# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-1: "M" Electric Furnace, Channel and Forehearth

S-19: "O" Electric Furnace, Channel and Forehearth

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-A)

No	Yes	Recordkeeping	Periodic (Daily)	Permit Condition 16834, Part 6	6 tons/hour 144 tons/day	Permit Condition 16834, Part 5	Glass Production
No	Yes	Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 16834, Part 4	Hours of Operation < 480 hrs/yr for both furnaces	BAAQMD Permit Condition 16834, Part 3	Open Configuration Furnace Operation
No	Yes	Visual Observation and Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 16834, Part 7	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Permit Condition 16834, Part 7	Opacity
No	Yes	Visual Observation and Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 16834, Part 7	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 301	Opacity
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-1: "M" Electric Furnace, Channel and Forehearth

# Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-A)

S-19: "O" Electric Furnace, Channel and Forehearth

	SO <sub>2</sub> Reg	E FP Re	FP Re	Type of Limit C
	BAAQMD Regulation 9-1- 301	BAAQMD Regulation 6- 311	BAAQMD Regulation 6- 310	Citation of Limit
	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	0.15 grains per dscf of exhaust gas volume	Limit
BAAQMD Permit	None	BAAQMD Permit Condition 16834, Part 8	BAAQMD Permit Condition 16834, Part 8	Monitoring Requirement Citation
Periodic (Once per Permit	N/A	Periodic (Once per Permit Term)	Periodic (Once per Permit Term)	Monitoring Frequency
Source Test	None	Source Test	Source Test	Monitoring Type
Yes	N/A	Yes	Yes	Monitoring Performed (Yes/No)
No	No	No	No	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-1: "M" Electric Furnace, Channel and Forehearth

S-19: "O" Electric Furnace, Channel and Forehearth

# Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-A)

40 CFR 63.1383 (e)(1) BAAQMD Permit Periodic (Daily) V Condition 16834, Part 11	
Periodic (Once per Permit S Term)	e Source Test
N/A	A None
Periodic (Once per Permit S	ic (Once Permit Source Test rm)
Monitoring N Frequency	itoring Monitoring

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-1: "M" Electric Furnace, Channel and Forehearth

### S-19: "O" Electric Furnace, Channel and Forehearth

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-A)

Comments: For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not operate and "O" line did not produce products subject to MACT (Subpart NNN).

Source tests conducted from October 30, through November 7, 2008. Submitted to District on December 19, 2008

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-2: "M" Forming

S-20: "O" Forming

	Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-B)
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		G Proc	Op.	Op	Туре
FP	FP	Glass Production	Opacity	Opacity	Type of Limit
BAAQMD Regulation 6- 311	BAAQMD Regulation 6- 310	BAAQMD Permit Condition 20565, Part 13	BAAQMD Permit Condition 20565, Part 5	BAAQMD Regulation 6- 301	Citation of Limit
4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	0.15 grains per dscf of exhaust gas volume	6 tons/hour 144 tons/day	Ringelmann 1.0 For less than 3 minutes in an hour	Ringelmann 1.0 For less than 3 minutes in an hour	Limit
BAAQMD Permit Condition 20565, Part 6	BAAQMD Permit Condition 20565, Part 6	BAAQMD Permit Condition 20565, Part 14	BAAQMD Permit Condition 20565, Part 5	BAAQMD Permit Condition 20565, Part 5	Requirement Citation
Periodic (Once per Permit Term)	Periodic (Once per Permit Term)	Periodic (Daily)	Periodic (Daily)	Periodic (Daily)	Monitoring Frequency
Source Test	Source Test	Recordkeeping	Visual Observation and Recordkeeping	Visual Observation and Recordkeeping	Monitoring Type
Yes	Yes	Yes	Yes	Yes	Performed (Yes/No)
No	No	No	No	No	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

#### S-2: "M" Forming S-20: "O" Forming

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-B)

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Formaldehyde	SO <sub>2</sub>	SO <sub>2</sub>	Type of Limit
40 CFR 63.1382 (b)(9)	BAAQMD Regulation 9-1- 302	BAAQMD Regulation 9-1- 301	Citation of Limit
Free- Formaldehyde content of the resin in the binder S-2 ≤ 14.47% S-20 ≤ 14.44%	300 ppm (dry)	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	Limit
40 CFR 63.1383 (j)	None	None	Monitoring Requirement Citation
Periodic (Each Occurrence)	N/A	N/A	Monitoring Frequency
None None Recordkeeping (Free- Formaldehyde Content of Resins Received)		None	Monitoring Type
N/A	N/A	N/A	Monitoring Performed (Yes/No)
No	No	N <sub>O</sub>	Deviations (Yes/No)

