

## FACILITY PERMIT TO OPERATE

**INSULFOAM LLC  
5635 SCHAEFER AVE  
CHINO, CA 91710**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By \_\_\_\_\_  
Mohsen Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	DRAFT	03/02/2010
B	RECLAIM Annual Emission Allocation	DRAFT	03/02/2010
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	DRAFT	03/02/2010
E	Administrative Conditions	DRAFT	03/02/2010
F	RECLAIM Monitoring and Source Testing Requirements	DRAFT	03/02/2010
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	DRAFT	03/02/2010
H	Permit To Construct and Temporary Permit to Operate	DRAFT	03/02/2010
I	Compliance Plans & Schedules	DRAFT	03/02/2010
J	Air Toxics	DRAFT	03/02/2010
K	Title V Administration	DRAFT	03/02/2010
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	DRAFT	03/02/2010
B	Rule Emission Limits	DRAFT	03/02/2010

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION A: FACILITY INFORMATION

**LEGAL OWNER &/OR OPERATOR:** INSULFOAM LLC

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 5635 SCHAEFER AVE  
CHINO, CA 91710-9048

**MAILING ADDRESS:** 6004 N WESTGATE BLVD STE 120  
TACOMA, WA 98406

**RESPONSIBLE OFFICIAL:** DOUG CASSIDY

**TITLE:** VICE PRESIDENT - OPERATIONS

**TELEPHONE NUMBER:** (253) 572-5111

**CONTACT PERSON:** SHAWN OSLER

**TITLE:** ENVIRONMENTAL COMPLIANCE MANAGER

**TELEPHONE NUMBER:** (800) 248-5995

**TITLE V PERMIT ISSUED:** April 28, 2006

**TITLE V PERMIT EXPIRATION DATE:** April 27, 2011

TITLE V	RECLAIM
YES	<b>NOx:</b> NO <b>SOx:</b> NO <b>CYCLE:</b> 0 <b>ZONE:</b> INLAND

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### 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
<b>Process 1: Polystyrene Foam Block Mfg.</b>					P2.1, P13.1, P42.1
<b>System 1: Polystyrene Foam Expansion</b>					
HOPPER, NO. 1, POLYSTYRENE BEADS A/N:	D23	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
FEEDER, NO. 1, SCREW, POLYSTYRENE BEAD A/N:	D34	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
FOAM EXPANSION, NO. 1, PRE-EXPANDER, HIRSCH, MODEL VACUTRANS 12000, WITH FILLING CAN A/N:	D1	C58		VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	B163.1, D29.2, D323.1, K67.4
FEEDER, NO. 1, PRE-EXPANDED POLYSTYRENE A/N:	D25	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
DRYER, FLUIDIZED BED, NO. 1 A/N:	D2	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CONVEYOR, PNEUMATIC, NO. 1, PRE-EXPANDED POLYSTYRENE A/N:	D24	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
HOPPER, NO. 2, POLYSTYRENE BEADS A/N:	D27	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
FEEDER, SCREW, NO. 2, POLYSTYRENE BEADS A/N:	D26	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
FOAM EXPANSION, NO. 2, PRE-EXPANDER, HIRSCH, MODEL VACUTRANS 12000, WITH FILLING CAN A/N:	D3	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	B163.1, D29.2, D323.1, K67.4

- \* (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 LLC

### 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
<b>Process 1: Polystyrene Foam Block Mfg.</b>					P2.1, P13.1, P42.1
FEEDER, NO. 2, PRE-EXPANDED POLYSTYRENE A/N:	D28	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
DRYER, FLUIDIZED BED, NO. 2 A/N:	D4	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CONVEYOR, PNEUMATIC, NO. 2, PRE-EXPANDED POLYSTYRENE A/N:	D29	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
<b>System 2: Pre-expanded Polystyrene Storage</b>					
AGING ROOM, PRE-EXPANDED POLYSTYRENE, 18 STORAGE BAGS, 3,750 CU. FT. EACH, WITH BAGFARM HEATING UNIT A/N:	D7	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1, E193.1, E193.4, E193.6
CONVEYOR, PNEUMATIC, VIRGIN PREEXPANDED POLYSTYRENE A/N:	D35			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
<b>System 3: Polystyrene Block Molding</b>					
MIXER, NO. 1, PRE-EXPANDED POLYSTYRENE, PELLET MIXING STATION, WITH 3 BAGS (VIRGIN, REGRIND, AND MOLD FILL), 800 CU.FT.EACH A/N:	D21	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	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:	D52	C58		PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1

