foam blocks and boards that are used for construction insulation applications. At Insulfoam facility, raw material (Expandable Polystyrene [EPS] beads), is expanded using steam and mechanical agitation, then aged. The expanded and aged material is then molded into a block using steam and vacuum pressure. Insulfoam is the only EPS block molder within the District.

Insulfoam facility type:

RECLAIM		Title V
SOx	NOx	
No	No	Yes

On March 12, 2014 and April 02, 2015, Insulfoam submitted three applications indicated as follows:

<u>Appl. No.</u>	<u>Type</u>	<u>Previous P/O</u>	<u>Equipment</u>	<u>Fee Sch.</u>	<u>Expedited?</u>
561753	P/C-Mod.	G1360	RTO	Sch. D	No
561754	Plan	N/A	Minor Title V Revision	Title V Rev.	N/A
573845	Change of Cond.	G27623	Polystyrene Foam Block Mfg.	Sch. C	No



APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
PROCESSED BY S. JIANG	CHECKED BY D. GORDON

Application No. 573845 was submitted to remove the pre-expanding system no. 1 from the Polystyrene Foam Block Manufacturing Process. The changes are being proposed to make the system more compact and easy to maintain.

the removal of:

- Pre-expanding System No. 1 (D1, D2, D23, D24, D25 & D34)

Insulfoam did not propose an increase of the throughput, no emission increase is expected

Application No. 561753 was submitted to reconfigure portions of the existing emission collection systems. The changes are being proposed to make the system more compact and easy to maintain. The alteration with the air pollution control equipment is indicated as follows:

the removal of:

- The venting of Pre-expanding System No. 1 (D1, D2, D23, D24, D25 & D34)
- Booster Blower
- Moisture knock-out tank 2 (Blue Tank)

And, the addition of:

- Ducting directly to Tank 1 (Silver Tank)

Application No. 561754 was submitted as a plan for the minor revision of the Title V permit as specified in Rule 301.

PROCESS DESCRIPTION

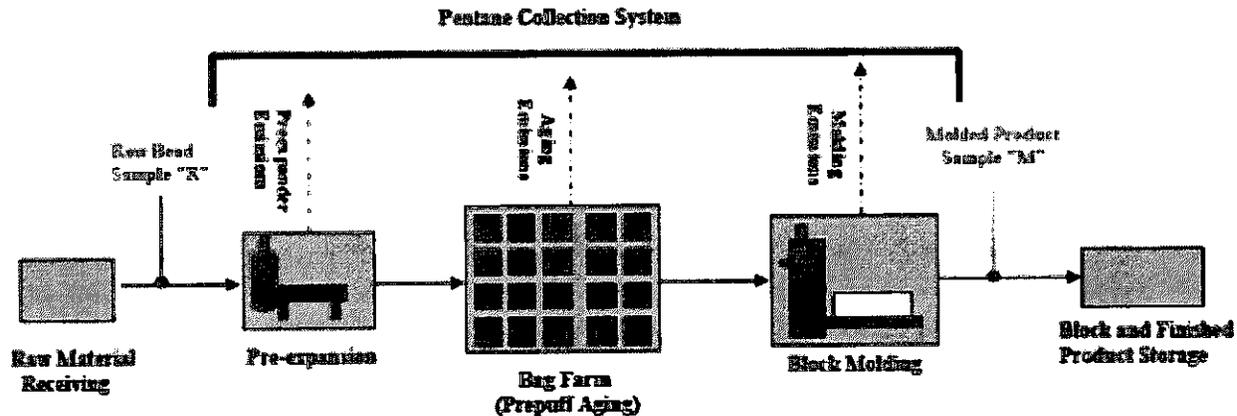
Insulfoam manufactures polystyrene foam blocks and boards that are used for construction insulation applications. In this process, raw material (EPS), is expanded using steam and mechanical agitation, then aged. The expanded and aged material is then molded into a block using steam and vacuum pressure. VOC emissions from these processes are continuously vented to an emission control system consisting of a regenerative thermal oxidizer (RTO) (C58). The EPS block molding process and the pentane collection system are shown in the following process diagram:



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
PROCESSED BY S. JIANG	CHECKED BY D. GORDON



