



INNOVATIONS FOR LIVING™

OWENS CORNING
INSULATING SYSTEMS, LLC
Santa Clara Facility
960 Central Expressway
Santa Clara, California 95050

November 28, 2018

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Reference: **Owens Corning Insulating Systems, LLC – Santa Clara Facility**
Facility #A0041
Title V Semiannual Report
Period from May 1, 2018 through October 31, 2018

Dear Sir or Madam:

The Owens Corning Insulating Systems, LLC – Santa Clara facility is submitting this semi-annual monitoring report, as required by our Title V Permit issued by the Bay Area Air Quality Management District. The reporting period addressed in this report is May 1, 2018 through October 31, 2018.

Based on the information and belief formed after reasonable inquiry, the statements and information in this report are true, accurate and complete. Should you have any questions regarding this data, please contact Matt Glibota at (408) 235-1208.

Sincerely,

James Gerodimos
Plant Leader

Attachment

cc: Director of the Air Division
U.S. EPA-Region IX
75 Hawthorne Street
San Francisco, CA 94105

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2018 NOV 30 PM 2:34
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

Semi-Annual Monitoring Report
 May 1, 2018 – October 31, 2018

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 (12/27/12) Table VII-A)									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
Open Configuration Furnace Operation	BAAQMD Condition 16834, Part 3	Hours of Operation < 480 hrs/yr for both furnaces	BAAQMD Condition 16834, Part 4	Periodic (Daily)	Recordkeeping: Hours	Y	N		
Glass Production	BAAQMD Condition 16834, Part 5	6 tons/hour 144 tons/day	BAAQMD Condition 16834, Part 6	Periodic (Daily)	Recordkeeping: Glass Pull	Y	N		
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 16834, Part 7	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N		
PM ₁₀	BAAQMD Regulations 6-1-310 and 6-4-311	0.5 lbs/ton glass pulled	BAAQMD Condition 16834, Part 8	Periodic (Once Every Five Years)	Source Test	Y	N		
SO ₂	BAAQMD Regulation 9-1-302	300 ppm (dry)	BAAQMD Condition 16834, Part 9	Periodic (Once Every Five Years)	Source Test	Y	N		
Lead	BAAQMD Regulation 11-1-301	15 lb/day	BAAQMD Condition 16834, Part 10	Periodic (Once per Permit Term)	Source Test	Y	N		

Semi-Annual Monitoring Report
May 1, 2018 – October 31, 2018

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 (12/27/12) Table VII-A)

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Batch Wetting Process: Water Flow Rate Limit	BAAQMD Condition 16834, Part 11	Water flow rate ≥ 0.3 GPM	40 CFR 63.1383 (e)(1) BAAQMD Condition 16834, Part 11	Periodic (Daily)	Recordkeeping: Water Flow Rate	Y	N
Temperature above Molten Glass Surface	BAAQMD Condition 16834, Part 14	Temperature measured at a location 46 to 61 centimeters (18 to 24 inches) above the molten glass surface ≤ 120 °C (250 °F)	BAAQMD Condition 16834, Part 15	Periodic (Daily: Once per Shift)	Recordkeeping: Temperature	Y	N
As, Cr ₆ and Pb	BAAQMD Condition 16834, Part 19	N/A	BAAQMD Condition 16834, Part 19	Periodic (Initial and Annual)	Source Test	Y	N

Comments:

Semi-Annual Monitoring Report
 May 1, 2018 – October 31, 2018

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-A and Condition No. Y26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Open Configuration Furnace Operation	BAAQMD Condition 16834, Part 3	Hours of Operation < 480 hrs/yr for both furnaces	BAAQMD Condition 16834, Part 4	Periodic (Daily)	Recordkeeping: Hours	Y	N
Glass Production	BAAQMD Condition 26282, Part 1	6.46 tons/hour 155 tons/day 56,575 tons/12 month period	BAAQMD Condition 26282, Part 13	Periodic (Daily)	Recordkeeping: Glass Pull	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 16834, Part 7	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
Actual Energy Input	BAAQMD Condition 26282, Part 13	N/A	BAAQMD Condition 26282, Part 13	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Energy Input	Y	N
Percent Glass Yield	BAAQMD Condition 26282, Part 13	N/A	BAAQMD Condition 26282, Part 13	Periodic (Daily)	Recordkeeping: Percent Glass Yield	Y	N
Weight Percent Glass Yield	BAAQMD Condition 26282, Part 13	N/A	BAAQMD Condition 26282, Part 13	Periodic (Daily)	Recordkeeping: Weight Percent Glass Yield	Y	N