Owens Corning Insulating Systems, LLC - Santa Clara, CA

#### S-2: "M" Forming

**S-20: "O" Forming** 

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-B)

Formaldehvde 40 CFR	Formaldehyde (b)(10)	Type of Limit Citati
40 CFR 63.1382   8  (a)(2)(i)   N		Citation of Limit
1.2 lb/ton of glass pulled per Rotary Spin Manufacturing Line	Binder formulation for "M" & "O" Lines 2.07 pounds of phenol/ formaldehyde resin per pound of urea in the premix	Limit
BAAQMD Permit Condition 20565, Part 9	40 CFR 63.1383 (k)	Monitoring Requirement Citation
Periodic (Once per Permit Term)	Periodic (Daily)	Monitoring Frequency
Source Test	Recordkeeping (Formulation of Binder Used Per Batch)	Monitoring Type
Yes	N/A	Monitoring Performed (Yes/No)
No	No	Deviations (Yes/No)

Comments: For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not operate and "O" line did not produce products subject to MACT (Subpart NNN).

O-line source testing was conducted the week of April 23, 2012.

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-3: "M" Curing Oven

S-21: "O" Curing Oven

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No	Yes	Source Test	Periodic (Once per Permit Term)	BAAQMD Permit Condition 20565, Part 6	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	BAAQMD Regulation 6- 311	FР
No	Yes	Source Test	Periodic (Once per Permit Term)	BAAQMD Permit Condition 20565, Part 6	0.15 grains per dscf of exhaust gas volume	BAAQMD Regulation 6- 310	FP
No	Yes	Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 20565, Part 14	6 tons/hour 144 tons/day	BAAQMD Permit Condition 20565, Part 13	Glass Production
No	Yes	Visual Observation and Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 20565, Part 5	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Permit Condition 20565, Part 5	Opacity
No	Yes	Visual Observation and Recordkeeping	Periodic (Daily)	BAAQMD Permit Condition 20565, Part 5	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 301	Opacity
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

#### S-3: "M" Curing Oven

### S-21: "O" Curing Oven

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FΡ	FР	FP	FP	Type of Limit
BAAQMD Permit Condition 20565, Part 3	BAAQMD Permit Condition 20565, Part 3	BAAQMD Permit Condition 20565, Part 3	BAAQMD Permit Condition 20565, Part 3	Citation of Limit
Pressure drop range across A- 102 5" wc to 40" wc	Pressure drop range across A- 101 1" wc to 20" wc	Pressure drop range across A- 100 5" wc to 40" wc	Pressure drop range across A- 99 1" wc to 20" wc	Limit
BAAQMD Permit Condition 20565, Part 4	BAAQMD Permit Condition 20565, Part 4	BAAQMD Permit Condition 20565, Part 4	BAAQMD Permit Condition 20565, Part 4	Monitoring Requirement Citation
Periodic (Once per Shift)	Periodic (Once per Shift)	Periodic (Once per Shift)	Periodic (Once per Shift)	Monitoring Frequency
Recordkeeping	Recordkeeping	Recordkeeping	Recordkeeping	Monitoring Type
Yes	Yes	Yes	Yes	Monitoring Performed (Yes/No)
No	No	No	No	Deviations (Yes/No)

Owens Corning Insulating Systems, LLC - Santa Clara, CA

#### S-3: "M" Curing Oven

S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-C)

 Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
 SO <sub>2</sub>	BAAQMD Regulation 9-1- 301	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N/A	None	N/A	No
SO <sub>2</sub>	BAAQMD Regulation 9-1- 302	300 ppm (dry)	None	N/A	None	N/A	No
 Incinerator Firebox Temperature	40 CFR 63.1382 (b)(6)	Average firebox temperature at A-5, A-6 and A-25 for any 3-hour block period ≥ 1340	40 CFR 63.1383 (g)(1)	Continuous	Recordkeeping (Firebox Operating Temperature)	N/A	No
Incinerator Firebox	BAAQMD Permit Condition 20565, Part 5	Proper Incinerator Maintenance	40 CFR 63.1383 (g)(2)	Periodic (Annual)	Inspection; Incinerator	Yes	No

Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-3: "M" Curing Oven

S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-C)

0	Comments: F	Formaldehyde	Type of Limit
)-line source test	or the May 1, 20 lid not produce p	40 CFR 63.1382 (a)(2)(i)	Citation of Limit
O-line source test was conducted the week of April 23, 2012.	For the May 1, 2011 – October 31, 2012 reporting period, "M" line did not operate. During the did not produce products subject to MACT (Subpart NNN); converted to starch-based binder.	1.2 lb/ton of glass pulled per Rotary Spin Manufacturing Line	Limit
he week of April	2012 reporting p o MACT (Subpart	BAAQMD Permit Condition 20565, Part 9	Monitoring Requirement Citation
23, 2012.	eriod, "M" line di NNN); convertec	Periodic (Once per Permit Term)	Monitoring Frequency
	d not operate. D I to starch-based	Source Test	Monitoring Type
	operate. During this same period "O" line arch-based binder.	Yes	Monitoring Performed (Yes/No)
	period "O" line	No	Deviations (Yes/No)
	· · ·		

Annual inspection and maintenance was performed on the O Line incinerator on October 23, 2012.

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-4: "M" Cooling

S-22: "O" Cooling

•	-	;	3-22: "O	S-22: "O" Cooling			
Type of Limit	mit Citation of Limit Requirement Frequency Type (Yes/No)	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	
Opacity	BAAQMD Regulation 6- 301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Permit Condition 20566, Parts 4	Periodic (Daily)	Visual Observation and Recordkeeping	Yes	
Opacity	BAAQMD Permit Condition 20566, Part 4	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Permit Condition 20566, Parts 4	Periodic (Daily)	Visual Observation and Recordkeeping	Yes	
Glass Production	BAAQMD Permit Condition 20566, Part 7	6 tons/hour 144 tons/day	BAAQMD Permit Condition 20566, Part 8	Periodic (Daily)	Recordkeeping	N/A	
FP	BAAQMD Regulation 6- 310	0.15 grains per dscf of exhaust gas volume	BAAQMD Permit Condition 20566, Part 5	Periodic (Once per Permit Term)	Source Test	Yes	
FP	BAAQMD Regulation 6- 311	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	BAAQMD Permit Condition 20566, Part 5	Periodic (Once per Permit Term)	Source Test	Yes	

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

#### S-4: "M" Cooling

#### S-22: "O" Cooling

# Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-D)

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SO <sub>2</sub>	FP	FP	FP	Type of Limit
BAAQMD Regulation 9-1- 301	BAAQMD Permit Condition 20566, Part 2	BAAQMD Permit Condition 20566, Part 2	BAAQMD Permit Condition 20566, Part 2	Citation of Limit
Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	Water flow rate across A-26 50 gpm to 250 gpm	Pressure drop range across A- 26 1" wc to 10" wc	Pressure drop range across A-7 0.1" wc to 3" wc	Limit
None	BAAQMD Permit Condition 20566, Part 3	BAAQMD Permit Condition 20566, Part 3	BAAQMD Permit Condition 20566, Part 3	Monitoring Requirement Citation
N/A	Periodic (Daily)	Periodic (Daily)	Periodic (Daily)	Monitoring Frequency
None	Recordkeeping	Recordkeeping	Recordkeeping	Monitoring Type
N/A	Yes	Yes	Yes	Monitoring Performed (Yes/No)
No	No	No	No	Deviations (Yes/No)

### Semi-Annual Monitoring Report

May 1, 2012 to October 31, 2012

Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-4: "M" Cooling

S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-D)

Periodic (Once per Permit Source Test Term)
Recordkeeping Periodic (Daily)  (Finished Product  LOI and Density)
N/A None
Monitoring Monitoring Performed Frequency Type (Yes/No)

Comments: For the May 1, 2012 - October 31, 2012 reporting period, "M" line did not operate. During this same period "O" line did not produce products subject to MACT (Subpart NNN); converted to starch-based binder.

O Line source tests conducted the week of April 23, 2012.