- 1) Raw Material Receiving - The raw materials for the process are EPS resins, called beads, which have a sand-like appearance. The resins are shipped to the facility in lined 1000-pound Gaylord boxes or lined 2200- pound bags. EPS resin is impregnated with a pentane blowing agent. Depending on the amount of pentane contents, the EPS bead is categorized to Low-Pentane Bead or Mid-Pentane Bead. Low-Pentane Bead is defined as the pentane content with an upper limit less than 4.0 percent by weight. Mid-Pentane Bead is defined as the pentane content within the range of 4.0 to 5.2 percent by weight. The pentane content is certified upon delivery by an accompanying bead lot manufacturer's Certificate of Analysis prior to shipment.
- 2) Pre-Expansion – Pre-expansion is performed in a line of equipment. Boxes and bags of EPS beads are opened and allowed to air out for 5-10 minutes. Then they are dumped into a hopper (D64). The beads then are augured (D65) into a small hopper (filling can) (D66), where the bead charge is measured then introduced into the Pre-Expander (D66). With steam and mechanical agitation, the beads are pre-expanded into BB-sized particles called “pre-puff”. The steam softens the polymer and causes the pentane blowing agent to expand inside the bead and blow outward. Following the pre-expansion cycle, the pre-puff is dumped via a feeder (D67) directly from the pre-Expander into an integral fluidized bed drier (D68), where air is blown through the pre-puff to cool and dry it. Following drying, the pre-puff is blown through a takeaway blower (D69) to the aging bags (D7) for stabilization and aging.
- 3) Pre-puff Bead Aging – Pre-puff is blown by the take-away blower (D69) to the aging Room (D7) (also known as “bag farm”), where the pre-puff is aged and stabilized for 4-12 hours. The pre-puff is stored in eighteen 3750-cubic foot bags, located inside of the Aging Room. The aging step allows the temperature to equalize and the pre-puff to achieve the proper conditions for molding. During the pre-puff aging, a portion of the pentane is emitted into the Aging Room.



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- 4) Molding – Stabilized pre-puff is pneumatically conveyed (D35) from the Aging Room to the mixing station (D21, D52) at each of the two block molds (D56, D63). Each mixing station contains three bags: virgin bead bag, regrind bag, and mold fill bag. Specifically, the pre-puff is conveyed to the virgin bead bag. The regrind (recycled scrap bead) from Scrap Recovery (see below), is conveyed to the regrind bag via a pneumatic conveyor (D61).

When producing virgin foam block, virgin beads are transferred mechanically via auger from the virgin bead bag to the mold fill bag. When producing “scrap foam block”, the virgin bead bag and the regrind bag, respectively, to the mixing station, where they are combined then blown to the mold fill bag. From the mold fill bag, the beads are vacuum fed into the block mold (D56, D63) using a mold fill blower.

Once in the mold, the beads are subjected to a number of steaming and vacuum cycles which fuse the pre-puff into a foam billet or block. The molding cycle consists of the following steps: (1) initial steam/vacuum, with mold cavity evacuated to vacuum system; (2) final steam, with mold cavity pressurized with steam and held, no evacuation or venting; (3) mold pressure exhaust, with exhaust vent opened to instantaneously depressurize mold, the shut; (4) dewatering, when exhaust vents are opened and the mold evacuated via fill blower; (5) final vacuum, with mold evacuated and collected via vacuum system; and (6) open mold/eject block.

- 5) Cutting and Packaging/Shipping – Some of the foam billets are shipped in the original molded block form. Other blocks are set aside and allowed to stabilize for 24 to 96 hours, then are cut into various product sizes and shapes. The cutters with roller conveyors (D39, D41, D43, D45) cut a block into boards by conveying the block through the hot wire. The Shape Cutter (D47) cuts a block by holding the block stationary and moving the hot wire as directed by a computer. The blocks or cut products may be directly packaged and shipped to the customer, or placed in inventory storage pending shipment.
- 6) Scrap Recovery – The cutting of foam blocks into boards and shapes generates a significant amount of foam scrap that is not directly saleable. The majority of this scrap is collected, reduced in size, then recycled to the regrind bags at the mold mixing stations (D21, D52) to produce “scrap foam blocks”. The facility also receives shipments of scrap from outside sources. These outside sources are primarily Insulfoam’s block customers, who purchase the blocks and cut them as necessary at their own facilities. Thereby generating scrap that Insulfoam has agreed to accept.