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Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-A and Condition No. Y26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
PM ₁₀	BAAQMD Regulations 6-1-310 and 6-4-311	0.5 lbs/ton glass pulled	BAAQMD Condition 16834, Part 8	Periodic (Once Every Five Years)	Source Test	Y	N
SO ₂	BAAQMD Regulation 9-1-302	300 ppm (dry)	BAAQMD Condition 16834, Part 9	Periodic (Once Every Five Years)	Source Test	Y	N
Lead	BAAQMD Regulation 11-1-301	15 lb/day	BAAQMD Condition 16834, Part 10	Periodic (Once per Permit Term)	Source Test	Y	N
Batch Wetting Water Flow Rate	BAAQMD Condition 26282, Part 3	Water flow rate ≥ 0.3 GPM	BAAQMD Condition 26282, Part 3 and 13	Periodic (Daily)	Recordkeeping: Water Flow Rate	Y	N

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May 1, 2018 – October 31, 2018

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-A and Condition No. Y26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Temperature above Molten Glass Surface	BAAQMD Condition 26282, Part 4	Temperature measured at a location 46 to 61 centimeters (18 to 24 inches) above the molten glass surface ≤ 120 °C (250 °F)	BAAQMD Condition 26282, Part 5 and 13	Periodic (Daily) – Until January 1, 2017	Recordkeeping: Temperature	Y	N
Temperature above Molten Glass Surface	BAAQMD Condition 26282, Part 4	Temperature measured at a location 46 to 61 centimeters (18 to 24 inches) above the molten glass surface ≤ 120 °C (250 °F)	BAAQMD Condition 26282, Part 5	Continuously – Starting January 1, 2017	Recordkeeping: Temperature	Y	N

Comments:

Semi-Annual Monitoring Report
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Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-2: "M" Forming							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Glass Production	BAAQMD Condition 24873, Part 1	6 tons/hour 144 tons/day	BAAQMD Condition 24873, Part 2	Periodic (Daily)	Recordkeeping: Glass Pull	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 24873, Part 15	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
PM ₁₀	BAAQMD Condition 24873, Part 17	515.59 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 24873, Part 18	84.89 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
POC	BAAQMD Condition 24873, Part 19	94.40 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 24873, Part 20	13.22 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N

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Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-2: "M" Forming									
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B)									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
CO	BAAQMD Condition 24873, Part 21	95.42 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N		
CO	BAAQMD Condition 24873, Part 22	15.71 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		
NOx	BAAQMD Condition 24873, Part 23	30.45 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N		
NOx	BAAQMD Condition 24873, Part 24	3.76 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		
SO ₂	BAAQMD Condition 24873, Part 25	37.17 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N		
SO ₂	BAAQMD Condition 24873, Part 26	4.59 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		

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Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
NOx, CO, POC, PM ₁₀ (Filterable and Condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 16834, Part 78	N/A	BAAQMD Condition 16834, Part 78	Periodic (Annual)	Source Test	Y	N
Comments:							

Semi-Annual Monitoring Report
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Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-20: "O" Forming									
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B and Condition No. 26282 (06/16/16))									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
Glass Production	BAAQMD Condition 26282, Part 1	6.46 tons/hour 155 tons/day 56,575 tons/12 month period	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Glass Pull	Y	N		
Natural Gas Firing Rate (MMscf)	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Natural Gas Firing Rate	Y	N		
Number of Fiberizes	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Number of Fiberizes Used	Y	N		
% Oxygen Setting	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: % Oxygen Setting	Y	N		
Binder Application Rate	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Binder Application Rate	Y	N		
Theoretical LOI of the Product	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Theoretical LOI of the Product	Y	N		