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

# S-26: Sandblasting Room

FP	FP	FP	Opacity	Opacity	Type of Limit	Applic
BAAQMD Permit Condition 15250, Part 7	BAAQMD Regulation 6- 311	BAAQMD Regulation 6- 310	BAAQMD Permit Condition 15250, Part 6	BAAQMD Regulation 6- 301	Citation of Limit	able Limits and C
Pressure drop range across A- 149 0" wc to 10" wc	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	0.15 grains per dscf of exhaust gas volume	Ringelmann 1.0 For less than 3 minutes in an hour	Ringelmann 1.0 For less than 3 minutes in an hour	Limit	Compliance Moni
BAAQMD Permit Condition 15250, Part 6	None	None	BAAQMD Permit Condition 15250, Part 6	BAAQMD Permit Condition 15250, Part 6	Monitoring Requirement Citation	toring Requireme
Periodic (Monthly)	N/A	N/A	Periodic (Monthly)	Periodic (Monthly)	Monitoring Frequency	ents (Major Facili
Recordkeeping	None	None	Visual Observation and Recordkeeping	Visual Observation and Recordkeeping	Monitoring Type	Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-E)
Yes	N/A	N/A	Yes	Yes	Monitoring Performed (Yes/No)	(01/30/07) Table
No	No	No	No	No	Deviations (Yes/No)	VII-E)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-G) S-56: Batch Materials Silo & Unloading System

<b>F</b> P	FP	Opacity	Type of Limit
BAAQMD Regulation 6- 311	BAAQMD Regulation 6- 310	BAAQMD Regulation 6- 301	Citation of Limit
4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	0.15 grains per dscf of exhaust gas volume	Ringelmann 1.0 For less than 3 minutes in an hour	Limit
None	None	None	Monitoring Requirement Citation
N/A	N/A	Periodic (Weekly)	Monitoring Frequency
None	None	Visual Observation	Monitoring Type
N/A	N/A	Yes	Monitoring Performed (Yes/No)
No	No	No	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-H)	S-57: Batch Mixing
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Yes	Recordkeeping	Periodic (Weekly)	BAAQMD Permit Condition	Pressure drop range across A-	BAAQMD Permit Condition	FP
	None	N/A	None	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	BAAQMD Regulation 6- 311	FP
	None	N/A	None	0.015 grains per dscf of exhaust gas volume	BAAQMD Permit Condition 12144, Part 4	FΡ
	None	N/A	None	0.15 grains per dscf of exhaust gas volume	BAAQMD Regulation 6- 310	FP
ion	Visual Observation and Recordkeeping	Periodic (Weekly)	BAAQMD Permit Condition 12144, Part 3	Ringelmann 0.5 For less than 3 minutes in an hour	BAAQMD Permit Condition 12144, Part 2	Opacity
ion	Visual Observation	Periodic (Weekly)	None	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 301	Opacity
ing	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-61: "M" Packing Dust Collection System

S-62: "O" Packing Dust Collection System

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-I)

		id not operate.	eriod, "M" line di	2012 reporting po	12 – October 31,	For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not operate	Comments:
No	N/A	None	N/A	None	0.15 grains per dscf of exhaust gas volume	BAAQMD Regulation 6- 310	FP
No	Yes	Visual Observation	Periodic (Weekly)	None	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 301	Opacity
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-65: Fire System Diesel Pump

### S-166: Cullet Water Standby Generator

### S-167: Cooling Water Standby Generator

SO <sub>2</sub>	SO <sub>2</sub>	FP	Opacity	Type of Limit	Applic
BAAQMD Regulation 9-1- 304	BAAQMD Regulation 9-1- 301	BAAQMD Regulation 6- 310	BAAQMD Regulation 6- 303	Citation of Limit	able Limits and
Sulfur Content of Fuel < 0.5% by weight	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	0.15 grains per dscf of exhaust gas volume	Ringelmann 2.0 For less than 3 minutes in an hour	Limit	Compliance Moni
BAAQMD Permit Condition 19142, Part 3	None	None	None	Monitoring Requirement Citation	itoring Requirem
Periodic (Every Occurrence)	N/A	N/A	N/A	Monitoring Frequency	ents (Major Facili
Fuel Certification by Vendor	None	None	Visual Observation	Monitoring Type	ty Review Permit
Yes	N/A	N/A	N/A	Monitoring Performed (Yes/No)	Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-J)
No	No	No	No	Deviations (Yes/No)	y VII-J)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-65: Fire System Diesel Pump