The scrap foam is placed into grinders (D11, D12) to reduce the scrap into smaller pieces suitable for on-site recycling. This “regrind” is processed through a screen (D57) to ensure proper sizing, and stored in regrind storage bags (D13).



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

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In regards of the production of “scrap foam blocks”, which are made using a percentage of recycled regrind material, the regrind is pneumatically conveyed (D61) from the regrind storage bags (D13) to the regrind bag at the mold mixing station (D21, D52). There, the regrind is mixed with “virgin” bead prior to charging to the block mold (D56, D63).

Some scrap generated at Insulfoam is not suitable for recycling, and is packaged and removed from the facility to offsite recyclers or waste landfills.

This facility operates 24 hrs/day, 7 days/wk, and 52 wks/yr. Insulfoam is operating under an emission cap condition (condition no. P2.1), which limits total VOC emissions of 227 lb/day.

EMISSION CALCULATIONS

Appl. No. 573845 – Polystyrene Foam Block Manufacturing Operation

The project is to remove one older pre-expanding system from the existing two systems. No emission change is expected from the proposed modification.

Rule 1175 Source Test

On February 13, 2007, a source test was performed to determine the RTO’s VOC destruction removal efficiency (DRE) and the air pollution control (APC) system’s collection efficiency (CE). The source test report was prepared by URS Corporation (URS) and submitted to the District on March 27, 2007. The source test report was approved by M&STE on June 7, 2007 (Ref: 05038a). The source test results are indicated as follows:

<u>Parameters</u>	<u>Result Average</u>
Collection Efficiency (CE)	99.4%
Destruction Removal Efficiency (DRE)	98.6%
Overall Control Efficiency	98.0%

EMISSION SUMMARY

Since the facility is operating under an emission cap condition (227 lb/day), no daily emission increase is expected. Thus, no emission calculation required for the proposed pre-expander replacement. The emissions will remained to be the same with the previous permit to operate (P/O: G8118), as indicated as follows:

A/N: 573845		Hourly (lbs/hr)	Daily (lbs/day)	Annually (lbs/yr)	30 day ave. (lbs/day)	30 day NSR (lbs/day)
VOC	R1	94.6	2270.4	826,426	2270	2270
	R2	9.46	227.0	82,643	227	227



APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
PROCESSED BY S. JIANG	CHECKED BY D. GORDON

Daily (lb/day) = (Hourly, lb/hr) (24 hr/day)
 Annually (lb/yr) = (daily, lb/day) (7 day/wk) (52 wk/yr)
 30-day average = (Annually, lbs/yr) / (360 day/yr)

Appl. No. 561753 - RTO

The project is to remove one older pre-expanding system from the existing two systems, and to remove some venting ducts, knock-out tank no. 2 and a booster blower. The two pre-expander collection points that are being modified will both have a reduced pressure drop relative to existing configuration. This is a result both of reduced length of ducting, and reduced total flow rate for the one pre-expander vs. the two existing pre-expanders.

The removal of the existing blue tank, and associated rerouting of the above emission points closer to the RTO inlet, will result in elimination of the pressure drop associated with the existing blue tank exhaust. Since that pressure drop is greater than the static pressure of the current booster blower installed in that line; removal of the blower does not offset the improved pressure drop characteristics of the modified ductwork. In other words, the booster fan is not needed because the pressure drop it is reducing will no longer exist.

The block mold vacuum exhausts will have a slightly increased pressure drop relative to the existing, as the duct run for these emission points will be longer. This increase will not offset the overall decrease in system pressure drop.

The following calculation is performed to show such change will not affect the emission collection efficiency.

Pre-modification Energy Requirement:

Energy required from emission sources to knock-out tank no. 1:

Source Description	Flow cfm	Pressure Loss inch w.c.	Energy Loss cfm-inch w.c.
Two Preexpander Vents	500	-0.101	-50.500
Two Preexpander Hoods	2,000	-0.277	-554.000
Press Mold Vacuum Vents	1,200	-0.678	-813.600
From tank 2 to tank 1	3,700	-0.384	-1,420.800
Booster Fan	3,700	0.190	703.000
Net	-	-	-2,135.900

Post-modification Energy Requirement:

Energy required from emission sources to knock-out tank no. 1:



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

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Source Description	Flow cfm	Pressure Loss inch w.c.	Energy Loss cfm-inch w.c.
Preexpander Vent	370	-0.047	-17.390
Preexpander Hood	1,200	-0.065	-78.000
Press Mold Vacuum Vents	1,200	-0.831	-997.200
Net	-	-	-1,092.590

Since the new ducting energy requirement is less than the existing ducting, and the net extraction flow for the remaining pre-expander vent and hood are not reduced, the VOC emission collection efficiency will not be reduced. In addition, since the energy input for the main blower remains to be the same, all energy saved for the modified system will be routed for the additional collections at the permanent total enclosure (PTE); thus, enhancing VOC collection efficiency.