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S-20: "O" Forming

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 16834, Part 7	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 23	464.84 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 23	82.25 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
POC	BAAQMD Condition 26282, Part 23	138.08 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 26282, Part 23	24.43 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 23	211.51 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 23	37.44 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
NOx	BAAQMD Condition 26282, Part 23	2.21 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		
NOx	BAAQMD Condition 26282, Part 23	3.28 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N		
SO ₂	BAAQMD Condition 26282, Part 23	38.51 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		
SO ₂	BAAQMD Condition 26282, Part 23	5.95 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N		
Phenol	BAAQMD Condition 26282, Part 23	50.51 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		
Phenol	BAAQMD Condition 26282, Part 23	7.81 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N		
Formaldehyde	BAAQMD Condition 26282, Part 23	42.91 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		

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S-20: "O" Forming

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Formaldehyde	BAAQMD Condition 26282, Part 23	6.64 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Methanol	BAAQMD Condition 26282, Part 23	142.35 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Methanol	BAAQMD Condition 26282, Part 23	22.02 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Acetaldehyde	BAAQMD Condition 26282, Part 23	1.33 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Acetaldehyde	BAAQMD Condition 26282, Part 23	0.20 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 23	164.03 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 23	25.37 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-B and Condition No. 26282 (06/16/16))									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
NOx, CO, POC, PM ₁₀ (Filterable and condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 26282, Part 27	N/A	BAAQMD Condition 26282, Part 27	Periodic (Annual)	Source Test	Y	N		
PM ₁₀	BAAQMD Condition 26282, Part 26	665.81 lb/day S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		
PM ₁₀	BAAQMD Condition 26282, Part 26	117.81 tpy S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N		
Comments:									

Semi-Annual Monitoring Report
 May 1, 2018 – October 31, 2018

Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-3: "M" Curing Oven							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Glass Production	BAAQMD Condition 24873, Part 1	6 tons/hour 144 tons/day	BAAQMD Condition 24873, Part 2	Periodic (Daily)	Recordkeeping: Glass Pull	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 24873, Part 15	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
Incinerator Firebox Temperature	BAAQMD Condition 24873, Part 9	Average firebox temperature at A-5 and A-6 for any 3-hour block period \geq 1340 °F	BAAQMD Condition 24873, Parts 9-12	Continuous	Recordkeeping (Firebox Operating Temperature)	Y	N
Incinerator Firebox	BAAQMD Condition 24873, Part 5	Proper Incinerator Maintenance for A-5 and A-6	BAAQMD Condition 24873, Part 5	Periodic (Annual)	Inspection: Incinerator	Y	N

Semi-Annual Monitoring Report
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Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-3: "M" Curing Oven							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Incinerator Temperature	BAAQMD Condition 24873, part 9a	1340 degrees F (or lower if owner/operator demonstrates satisfaction of the APCO that the requirements of this permit condition 24873 can be met if the thermal oxidizers are operated at a temperature lower than 1,340 F)	BAAQMD Condition 24873, Part 9b	C	Temperature Monitoring	Y	N
PM ₁₀	BAAQMD Condition 24873, Part 27	22.48 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N

Semi-Annual Monitoring Report
 May 1, 2018 – October 31, 2018

Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-3: "M" Curing Oven							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
PM ₁₀	BAAQMD Condition 24873, Part 28	3.70 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
POC	BAAQMD Condition 24873, Part 29	5.33 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 24873, Part 30	0.75 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
CO	BAAQMD Condition 24873, Part 31	345.02 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
CO	BAAQMD Condition 24873, Part 32	56.81 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
NOx	BAAQMD Condition 24873, Part 33	248.44 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N

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Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
NOx	BAAQMD Condition 24873, Part 34	30.68 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
SO ₂	BAAQMD Condition 24873, Part 35	5.61 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
SO ₂	BAAQMD Condition 24873, Part 36	0.69 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
NOx, CO, POC, PM ₁₀ (Filterable and condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 16834, Part 78	N/A	BAAQMD Condition 16834, Part 78	Periodic (Annual)	Source Test	Y	N
Comments:							