S-166: Cullet Water Standby Generator

S-167: Cooling Water Standby Generator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-J)

		id not operate.	For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not	2012 reporting p	12 – October 31,	or the May 1, 20	Comments: F
No	N/A	Visual Observation	N/A	None	Ringelmann 2.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 303	Opacity
No	Yes	Running Time Clock and Recordkeeping	Periodic (Every Occurrence)	BAAQMD Permit Condition 19142, Part 1	Unlimited	BAAQMD Regulation 9-8- 330.1	Hours of Operation: Emergency Use
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-66: EM-3 Standby Diesel Generator

S-67: "O" Line Standby Diesel Generator

S-68: "M" Line Standby Diesel Generator

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SO <sub>2</sub>	SO <sub>2</sub>	FP	Opacity	Type of Limit
BAAQMD Regulation 9-1- 304	BAAQMD Regulation 9-1- 301	BAAQMD Regulation 6- 310	BAAQMD Regulation 6- 303	Citation of Limit
Sulfur Content of Fuel < 0.5% by weight	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	0.15 grains per dscf of exhaust gas volume	Ringelmann 2.0 For less than 3 minutes in an hour	Limit
BAAQMD Permit Condition 19142, Part 3	None	None .	None	Monitoring Requirement Citation
Periodic (Each Occurrence)	N/A	N/A	N/A	Monitoring Frequency
Fuel Certification by Vendor	None	None	Visual Observation	Monitoring Type
Yes	N/A	N/A	N/A	Monitoring Performed (Yes/No)
No	No	No	No	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-66: EM-3 Standby Diesel Generator

S-67: "O" Line Standby Diesel Generator

S-68: "M" Line Standby Diesel Generator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-K)

		id not operate.	eriod, "M" line di	2012 reporting p	12 – October 31,	For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not	Comments:
No	Yes	Running Time Clock and Recordkeeping	Periodic (Each Occurrence)	BAAQMD Permit Condition 19142, Part 1	100 hours per year	BAAQMD Regulation 9-8- 330.2	Hours of Operation – Reliability: Related Activities
No	Yes	Running Time Clock and Recordkeeping	Periodic (Each Occurrence)	BAAQMD Permit Condition 19142, Part 1	Unlimited	BAAQMD Regulation 9-8- 330.1	Hours of Operation: Emergency Use
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-69: "M" Line Asphalt Applicator

S-70: "O" Line Asphalt Applicator

Applic	cable Limits and (	Applicable Limits and Compliance Monitoring Requirements (Major Facility Revi	toring Requireme	ents (Major Facili	ty Review Permit	iew Permit (01/30/07) Table VII-L)	V(II-L)
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	BAAQMD Regulation 6- 301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Permit Condition 12672, Part 4	Periodic (Weekly)	Visual Observation and Recordkeeping	Yes	N
FP	BAAQMD Regulation 6- 310	0.15 grains per dscf of exhaust gas volume	None	N/A	None	N/A	No
FP	BAAQMD Regulation 6- 311	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	None	N/A	None	N/A	No
VOC	BAAQMD Regulation 8-2- 301	15 lb/day and 300 ppm (dry basis) total carbon	BAAQMD Permit Condition 12672, Part 6	Periodic (Once Per Permit Term)	Source Test	Yes	No

#### May 1, 2012 to October 31, 2012 **Semi-Annual Monitoring Report**

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-69: "M" Line Asphalt Applicator

S-70: "O" Line Asphalt Applicator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-L)

Commonts:	H <sub>2</sub> S	Type of Limit
Comments: Earthe May 1 2012, October 31 2012 reporting period "M" line did not operate	BAAQMD Regulation 9-2- 301	Citation of Limit
12_October 31_2	Ground Level Concentration during any 24 hour period of less than 0.06 ppm averaged over three consecutive minutes or less than 0.03 ppm averaged over any 60 consecutive minutes.	Limit
017 reporting pe	None	Monitoring Requirement Citation
riod "M" line die	N/A	Monitoring Frequency
not operate	None	Monitoring Type
	N/A	Monitoring Performed (Yes/No)
	No	Deviations (Yes/No)
		1

Comments:

For the May 1, 2012- October 31, 2012 reporting period, "M" line did not operate.