Combustion Emissions from the RTO

Data

Operation (Maximum): 24 hrs/day, 7 days/wk, 52 wks/yr
 Burner Rating: 2 MMBtu/hr
 Fuel Type: Natural gas only
 Retention time at normal operating temperature: 0.5 sec at 1,450 °F

Emission Factors

$$\text{Emission}_{\text{ROG,SOX,PM10}} (\text{lb/MMBtu}) = EF_{\text{ROG,SOX,PM10}} \left(\frac{\text{lb}}{\text{MMscf}} \right) \times \frac{1 \text{MMscf}}{1050 \text{MMBtu}}$$

Emission Factor Summary - Natural Gas

Pollutant	Emission Factor (from manufacturer) ppmV @ 3% O2	Emission Factor (AQMD Default) lb/mmscf	Emission Factor (for this report) lb/MMBtu
VOC	-	7.00	0.00667
SOx	-	0.60	0.000571
PM10	-	7.50	0.00714
NOx	9	-	0.0109
CO	100	-	0.0738

AQMD Default emission factors for a natural gas fired afterburner were taken from "General Instruction Book for the AQMD 2007-2008 Annual Emission Reporting Program", Appendix A- Table 1):

The manufacturer emission factors are per Mr. Shawn Osler email, dated 1/23/2004.



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APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
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Combustion Emissions

The calculated combustion emission results are indicated below:

A/N 561753		Hourly (lbs/hr)	Daily (lbs/day)	Annually (lbs/yr)	30 day ave. (lbs/day)	30 day NSR (lbs/day)
R1=R2	VOC	0.0133	0.32	116.48	0.32	0
R1=R2	SOx	0.00114	0.03	9.98	0.03	0
R1=R2	PM10	0.0143	0.34	124.80	0.34	0
R1=R2	NOX	0.0218	0.52	190.71	0.52	1
R1=R2	CO	0.148	3.54	1289.83	3.54	4

Hourly (lbs/hr) = (Emission Factor, lbs/MMBtu) (2 MMBtu/hr)

Daily (lbs/day) = (Hourly, lbs/hr) (24 hrs/day)

Annually (lbs/yr) = (daily lbs/day) (7 days/wk) (52 wks/yr)

GHG Emissions

Parameter	Value	Unit	Source
Operation	24 hrs/day	Default	
Schedule	7 day/wk	Default	
Rating	2 MMBtu/hr	Manufacturer	
CO ₂ EF	116.888 lb/MMBtu	District	
CH ₄ EF	0.001984 lb/MMBtu	District	
N ₂ O EF	0.000220 lb/MMBtu	District	

		Hourly (lb/hr)	Daily (lb/day)	Annually (lb/yr)	30 day ave. (lb/day)	30 day NSR (lb/day)
R1=R2	CO ₂	233.78	5,610.62	2,042,265.2	5,672.959	5,673
R1=R2	CH ₄	0.004	0.03	10.1	0.028	0
R1=R2	N ₂ O	0.000	0.00	0.3	0.001	0

RULES AND REGULATIONS EVALUATION

Rule 212: **Standards for Approving Permits** – The facility is not located within 1,000 feet of a K-12 school, and there is no emission increase with the subject modification. A Public Notice is not required.

Rule 401: **Visible Emissions** – Compliance is expected from well maintained and properly operated equipment.

Rule 402: **Public Nuisance** – With proper operation and maintenance, the equipment is not likely to create a public nuisance.

Rule 1147: **NOx Reductions from Miscellaneous Sources**

Application A/N 561753 – RTO



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
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(c)(1) – this RTO was installed in 2005, therefore it is subject to NOx emission limit of 60 ppm or 0.073 lb/mmBtu by July 1, 2020.