Semi-Annual Monitoring Report
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Owens Corning Insulating Systems, LLC - Santa Clara, CA

S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VI-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Glass Production	BAAQMD Condition 26282, Part 1	6.46 tons/hour 155 tons/day 56,575 tons/12 month period	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Glass Pull	Y	N
Natural Gas Firing Rate (MMscf)	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Natural Gas Firing Rate	Y	N
Binder Application Rate	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Binder Application Rate	Y	N
Theoretical LOI of the Product	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Theoretical LOI of the Product	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 16834, Part 7	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 26282, Part 19	Pressure drop range across A-99 1" wc to 20" wc	BAAQMD Condition 26282, Part 19	Periodic (Once per Shift)	Recordkeeping	Y	N

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Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Filterable Particulate	BAAQMD Condition 26282, Part 19	Pressure drop range across A-100 5" wc to 40" wc	BAAQMD Condition 26282, Part 19	Periodic (Once per Shift)	Recordkeeping	Y	N
Incinerator Firebox Temperature	BAAQMD Condition 26282, Part 15	Average firebox temperature at A-25 for any 3-hour block period ≥ 1340 °F	BAAQMD Condition 26282, Part 15-18	Continuous	Recordkeeping (Firebox Operating Temperature)	Y	N
Incinerator Firebox	BAAQMD Condition 26282, Part 29	Proper Incinerator Maintenance for A-25	BAAQMD Condition 26282, Part 29	Periodic (Annual)	Inspection: Incinerator	Y	N

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S-21: "O" Curing Oven							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Incinerator Temperature	BAAQMD Condition 26282, part 15a	1340 degrees F (or lower if owner/operator demonstrates to the satisfaction of the APCO that the requirements of this permit condition 28282 can be met if the thermal oxidizers are operated at a temperature lower than 1,340 F)	BAAQMD Condition 26282, Part 15b	C	Temperature Monitoring	Y	N
Scrubber and HPAF	BAAQMD Condition 26282, Part 29	Proper Maintenance for A-99 and A-100	BAAQMD Condition 26282, Part 29	Periodic (Monthly)	Inspection: Scrubber and HPAF	Y	N

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S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
PM ₁₀	BAAQMD Condition 26282, Part 24	166.28 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 24	29.42 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
POC	BAAQMD Condition 26282, Part 24	4.05 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 26282, Part 24	0.71 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 24	458.82 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 24	81.19 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
NOx	BAAQMD Condition 26282, Part 24	279.16 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N

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S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
NOx	BAAQMD Condition 26282, Part 24	43.16 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
SO ₂	BAAQMD Condition 26282, Part 24	6.87 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
SO ₂	BAAQMD Condition 26282, Part 24	1.06 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Phenol	BAAQMD Condition 26282, Part 24	4.04 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Phenol	BAAQMD Condition 26282, Part 24	0.63 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Formaldehyde	BAAQMD Condition 26282, Part 24	0.51 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Formaldehyde	BAAQMD Condition 26282, Part 24	0.08 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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S-21: "O" Curing Oven

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Methanol	BAAQMD Condition 26282, Part 24	1.88 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Methanol	BAAQMD Condition 26282, Part 24	0.29 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Acetaldehyde	BAAQMD Condition 26282, Part 24	0.23 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Acetaldehyde	BAAQMD Condition 26282, Part 24	0.04 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 24	112.41 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 24	17.39 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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S-Z1: "O" Curing Oven									
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
NOX, CO, POC, PM ₁₀ (Filterable and Condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 26282, Part 27	N/A	BAAQMD Condition 26282, Part 27	Periodic (Annual)	Source Test	Y	Y		
PM ₁₀	BAAQMD Condition 26282, Part 26	665.81 lb/day S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N		
PM ₁₀	BAAQMD Condition 26282, Part 26	117.81 tpy S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N		
Comments:									

Commented [GM11]: Formaldehyde exceeded limits in Part 24 of Condition 26282 during April 2018 source test