O Line source tests conducted October 30 through November 7, 2008. Submitted results to District on December 19,

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

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		id not operate.	eriod, "M" line di	For the May 1, $2012-$ October 31, 2012 reporting period, "M" line did not operate.	12 – October 31,	or the May 1, 20	Comments:
	N/A	None	N/A	None	4.10P <sup>0.67</sup> lb/hr, where P is process weight, ton/hr	BAAQMD Regulation 6- 311	FP
	N/A	None	N/A	None	0.015 grains per dscf of exhaust gas volume	BAAQMD Permit Condition 12144, Part 8	FP
	N/A	None	N/A	None	0.15 grains per dscf of exhaust gas volume	BAAQMD Regulation 6- 310	FP
	N/A	Visual Observation and Recordkeeping	Periodic (Weekly)	BAAQMD Permit Condition 12144, Part 7	Ringelmann 0.5 For less than 3 minutes in an hour	BAAQMD Permit Condition 12144, Part 6	Opacity
	N/A	Visual Observation	Periodic (Weekly)	None	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Regulation 6- 301	Opacity
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit
M-IIA	(01/30/07) Table	S-86: "M" Batch Transporter Bin & Silo Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-M)	ansporter Bin & sents (Major Facilit	S-86: "M" Batch Transporter Bin & Silonitoring Requirements (Major Facility R	S-8 Compliance Monit	cable Limits and (	Applic
		:					

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-87: "O" Batch Transporter Bin & Silo

	<del>,                                     </del>	,		,	
FP	FP	Opacity	Opacity	Type of Limit	Applic
BAAQMD Permit Condition 12144, Part 12	BAAQMD Regulation 6- 310	BAAQMD Permit Condition 12144, Part 10	BAAQMD Regulation 6- 301	Citation of Limit	able Limits and C
0.015 grains per dscf of exhaust gas volume	0.15 grains per dscf of exhaust gas volume	Ringelmann 0.5 For less than 3 minutes in an hour	Ringelmann 1.0 For less than 3 minutes in an hour	Limit	Compliance Moni
None	None	BAAQMD Permit Condition 12144, Part 11	None	Monitoring Requirement Citation	toring Requireme
N/A	N/A	Periodic (Weekly)	Periodic (Weekly)	Monitoring Frequency	ents (Major Facili
None	None	Visual Observation and Recordkeeping	Visual Observation	Monitoring Type	ty Review Permit
N/A	N/A	Yes	Yes	Monitoring Performed (Yes/No)	Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-N)
No	No	No	No	Deviations (Yes/No)	VII-N)
	BAAQMD 0.015 grains Permit per dscf of Condition exhaust gas 12144, Part 12 volume N/A None N/A	BAAQMD 0.15 grains per Regulation 6- dscf of exhaust None N/A None N/A 310 gas volume  BAAQMD 0.015 grains Permit per dscf of Condition exhaust gas 12144, Part 12 volume  None N/A None N/A	BAAQMD Permit Condition 12144, Part 10  BAAQMD  O.15 grains per Regulation 6- 310  BAAQMD  O.015 grains  Permit None  BAAQMD  None  BAAQMD  O.015 grains  None  None  BAAQMD  O.015 grains  None  BAAQMD  O.015 grains  None  None	BAAQMD Ringelmann 1.0 Regulation 6- Regulation 6- Regulation 6- Regulation 6- Regulation 6- Regulation 6- 301 Ringelmann 0.5 Ringelmann 0.5 Permit Condition 12144, Part 10  BAAQMD Ringelmann 0.5 Permit Condition 12144, Part 10  BAAQMD Ringelmann 0.5 Permit Condition 12144, Part 11  Regulation 6- Regulation 7- Regulation 6- Regulation 6- Regulation 6- Regulation 7- Regulation 8- Regulation 8- Recordkeeping 8- N/A None N/A None N/A None N/A None N/A None N/A	Citation of Limit     Limit Limit     Monitoring Requirement Citation     Monitoring Frequency     Monitoring Type     Monitoring Monitoring Performed (Yes/No)     Monitoring Performed (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitoring (Yes/No)     Monitorin

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-90: Bad Batch Bin

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-O)

in all in a	0.15 grains per dscf of exhaust None gas volume 4.10P <sup>0.67</sup> lb/hr, where P is process None	None	None N/A	None N/A
inutes in an ho .15 grains po scf of exhau gas volume		None	None N/A	None N/A None
ninutes in an ho	our			NG.
nan	Ringelmann 1.0 For less than 3 None	None	None Periodic (Weekly)	None Periodic Ob
Limit	Monitoring Requirement Citation	Monitoring Requirement Citation  Monitoring Frequency		Monitoring Frequency