(c)(7) – On or after January 1, 2010, the operator shall perform combustion system maintenance in accordance with the manufacturer’s schedule and specifications as identified in the manual and other written materials supplied by the manufacturer or distributor. Condition No. H23.2 is added to ensure the compliance with this rule.

(c)(8) – This RTO is operating with variable heat input. Therefore, on or after January 1, 2011, the operator shall install and maintain in service non-resettable, totalizing, fuel and time meter for this RTO. Condition No. H23.2 is added to ensure the compliance with this rule.

Rule 1175: Control of Emissions from the Manufacture of Polymeric Cellular (Foam) Products

Based on source tests performed, compliance with this rule is expected if all operating permit conditions are met.

REG XIII: New Source Review - There are no emission increase associated with this change of condition application. No emission offset is required for the subject modification.

Reg XXX: Title V Permit

Insulfoam LLC (Facility ID: 151843) has an active Title V permit. The proposed project is considered as a “minor permit revision” to the Title V permit for this facility.

Rule 3000(b)(12)(vi) defines a “minor permit revision” as any Title V permit revision that does not result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP).

The proposed project is not expected to result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP), and therefore is considered as a “minor permit revision” pursuant to Rule 3000(b)(12)(A)(vi).

This proposed project is the 2nd permit revision to the Title V renewal permit issued to this facility on July 19, 2011. The following table summarizes the permit revisions since the Title V renewal permit was issued:

Revision	HAP	VOC	NOx	PM ₁₀	SOx
1 st Permit Revision 10/10/13; administrative permit revision for issuing Permit to Operate for a pre-expander that was previously issued Permit to Construct	[0]	[0]	[0]	[0]	[0]
2 nd Permit Revision; modification of control system	[0]	[0]	[0]	[0]	[0]
Cumulative Total	[0]	[0]	[0]	[0]	[0]
Maximum Daily	30	30	40	30	60



ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

APPL. NO. 573845, 561753 & -54	DATE: 6/2/2015
PROCESSED BY S. JIANG	CHECKED BY D. GORDON

CONCLUSION AND RECOMMENDATIONS

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "minor permit revision", it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: Polystyrene Foam Block Mfg.					P2.1, P13.1, P42.1, P42.2
System 1: Polystyrene Foam Expansion					
HOOPER, NO. 2, POLYSTYRENE BEADS A/N: 573845	D64	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
FEEDER, SCREW, NO. 2, POLYSTYRENE BEADS A/N: 573845	D65	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
FOAM EXPANSION, NO. 2, PRE-EXPANDER, HIRSCH, MODEL VACUTRANS PREEX 14000, WITH FILLING CAN A/N: 573845	D66	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1, K67.4
FEEDER, NO. 2, PRE-EXPANDED POLYSTYRENE A/N: 573845	D67	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
DRYER, FLUIDIZED BED, NO. 2 A/N: 573845	D68	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR, PNEUMATIC, NO. 2, PRE-EXPANDED POLYSTYRENE A/N: 573845	D69	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
System 2: Pre-expanded Polystyrene Storage					
AGING ROOM, PRE-EXPANDED POLYSTYRENE, 18 STORAGE BAGS, 3,750 CU. FT. EACH, WITH BAGFARM HEATING UNIT A/N: 573845	D7	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1, E193.1, E193.4
CONVEYOR, PNEUMATIC, VIRGIN PREEXPANDED POLYSTYRENE A/N: 573845	D35			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
System 3: Polystyrene Block Molding					