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S-4: "M" Cooling							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Glass Production	BAAQMD Condition 24873, Part 1	6 tons/hour 144 tons/day	BAAQMD Condition 24873, Part 2	Periodic (Daily)	Recordkeeping: Glass Pull	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 24873, Part 15	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 24873, Part 3	Pressure drop range across A- 101 1" wc to 20" wc	BAAQMD Condition 24873, Part 3	Periodic (Once per Shift)	Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 24873, Part 3	Pressure drop range across A- 102 5" wc to 40" wc	BAAQMD Condition 24873, Part 3	Periodic (Once per Shift)	Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 24873, Part 4	Pressure drop range across A- 7 0.1" wc to 3" wc	BAAQMD Condition 24873, Part 6	Periodic (Once per Day)	Recordkeeping	Y	N
Scrubber and HPAF	BAAQMD Condition 24873, Part 4	Proper Maintenance for A-101 and A-102	BAAQMD Condition 24873, Part 4	Periodic (Monthly)	Inspection: Scrubber and HPAF	Y	N

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S-4: "M" Cooling							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
HPAF	BAAQMD Condition 24873, Part 5	Proper Maintenance for A-7	BAAQMD Condition 24873, Part 8	Periodic (Monthly)	Inspection: HPAF	Y	N
PM ₁₀	BAAQMD Condition 24873, Part 37	77.43 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 24873, Part 38	12.75 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
POC	BAAQMD Condition 24873, Part 39	18.36 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 24873, Part 40	2.55 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N
CO	BAAQMD Condition 24873, Part 41	9.18 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N

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S-4: "M" Cooling									
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
CO	BAAQMD Condition 24873, Part 42	1.51 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		
NOx	BAAQMD Condition 24873, Part 43	4.42 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N		
NOx	BAAQMD Condition 24873, Part 44	0.55 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		
SO ₂	BAAQMD Condition 24873, Part 45	6.20 lb/day	BAAQMD Condition 24873, Parts 82 and 83	Periodic (Daily)	Calculations	Y	N		
SO ₂	BAAQMD Condition 24873, Part 46	0.77 tpy	BAAQMD Condition 24873, Part 78	Periodic (Annually)	Source Test	Y	N		

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S-4: "M" Cooling							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
NOx, CO, POC, PM ₁₀ (Filterable and Condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 28473, Part 78	N/A	BAAQMD Condition 16834, Part 78	Periodic (Annual)	Source Test	Y	N
Comments:							

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S-22: "O" Cooling							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Glass Production	BAAQMD Condition 26282, Part 1	6.46 tons/hour 155 tons/day 56,575 tons/12 month period	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Glass Pull	Y	N
Binder Application Rate	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Binder Application Rate	Y	N
Theoretical LOI of the Product	BAAQMD Condition 26282, Part 31	N/A	BAAQMD Condition 26282, Part 31	Periodic (Hourly, Daily and Monthly)	Recordkeeping: Theoretical LOI of the Product	Y	N
Opacity	BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 16834, Part 7	Periodic (Daily)	Visual Observation and Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 26282, Part 19	Pressure drop range across A-99 1" wc to 20" wc	BAAQMD Condition 26282, Part 19	Periodic (Once per Shift)	Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 26282, Part 19	Pressure drop range across A-100 5" wc to 40" wc	BAAQMD Condition 26282, Part 19	Periodic (Once per Shift)	Recordkeeping	Y	N

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S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Filterable Particulate	BAAQMD Condition 26282, Part 20	Pressure drop range across A-26 1" wc to 10" wc	BAAQMD Condition 26282, Part 21	Periodic (Once per Day)	Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 26282, Part 20	Water flow across A-26 50 gpm to 250 gpm	BAAQMD Condition 26282, Part 21	Periodic (Once per Day)	Recordkeeping	Y	N
Scrubber and HPAF	BAAQMD Condition 26282, Part 19	Proper Maintenance for A-99 and A-100	BAAQMD Condition 26282, Part 19	Periodic (Monthly)	Inspection: Scrubber and HPAF	Y	N
Scrubber	BAAQMD Condition 26282, Part 20	Proper Maintenance for A-26	BAAQMD Condition 26282, Part 20	Periodic (Semi-Annually)	Inspection: Scrubber	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 25	34.71 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 25	6.14 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
POC	BAAQMD Condition 26282, Part 25	8.36 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
POC	BAAQMD Condition 26282, Part 25	1.48 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 25	4.83 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
CO	BAAQMD Condition 26282, Part 25	0.85 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
NOX	BAAQMD Condition 26282, Part 25	3.81 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
NOX	BAAQMD Condition 26282, Part 25	0.59 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
SO ₂	BAAQMD Condition 26282, Part 25	5.30 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N