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

# S-92: Nebraska Boiler Firing Natural Gas (Standby Fuel - Diesel)

	Applic	3-92: Nebraska boller Firing Natural Gas (Standby Fuel — Diesel) Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-P)	ompliance Monit	mpliance Monitoring Requirements (Major Facility Review Permi	ents (Major Facilit	y Fuel – Diesel) :y Review Permit	(01/30/07) Table	VII-P)
<del>, , , , , , , , , , , , , , , , , , , </del>	Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
	Opacity	BAAQMD Regulation 6- 301	Ringelmann 1.0 For less than 3 minutes in an hour	None	N/A	Visual Observation	N/A	
	FP	BAAQMD Regulation 6- 310.3	0.15 grains per dscf of exhaust gas volume at 6% O <sub>2</sub>	None	N/A	None	N/A	
·	SO <sub>2</sub>	BAAQMD Regulation 9-1- 301	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N/A	None	N/A	
	SO <sub>2</sub>	BAAQMD Regulation 9-1- 302	300 ppm (dry)	None	N/A	None	N/A	

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

# S-92: Nebraska Boiler Firing Natural Gas (Standby Fuel – Diesel)

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-P)

				1
NO <sub>x</sub>	NO <sub>x</sub>	SO <sub>2</sub>	SO <sub>2</sub>	Type of Limit
BAAQMD Regulation 9-7- 302.1	BAAQMD Regulation 9-7- 301.1	BAAQMD Permit Condition 10924, Part 1	BAAQMD Regulation 9-1- 304	Citation of Limit
40 ppmv @ 3%O <sub>2</sub> , dry, liquid fuel	30 ppmv @ 3%O <sub>2</sub> dry, gaseous fuel	< 0.5% by weight, for liquid fuel	Sulfur Content < 0.5% by weight, for liquid fuel < 300 ppm (dry), for solid fuel	Limit
BAAQMD Permit Condition 10924, Part 5	None	BAAQMD Permit Condition 10924, Parts 3,	BAAQMD Permit Condition 10924, Parts 3,	Monitoring Requirement Citation
Periodic (Prior to Initial Use of Non-Gaseous Fuel)	N/A	Periodic (Every Occurrence)	Periodic (Every Occurrence)	Monitoring Frequency
Source Test	None	Fuel Certification by Vendor, Recordkeeping	Fuel Certification by Vendor and Recordkeeping	Monitoring Type
N/A	N/A	N/A	N/A	Monitoring Performed (Yes/No)
No	No	No	No	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

# S-92: Nebraska Boiler Firing Natural Gas (Standby Fuel - Diesel)

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-P)

<del>J</del>		,		
CO	CO	NO <sub>x</sub>	NO <sub>x</sub>	Type of Limit
BAAQMD Regulation 9-7- 302.2	BAAQMD Regulation 9-7- 301.2	BAAQMD Regulation 9-7- 306.1	BAAQMD Regulation 9-7- 305.1	Citation of Limit
400 ppmv @ 3%O <sub>2</sub> , dry, 3-hr average Non-Gaseous Fuel	400 ppmv @ 3%O <sub>2</sub> , dry, 3-hr average Gaseous Fuel	150 ppmv @ 3%O <sub>2</sub> , dry, 3-hr average Equipment Testing Non Gaseous Fuel	150 ppmv @ 3%O <sub>2</sub> , dry, 3-hr average Natural Gas Curtailment Non Gaseous Fuel	Limit
BAAQMD Permit Condition 10924, Part 5	None	None	None	Monitoring Requirement Citation
Periodic (Prior to Initial Use of Non-Gaseous Fuel)	N/A	N/A	N/A	Monitoring Frequency
Source Test	None	None	None	Monitoring Type
N/A	N/A	N/A	N/A	Monitoring Performed (Yes/No)
No	No	No	N <sub>0</sub>	Deviations (Yes/No)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

# S-92: Nebraska Boiler Firing Natural Gas (Standby Fuel - Diesel)

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-P)

Heat Input	6	CO	Type of Limit	
BAAQMD Permit Condition 10924, Part 2	BAAQMD Regulation 9-7- 306.2	BAAQMD Regulation 9-7- 305.2	Citation of Limit	
< 12.2 MM Btu/hr	400 ppmv @ 3%02, dry, 3-hr average Equipment Testing Non Gaseous Fuel	400 ppmv @ 3%O <sub>2</sub> , dry, 3-hr average Natural Gas Curtailment: Non Gaseous Fuel	Limit	
BAAQMD Permit Condition 10924, Part 4	None	None	Monitoring Requirement Citation	
C N/A		N/A	Monitoring Frequency	
None Recordkeeping (Fuel Meter)		None	Monitoring Type	
N/A		N/A	Monitoring Performed (Yes/No)	
N No		No	Deviations (Yes/No)	