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

\*\* 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 LLC

### 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
<b>Process 1: Polystyrene Foam Block Mfg.</b>					P2.1, P13.1, P42.1
PRESS, BLOCK MOLDING, IDROPRESS, MODEL 24, WITH FILL BLOWER, VACUUM EXHAUST, DRAIN VENT, AND PRESSURE EXHAUST A/N:	D56	C58		VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2
PRESS, BLOCK MOLDING, NUOVA IDROPRESS, VERTICAL BLOCK MOLD, WITH FILL BLOWER, DRAIN VENT, VACUUM AND PRESSURE EXHAUST A/N:	D63	C58		VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2
<b>System 4: Foam Block Cutting</b>					
CUTTER, WITH ROLLER CONVEYER A/N:	D39			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYOR A/N:	D41			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYOR A/N:	D43			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CUTTER, WITH ROLLER CONVEYOR A/N:	D45			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CUTTER, SHAPE A/N:	D47			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
<b>System 5: Polystyrene Foam Scrap Recovery</b>					
GRINDER, SCRAP A/N:	D11			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1

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

\*\* 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 LLC

### 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
<b>Process 1: Polystyrene Foam Block Mfg.</b>					P2.1, P13.1, P42.1
GRINDER, SCRAP A/N:	D12			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
SCREEN, CLASSIFYING, SCRAP FOAM A/N:	D57			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CONVEYOR A/N:	D62			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
BULK MATERIAL LOAD/UNLOAD STATION, 6 RECYCLING BAGS, 3,750 CU. FT. EACH, AND 2 SMALLER BAGS A/N:	D13			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
CONVEYOR, PNEUMATIC, SCRAP A/N:	D61			PM: (9) [RULE 405, 2-7-1986]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	D29.2, D323.1
<b>Process 2: Air Pollution Control</b>					P13.1
<b>System 1: Oxidizer</b>					
OXIDIZER, REGENERATIVE, MODEL SSE-8.4K-95X-RTO, NATURAL GAS, 2 MMBTU/HR A/N: 468878	C58	D1 D2 D3 D4 D7 D21 D23 D24 D25 D26 D27 D28 D29 D34 D52 D56 D63		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]; VOC: (9) [RULE 1175, 5-13-1994; RULE 1175, 9-7-2007]	B59.2, C8.2, D29.2, E193.2, E193.3, E193.5, E193.7
<b>Process 3: Steam Generation</b>					

\* (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 LLC

### 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
<b>Process 3: Steam Generation</b>					
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]; CO: 2000 PPMV NATURAL GAS (5A) [RULE 407, 4-2-1982]; NOX: 30 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 40 PPMV NATURAL GAS (5) [RULE 1146, 11-17-2000]; 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 LLC**

**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 LLC**

**SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D1	1	1	1
D2	1	1	1
D3	1	1	1
D4	2	1	1
D7	2	1	2
D11	3	1	5
D12	4	1	5
D13	4	1	5
D19	5	3	0
D21	2	1	3
D23	1	1	1
D24	1	1	1
D25	1	1	1
D26	1	1	1
D27	1	1	1
D28	2	1	1
D29	2	1	1
D34	1	1	1
D35	2	1	2
D39	3	1	4
D41	3	1	4
D43	3	1	4
D45	3	1	4
D47	3	1	4
D52	2	1	3
E54	6	4	0
D56	3	1	3
D57	4	1	5
C58	4	2	1
D59	6	3	0
D61	4	1	5
D62	4	1	5
D63	3	1	3

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### 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, 9-7-2007]

[Processes subject to this condition : 1, 2]

P42.1 The operator shall limit emissions from this process as follows:

CONTAMINANT	Emission Limit (Units)
VOC	2.4 lbs per 100 lbs of raw material processed

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

To determine the emissions, it shall be assumed that all blowing agent is released from the product, and a mass balance equation shall be used. The mass balance shall be performed by subtracting the emissions that are captured and controlled by the emission control system (as measured pursuant to Condition D29.2) from the pentane content of the raw beads.

**[RULE 1175, 5-13-1994; RULE 1175, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[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]

B163.1 The operator shall only use raw materials containing the following:

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Raw EPS bead with a blowing agent content less than or equal to 3.6% by weight.

Flint Hills Type 54 raw bead that is used to produce either 1.0 pound per cubic foot (pcf) virgin product (1.0 MV), 1.0 pcf recycled product (1.0 MG) or 1.25 pcf recycled product (1.25 MG).

Loyal Type FS raw bead that is used to produce either 1.0 pcf virgin product (1.0 MV), 1.0 pcf recycled product (1.0 MG) or 1.25 pcf recycled product (1.25 MG).

BASF Type BFL raw bead (3.9% pentane) that is used to produce either 1.5 pcf recycled product (1.5 MG), 2.0 pcf virgin or recycled product (2.0 MV or 2.0 MG) or 3.0 pcf virgin or recycled product (3.0 MV or 3.0 MG).