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S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
SO ₂	BAAQMD Condition 26282, Part 25	0.82 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Phenol	BAAQMD Condition 26282, Part 25	1.72 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Phenol	BAAQMD Condition 26282, Part 25	0.72 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Formaldehyde	BAAQMD Condition 26282, Part 25	1.16 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Formaldehyde	BAAQMD Condition 26282, Part 25	0.18 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Methanol	BAAQMD Condition 26282, Part 25	7.58 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Methanol	BAAQMD Condition 26282, Part 25	1.17 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Acetaldehyde	BAAQMD Condition 26282, Part 25	0.18 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Acetaldehyde	BAAQMD Condition 26282, Part 25	0.03 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 25	17.65 lb/day	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
Ammonia	BAAQMD Condition 26282, Part 25	2.73 tpy	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N
NOx, CO, POC, PM ₁₀ (Filterable and condensable), SO ₂ , Phenol, Formaldehyde, Methanol, Ammonia, Acetaldehyde	BAAQMD Condition 26282, Part 27	N/A	BAAQMD Condition 26282, Part 27	Periodic (Annual)	Source Test	Y	N

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S-22: "O" Cooling

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-C and Condition No. 26282 (06/16/16))

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
PM ₁₀	BAAQMD Condition 26282, Part 26	665.81 lb/day S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Daily)	Calculations	Y	N
PM ₁₀	BAAQMD Condition 26282, Part 26	117.81 tpy S-20, S-21 and S-22 combined	BAAQMD Condition 26282, Part 30	Periodic (Annually)	Calculations	Y	N

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S-26: Sandblasting Room								
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-E)								
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)	
Opacity	SIP Regulation 6-301; BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 15250, Part 8	Periodic (Monthly)	Visual Observation	Y	N	
Filterable Particulate	BAAQMD Condition 15250, Part 9	Pressure drop range across A-149 0" wc to 10" wc	BAAQMD Condition 15250, Part 8	Periodic (Monthly)	Recordkeeping	Y	N	
Filterable Particulate	BAAQMD Condition 15250, Part 9	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 15250, Part 9	Periodic (Annually)	Inspection: Baghouse Bags	Y	N	

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S-56: Batch Materials Silo & Unloading System							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-G)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	SIP Regulation 6-301; BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	None	Periodic (Weekly)	Visual Observation	Y	N

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S-57: Batch Mixing							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-H)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	BAAQMD Condition 12144, Part 2	Ringelmann 0.5 For less than 3 minutes in an hour	BAAQMD Condition 12144, Part 2	Periodic (Weekly)	Visual Observation and Recordkeeping	Y	N
Filterable Particulate	BAAQMD Condition 12144, Parts 2 and 4	Ringelmann 0.5 For less than 3 minutes in an hour and 0.015 grain per dry standard cubic foot of exhaust effluent	BAAQMD Condition 12144, Part 3	Periodic (Weekly)	Recordkeeping	Y	N

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S-61: "M" Packing Dust Collection System							
S-62: "O" Packing Dust Collection System							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-I)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	SIP Regulation 6-301; BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	None	Periodic (Weekly)	Visual Observation	Y	N
Comments:							

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- S-65: Fire System Diesel Pump**
- S-66: EM-3 Standby Diesel Generator**
- S-67: "O" Line Standby Diesel Generator**
- S-68: "M" Line Standby Diesel Generator**
- S-164: Boilerhouse Standby Diesel Generator**
- S-166: Cullet Water Standby Generator**
- S-167: Cooling Water Standby Generator**