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-155: "M" Line Inkjet Printing System

### S-156: "O" Line Ink Jet Printing System

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-Q)

		id not operate.	eriod, "M" line d	2012 reporting p	12 – October 31,	For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not	Comments: F
20	Yes	Recordkeeping	Periodic (Annually)	BAAQMD Permit Condition 14391, Part 7	Annual POC Emissions < 0.082 TPY for both sources combined	BAAQMD Permit Condition 14391, Part 4	VOC
No	Yes	Recordkeeping	Periodic (Monthly)	BAAQMD Permit Condition 14391, Part 7	Annual Ink Usage < 360 gallons for both sources combined	BAAQMD Permit Condition 14391, Part 1	VOC
No	Yes	Recordkeeping	Periodic (Monthly)	BAAQMD 8-4- 501	5 tons POC on a calendar year basis	SIP Regulation 8-4-302	VOC
No	Yes	Recordkeeping	Periodic (Monthly)	BAAQMD Permit Condition 14391, Part 7	3.5 lbs/gallon	BAAQMD Regulation 8-4- 302.3	VOC
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-157: "M" Machine Flexographic Printers

S-158: "O" Machine Flexographic Printers

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-R)

		id not operate.	eriod, "M" line d	2012 reporting p	For the May 1, 2012 – October 31, 2012 reporting period, "M" line did not	For the May 1, 20	Comments:
No	Yes	Recordkeeping	Periodic (Annually)	BAAQMD Permit Condition 12378, Part 6	Annual POC Emissions < 40.032 TPY from both sources combined	BAAQMD Permit Condition 12378, Part 4	VOC
No	Yes	Recordkeeping	Periodic (Monthly)	BAAQMD Permit Condition 12378, Part 6	Annual Ink Usage < 32,000 gallons per source	BAAQMD Permit Condition 12378, Part 1	VOC
No	Yes	Recordkeeping	Periodic (Monthly)	BAAQMD Permit Condition 12378, Part 6	2.5 lbs/gallon	BAAQMD Regulation 8- 20-302	VOC
Deviations (Yes/No)	Monitoring Performed (Yes/No)	Monitoring Type	Monitoring Frequency	Monitoring Requirement Citation	Limit	Citation of Limit	Type of Limit

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-163: Maintenance Paint Shop Spray Booth

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-S)

# Owens Corning Insulating Systems, LLC - Santa Clara, CA

			<del></del>		<u> </u>	
Hours of Operation: Emergency Use	SO <sub>2</sub>	SO <sub>2</sub>	FP	Opacity	Type of Limit	Applic
BAAQMD Regulation 9-8- 330.1	BAAQMD Regulation 9-1- 304	BAAQMD Regulation 9-1- 301	BAAQMD Regulation 6- 310	BAAQMD Regulation 6- 303	Citation of Limit	able Limits and (
Unlimited	Sulfur Content of Fuel < 0.5% by weight	Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	0.15 grains per dscf of exhaust gas volume	Ringelmann 2.0 For less than 3 minutes in an hour	Limit	<b>S-164</b> Compliance Moni
BAAQMD Permit Condition 19142, Part 2	BAAQMD Permit Condition 19142, Part 3	None	None	None	Monitoring Requirement Citation	S-164: Boilerhouse Standby Diesel Generator Monitoring Requirements (Major Facility Revi
Periodic (Each Occurrence)	Periodic (Each Occurrence)	N/A	N/A	N/A	Monitoring Frequency	ındby Diesel Gen ents (Major Facilit
Running Time Clock and Recordkeeping	Fuel Certification by Vendor	None	None	None	Monitoring Type	<b>S-164: Boilerhouse Standby Diesel Generator</b> Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-T)
Yes	Yes	N/A	N/A	N/A	Monitoring Performed (Yes/No)	(01/30/07) Table
ON	No	No	No	No	Deviations (Yes/No)	VII-T)

Owens Corning Insulating Systems, LLC - Santa Clara, CA

### S-164: Boilerhouse Standby Diesel Generator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (01/30/07) Table VII-T)