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: Polystyrene Foam Block Mfg.					P2.1, P13.1, P42.1, P42.2
MIXER, NO. 1, PRE-EXPANDED POLYSTYRENE, PELLET MIXING STATION, WITH 3 BAGS (VIRGIN, REGRIND, AND MOLD FILL), 800 CU.FT.EACH A/N: 573845	D21	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
MIXER, NO. 2, PRE-EXPANDED POLYSTYRENE, PELLET MIXING STATION, WITH 3 BAGS (VIRGIN, REGRIND, AND MOLD FILL), 800 CU.FT. EACH A/N: 573845	D52	C58		PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
PRESS, BLOCK MOLDING, IDDROPRESS, MODEL 24, WITH FILL BLOWER, VACUUM EXHAUST, DRAIN VENT, AND PRESSURE EXHAUST A/N: 573845	D56	C58			D29.2
PRESS, BLOCK MOLDING, NUOVA IDROPRESS, VERTICAL BLOCK MOLD, WITH FILL BLOWER, DRAIN VENT, VACUUM AND PRESSURE EXHAUST A/N: 573845	D63	C58			D29.2
System 4: Foam Block Cutting					
CUTTER, WITH ROLLER CONVEYER A/N: 573845	D39			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYOR A/N: 573845	D41			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYOR A/N: 573845	D43			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit
 (4) Denotes BACT emission limit
 (5) (5A) (5B) Denotes command and control emission limit
 (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits
 (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: Polystyrene Foam Block Mfg.					P2.1, P13.1, P42.1, P42.2
CUTTER, WITH ROLLER CONVEYOR A/N: 573845	D45			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CUTTER, SHAPE A/N: 573845	D47			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
System 5: Polystyrene Foam Scrap Recovery					
GRINDER, SCRAP A/N: 573845	D11			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
GRINDER, SCRAP A/N: 573845	D12			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
SCREEN, CLASSIFYING, SCRAP FOAM A/N: 573845	D57			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR A/N: 573845	D62			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
BULK MATERIAL LOAD/UNLOAD STATION, 6 RECYCLING BAGS, 3,750 CU. FT. EACH, AND 2 SMALLER BAGS A/N: 573845	D13			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
CONVEYOR, PNEUMATIC, SCRAP A/N: 573845	D61			PM: (9) [RULE 405, 2-7-1986]	D29.2, D323.1
Process 2: Air Pollution Control					P13.1
System 1: Oxidizer					
OXIDIZER, REGENERATIVE, MODEL SSE-8.4K-95X-RTO, NATURAL GAS, 2 MMBTU/HR A/N: 561753	C58	D7 D21 D52 D56 D63 D64 D65 D66 D67 D68 D69		CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.2, C8.2, D29.2, E193.2, E193.3, E193.5, E193.7, H23.2
Process 3: Steam Generation					

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: Steam Generation					
BOILER, NATURAL GAS, CLEAVER-BROOKS, MODEL CB 200-150, WITH FLUE GAS RECIRCULATION, 6.277 MMBTU/HR A/N: 470670	D19			CO: 100 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 400 PPMV NATURAL GAS (5) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; CO: 2000 PPMV NATURAL GAS (5A) [RULE 407, 4-2-1982]; NOX: 30 PPMV NATURAL GAS (5) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; NOX: 30 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]	D323.1, D328.1, D328.2, E73.1, E113.1, H23.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
 INSULFOAM**

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D7	1	1	2
D11	3	1	5
D12	3	1	5
D13	3	1	5
D19	4	3	0
D21	2	1	3
D35	1	1	2
D39	2	1	4
D41	2	1	4
D43	2	1	4
D45	3	1	4
D47	3	1	4
D52	2	1	3
E54	5	4	0
D56	2	1	3
D57	3	1	5
C58	3	2	1
D59	5	3	0
D61	3	1	5
D62	3	1	5
D63	2	1	3
D64	1	1	1
D65	1	1	1
D66	1	1	1
D67	1	1	1
D68	1	1	1
D69	1	1	1

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

PROCESS CONDITIONS

P2.1 The operator shall limit emissions from this process as follows

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 227 LBS IN ANY ONE DAY

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Processes subject to this condition : 1]

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
ROG	District Rule	1175

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010]

[Processes subject to this condition : 1, 2]

P42.1 The operator shall limit the raw beads used in this process as follows:

RAW BEAD TYPE	REQUIREMENT
Mid Pentane Beads	less than or equal to 40% of the annual expanded polystyrene block throughput

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Low Pentane Beads	greater than or equal to 60% of the annual expanded polystyrene block throughput
-------------------	--

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010]

[Processes subject to this condition : 1]

P42.2 The operator shall collect and reduce the manufacturing emissions from this process as follows:

POLLUTANT	REQUIREMENT
VOC	at least 93% by weight (the product of capture and control device efficiencies)

To demonstrate compliance with this condition, the operator shall repeat a source test specified in Condition No. D29.2 once every five (5) years.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010]

[Processes subject to this condition : 1]

DEVICE CONDITIONS

B. Material/Fuel Type Limits

B59.2 The operator shall only use the following material(s) in this device :

Natural gas and the emissions from the polystyrene foam expansion, pre-expanded polystyrene storage, and polystyrene block molding systems.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition : C58]

C. Throughput or Operating Parameter Limits

C8.2 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1450 Deg F.