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-J)

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Hours of Operation	BAAQMD Regulation 9-8-330	50 hours/yr for maintenance and testing	BAAQMD Regulation 9-8-530	Continuous	Totalizing Counter	Y	N
Hours of Operation	BAAQMD Regulation 9-8-330	50 hours/yr for maintenance and testing	BAAQMD Regulation 9-8-502.1 and 9-8-530	Periodic (Monthly)	Records	Y	N
Hours of Operation	40 CFR Part 63, Subpart ZZZZ, 63.6640(f)(1)(ii)	Maintenance checks and readiness testing less than 100 hours/yr	40 CFR, Part 63, Subpart ZZZZ, 63.6655(e)	Periodic	Records	Y	N

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- S-65: Fire System Diesel Pump
- S-66: EM-3 Standby Diesel Generator
- S-67: "O" Line Standby Diesel Generator
- S-68: "M" Line Standby Diesel Generator
- S-164: Boilerhouse Standby Diesel Generator
- S-166: Cullet Water Standby Generator
- S-167: Cooling Water Standby Generator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-J)

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Hours of Operation	CCR, Title 17, Section 93115.6(b)(3)(A)1.a	20 hours/yr for maintenance and testing for S-66, S-67, S-68, S-164, S-166, S-167	CCR, Title 17, Section 93115.10(d)(1)	Continuous	Totalizing Counter	Y	N
Hours of Operation	CCR, Title 17, Section 93115.6(b)(3)(A)1.a	20 hours/yr for maintenance and testing for S-66, S-67, S-68, S-164, S-166, S-167	CCR, Title 17, Section 93115.10(f)	Periodic (Monthly)	Records	Y	N

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Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-J)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Hours of Operation	BAAQMD Condition 22820, Part 1	20 hours/yr for maintenance and testing for S-66, S-67, S-68, S-164, S-166, S-167	BAAQMD Condition 22820, Part 3	Continuous	Totalizing Counter	Y	N
	BAAQMD Condition 22820, Part 1	20 hours/yr for maintenance and testing for S-66, S-67, S-68, S-164, S-166, S-167	BAAQMD Condition 22820, Part 4	Periodic (Monthly)	Records	Y	N

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- S-65: Fire System Diesel Pump
- S-66: EM-3 Standby Diesel Generator
- S-67: "O" Line Standby Diesel Generator
- S-68: "M" Line Standby Diesel Generator
- S-164: Boilerhouse Standby Diesel Generator
- S-166: Cullet Water Standby Generator
- S-167: Cooling Water Standby Generator

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-I)

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Hours of Operation	BAAQMD Condition 22851, Part 1	34 hours/yr for maintenance and testing for S-65	BAAQMD Condition 22851, Part 3	Continuous	Totalizing Counter	Y	N
Hours of Operation	BAAQMD Condition 22851, Part 1	34 hours/yr for maintenance and testing for S-65	BAAQMD Condition 22851, Part 4	Periodic (Monthly)	Records	Y	N

Comments:

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S-69: "M" Line Asphalt Applicator S-70: "O" Line Asphalt Applicator									
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-L)									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
Opacity	SIP Regulation 6-301; BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	BAAQMD Condition 12672, Part 1	Periodic (Weekly)	Visual Observation	Y	N		
VOC	BAAQMD Regulation 8-4-302.3	3.5 lbs/gallon	BAAQMD Regulation 8-4-501	Periodic (Monthly)	Recordkeeping	Y	N		
Comments									

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S-86: "M" Batch Transporter Bin & Silo							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-M)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	BAAQMD Condition 12144, Part 6	Ringelmann 0.5 For less than 3 minutes in an hour	BAAQMD Condition 12144, Part 7	Periodic (Weekly)	Visual Observation and Recordkeeping	Y	N
Baghouse Inspection	BAAQMD Condition 12144, Parts 6 and 8	Ringelmann 0.5 For less than 3 minutes in an hour and 0.015 grain per dry standard cubic foot of exhaust effluent	BAAQMD Condition 12144, Part 7	Periodic (Every Two Months)	Visual Inspection	Y	N
Comments							