Raw bead with a blowing agent content greater than 3.6% by weight and not exceeding a maximum of 5.2% by weight, other than the raw bead types referenced above, only for a purpose of conducting a source test to demonstrate compliance with the SIP approved Rule 1175. The operator may only conduct the test upon submission of a test plan and written approval by the District. The operator shall notify the District 10 days prior to the test and submit the report within 30 days after the test.

At least 60% of the annual EPS block throughput shall be manufactured with low-pentane beads, and the remainder shall be manufactured with mid-pentane beads, which include Flint Hills Type 54, Loyal Type FS, and/or other types of beads used for a compliance source testing purpose.

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, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[Devices subject to this condition : D1, D3]

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

#### **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**

D29.1 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
NOX emissions	Approved District method	District-approved averaging time	Outlet
CO emissions	Approved District method	District-approved averaging time	Outlet

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### 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 within 180 days after initial start-up.

The test shall be conducted to determine the NO<sub>x</sub> emissions at the outlet.

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted to demonstrate compliance with the BACT requirements for NO<sub>x</sub> and CO emissions.

Source test shall be conducted when this equipment is operating at maximum, minimum, and average firing rates.

Emission rates shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen, dry basis, and in terms of lbs/hr.

Source test results also shall include the exhaust flow rates, in actual cubic feet per minute (acfm); the firing rates, in BTU per hour; the exhaust temperature, in degree F; the oxygen content of the exhaust gases, in percent; and the fuel flow rate under which the test was conducted.

Notwithstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 45 days after the source test was conducted.

The test shall be conducted by a testing laboratory certified by the California Air Resources Board in the required test methods for criteria pollutant to be measured, and in compliance with Rule 304 (no conflict of interest).

Sampling facilities shall comply with the District guidelines for construction of sampling and testing facilities, pursuant to Rule 217.

**[RULE 1146, 11-17-2000; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D59]

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 shall be conducted to demonstrate compliance with the minimum of 93% reduction of the overall manufacturing emissions required by Rule 1175(c)(4).

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.

In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, 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 within 30 days after the receipt of the approval of the protocol.

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

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Required Data	Reported As
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, the Blue Tank and the Booster Blower	Under actual test condition
Operating temperature of the aging room	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, 9-7-2007; 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, D3, D4, D7, D11, D12, D13, D21, D23, D24, D25, D26, D27, D28, D29, D34, D35, D39, D41, D43, D45, D47, D52, D56, D57, C58, D61, D62, D63]

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### 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 LLC**

### 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 : D1, D2, D3, D4, D7, D8, D11, D12, D13, D14, D15, D19, D21, D23, D24, D25, D26, D27, D28, D29, D34, D35, D39, D41, D43, D45, D47, D52, D57, D59, D61, D62]

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 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 LLC**

### 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 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]**

[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]**

[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 LLC

### 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, 9-7-2007; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[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 LLC**

### **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 LLC**

### 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:

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

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 enclosed aging room shall be maintained at a 24-hour average temperature of no less than 90 degrees Fahrenheit at all times when there are Flint Hills Type 54 beads present in the Bead Aging Operation.

The enclosed aging room shall be maintained at a 24-hour average temperature of no less than 92 degrees Fahrenheit at all times when there are Loyal Type FS 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, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[Devices subject to this condition : D7]

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

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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, 9-7-2007; 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; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[Devices subject to this condition : C58]

E193.6 The operator shall operate and maintain this equipment according to the following requirements:

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

All Loyal Type FS beads shall be aged for a minimum of 18 hours in this equipment before they are used in the block molding process.

All Flint Hills Type 54 beads shall be aged for a minimum of 24 hours in this equipment before they are used in the block molding process.

All BASF Type BFL beads shall be aged for a minimum of 6.4 hours in this equipment whenever they are used to produce 1.5 pcf products.

All BASF Type BFL beads shall be aged for a minimum of 7.9 hours in this equipment whenever they are used to produce 2.0 pcf products.

All BASF Type BFL beads shall be aged for a minimum of 9.0 hours in this equipment whenever they are used to produce 3.0 pcf products.

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, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[Devices subject to this condition : D7]

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

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### 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 Silver Tank 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 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.

## FACILITY PERMIT TO OPERATE INSULFOAM LLC

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[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]**

[Devices subject to this condition : D19, D59]

#### **K. Record Keeping/Reporting**

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

## **FACILITY PERMIT TO OPERATE INSULFOAM LLC**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

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.

Records detailing the brand and type of bead used and the density and source (virgin or recycled/regrind) of each batch of product produced with such bead.

**[RULE 1175, 5-13-1994; RULE 1175, 9-7-2007; CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 8-29-2007; RULE CONSENT DECREE CIVIL NO. 5:07CV01092SGLOP, 7-20-2008]**

[Devices subject to this condition : D1, D3]