To comply with this condition, the operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature in the oxidizer.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The operator shall not operate this equipment in the fuel injection mode.

The operator shall operate this equipment exclusively with the burner in operation.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

[Devices subject to this condition : C58]

D. Monitoring/Testing Requirements

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
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FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

VOC	Method(s) specified in District Rule 1175	District-approved averaging time	Protocol to indicate test locations for collection efficiency demonstration
VOC	Method(s) specified in District Rule 1175	District-approved averaging time	Inlet and outlet simultaneously of oxidizer

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted to demonstrate compliance with the minimum of 93% reduction of the overall manufacturing emissions required by Rule 1175(c)(5).

The test shall be conducted at least once every five years.

Source test shall be conducted when the polystyrene foam expansion system is operating at maximum capacity.

Notwithstanding the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer at least 365 days prior to the expiration date of this Title V Facility Permit unless otherwise approved in writing by the District, and notify the District of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least 180 days prior to the expiration date of this Title V Facility Permit unless otherwise approved in writing by the District.

Source test shall be conducted in accordance with the equipment configuration and operation specified in the test protocol approved in writing by the District.

The source test shall be conducted when this equipment is operating at parameters (aging times, temperatures and differential pressures) of not less than the minimum operating parameters specified in this permit. If the operating parameters during the source test are greater than the minimum operating parameters specified in this permit, the minimum operating parameters may be increased to reflect the operating parameters during the source test.

The operator shall also provide to the District a source test report containing, at a minimum, the following information:

Required Data	Reported As
Collection efficiency of emission collection system	Under actual test condition
Destruction efficiency of oxidizer	Under actual test condition

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

VOC emissions in ppmv and lbs/hr to support collection efficiency and destruction efficiency results	Under actual test condition
Operating temperature of oxidizer	Under actual test condition
Operating differential pressures of Tank 1 and the Booster Blower	Under actual test condition
Operating temperature of the aging room	Under actual test condition
Bead aging times	Under actual test condition
The maximum raw bead blowing agent content processed	Under actual test condition
The residual blowing agent content in product	Under actual test condition

Notwithstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 60 days after the source test was conducted.

[**RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D7, D11, D12, D13, D21, D35, D39, D41, D43, D45, D47, D52, D56, D57, C58, D61, D62, D63, D64, D65, D66, D67, D68, D69]

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D7, D11, D12, D13, D14, D15, D19, D21, D35, D39, D41, D43, D45, D47, D52, D57, D59, D61, D62, D64, D65, D66, D67, D68, D69]

D328.1 The operator shall determine compliance with the NOX emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 7.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the Rule 1303 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

For the purpose of determining compliance with Rule 1303 concentration limit, the emissions shall be measured and averaged over a 60 minute time period.

**[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008; RULE 1303(a)(1)-BACT, 5-10-1996;
RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring,
12-12-1997]**

[Devices subject to this condition : D19, D59]

D328.2 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 1303 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

For the purpose of determining compliance with Rule 1303 concentration limit, the emissions shall be measured and averaged over a 60 minute time period.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

**[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008; RULE 1303(a)(1)-BACT, 5-10-1996;
RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring,
12-12-1997]**

[Devices subject to this condition : D19, D59]

E. Equipment Operation/Construction Requirements

E73.1 Notwithstanding the requirements of Section E conditions, the operator shall not use FGR if all of the following requirement(s) are met:

The exhaust temperature is below 250 degrees fahrenheit

[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]

[Devices subject to this condition : D19]

E113.1 The operator shall have the burner equipped with a control system to automatically regulate the combustion air, fuel and, if applicable, recirculated flue gas as the boiler load varies. This control system shall be adjusted and tuned at least once a year according to the manufacturer's specifications to maintain its ability to repeat the same performance at the same firing rate.

[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]

[Devices subject to this condition : D19]

E193.1 The operator shall construct, operate, and maintain this equipment according to the following requirements:

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall maintain the enclosed aging room under a negative pressure of at least 0.007 inches water column at all times that any pre-expander or block molding machine is in operation, or beads are stored in the aging room.

The operator shall install and maintain a differential pressure monitoring device for the enclosed aging room, which monitors the differential pressure between the inside and the outside of the aging room.