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

Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VI-N)

Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	BAAQMD Condition 12144, Part 10	Ringelmann 0.5 For less than 3 minutes in an hour	BAAQMD Condition 12144, Part 11	Periodic (Weekly)	Visual Observation and Recordkeeping	Y	N
Baghouse Inspection	BAAQMD Condition 12144, Parts 10 and 12	Ringelmann 0.5 For less than 3 minutes in an hour and 0.015 grain per dry standard cubic foot of exhaust effluent	BAAQMD Condition 12144, Part 11	Periodic (Every Two Months)	Visual Inspection	Y	N

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S-90: Bad Batch Bin							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-O)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Opacity	SIP Regulation 6-301; BAAQMD Regulation 6-1-301	Ringelmann 1.0 For less than 3 minutes in an hour	None	Periodic (Weekly)	Visual Observation	Y	N

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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 (12/27/12) Table VII-Q)									
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)		
VOC	BAAQMD Regulation 8-4-302.3	3.5 lbs/gallon	BAAQMD Condition 14391, Part 7	Periodic (Monthly)	Recordkeeping	Y	N		
POC	BAAQMD Condition 14391, Part 1	Annual Ink Usage < 360 gallons for both sources combined	BAAQMD Condition 14391, Part 7	Periodic (Monthly)	Recordkeeping	Y	N		
POC	BAAQMD Condition 14391, Part 2	POC content of ink less than 5% by weight	None	Periodic (Event Based)	Recordkeeping (Results of District approved laboratory analysis for each ink)	Y	N		
POC	BAAQMD Condition 14391, Part 4	Annual POC Emissions < 0.082 TPY for both sources combined	BAAQMD Condition 14391, Part 7	Periodic (Annually)	Recordkeeping	Y	N		
Comments:									

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S-160: Binder Red Dye Tank							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-Q)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
Total Throughput	BAAQMD Condition 13661, Part 2	170 tons in any rolling 12 consecutive month period	BAAQMD Condition 13661, Part 3	Periodic (Monthly)	Recordkeeping	Y	N

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S-170: "M" Line Retail Roll Overwrap Tape Glue System							
S-171: "O" Line Retail Roll Overwrap Tape Glue System							
Applicable Limits and Compliance Monitoring Requirements (Major Facility Review Permit (12/27/12) Table VII-U)							
Type of Limit	Citation of Limit	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring Type	Monitoring Performed (Yes/No)	Deviations (Yes/No)
VOC	BAAQMD Regulation 8-4-302; BAAQMD Condition 23812, Part 5	Emissions <4,533 Kg (5 tons)/yr or VOC content < 420 g/l (3.5 lb/gal) as applied, excluding water	BAAQMD Regulation 8-4-501	Periodic (Event Based) maintain current list of coatings and solvents used	Recordkeeping	Y	N
VOC	BAAQMD Regulation 8-4-302; BAAQMD Condition 23812, Part 5	Emissions <4,533 Kg (5 tons)/yr or VOC content < 420 g/l (3.5 lb/gal) as applied, excluding water	BAAQMD Regulation 8-4-501	Periodic (Annually) record quantities of coatings applied and	Recordkeeping	Y	N
VOC	BAAQMD Regulation 8-4-302; BAAQMD Condition 23812, Part 5	Emissions <4,533 Kg (5 tons)/yr or VOC content < 420 g/l (3.5 lb/gal) as applied, excluding water	BAAQMD Regulation 8-4-501	Periodic (Monthly) for coatings subject to BAAQMD Regulation 8-4-302.3	Recordkeeping	Y	N
VOC	BAAQMD Condition 23812, Part 1	Hot melt glue used ≤ 65 tons/year/source	BAAQMD Condition 23812, Part 6.b.	Periodic (Annually)	Recordkeeping	Y	N
VOC	BAAQMD Condition 23812, Parts 2 and 3	POC ≤ 1,320 pounds/year/source and POC ≤ 10 pounds/day/source	BAAQMD Condition 23812, Part 6	Periodic (Daily, Monthly, Annually)	Recordkeeping	Y	N

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Comments

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