The operator shall also install and maintain a device to continuously record the differential pressure being monitored.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D7]

E193.2 The operator shall construct, operate, and maintain this equipment according to the following requirements:

A differential pressure gauge shall be installed across the main blower located at the inlet to the oxidizer.

The operating range for the differential pressure shall be determined during the initial source test for the oxidizer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C58]

E193.3 The operator shall construct, operate, and maintain this equipment according to the following requirements:

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The combustion chamber temperature shall be maintained at a minimum of 1,450 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7.

Such a system shall have an accuracy of within plus or minus 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications using an applicable AQMD or EPA approved method.

For the purpose of this condition, a deviation shall be defined as when a combustion chamber temperature of less than 1,400 degrees Fahrenheit occurs during normal operation of the equipment it serves. The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the combustion chamber temperature at or above 1,400 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective action taken.

All deviations shall be reported to the AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with an Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]

[Devices subject to this condition : C58]

E193.4 The operator shall operate and maintain this equipment according to the following requirements:

The enclosed aging room shall be maintained at a 24-hour average temperature of no less than 85 degrees Fahrenheit at all times when there are beads present in the Bead Aging Operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the air temperature in the enclosed aging room. Such recorded results shall include, but not be limited to, electronic recordings of the operating temperature for the Bead Aging Operation. The temperatures will be measured and recorded no less frequently than hourly, and the electronic recordings shall clearly indicate the dates and times of each temperature measurement.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D7]

E193.5 The operator shall operate and maintain this equipment according to the following requirements:

The operator shall operate this equipment at a set point temperature of at least 1,570 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature. Such recorded results shall include, but not be limited to, circular chart recordings containing the oxidizing chamber operating temperature. The circular chart recordings shall clearly indicate the dates and times of continuous temperature recordings, and each individual chart recording shall be for a maximum of seven consecutive calendar days.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C58]

E193.7 The operator shall operate and maintain this equipment according to the following requirements:

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall continuously operate fixed magnehelic gauges designated as the Tank 1 magnehelic during all times that a pre-expander and/or a block mold is in operation.

The operator shall operate and maintain the Tank 1 magnehelic at a minimum negative pressure of 1.0 inches of water (with an allowable variance of +0.5 inches of water).

The operator shall continuously operate a Booster Blower magnehelic gauge during all times that a pre-expander and/or a block mold is in operation and/or when there are beads present in the Bead Aging Operation.

The operator shall operate and maintain the Booster Blower magnehelic at a minimum negative pressure of 1.0 inches of water (with an allowable variance of +0.5 inches of water).

During the times that a magnehelic is required to be operated, the operator shall monitor negative pressure readings of the magnehelic once daily, by manually reading and recording, or by electronically recording, the magnehelic every 10 seconds for a 5 minute period. The 10 second magnehelic readings shall be averaged and the result recorded as a 5 minute average.

The operator shall maintain records of the daily 5 minute average readings for each magnehelic and these recordings shall clearly indicate the date and time of each set of magnehelic readings.

The operator shall determine monthly the accuracy of the magnehelics with an electronic manometer that measures the static pressure at a second port located adjacent to the magnehelic's port. Any magnehelic that shows a static pressure deviation from the electronic manometer of greater than 10% shall be immediately removed and replaced.

Records of all accuracy testing, removal and replacement of magnehelics shall be maintained. The records shall be signed by the person conducting the testing and the person removing or replacing the magnehelics.

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C58]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	District Rule	1146
CO	District Rule	1146

[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]

[Devices subject to this condition : D19, D59]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	District Rule	1147

[RULE 1147, 9-9-2011]

[Devices subject to this condition : C58]

K. Record Keeping/Reporting

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E54]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Certificate of Analysis showing blowing agent content for each lot of expandable polystyrene beads processed in this equipment.

Annual consumption of low-pentane beads and mid-pentane beads (in lbs per year)

Annual production of polystyrene foam blocks (in lbs per year)

[RULE 1175, 5-13-1994; RULE 1175, 11-5-2010; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D66]

FACILITY PERMIT TO OPERATE INSULFOAM

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

monthly natural gas usage

All records required under this condition shall be maintained by the facility for a period of two years following the date of such record.

[40CFR 60 Subpart Dc, 2-27-2006]

[Devices subject to this condition : D59]