Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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
November 1, 2016 - April 30, 2017
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
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance MonitYoring 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance MonitYoring 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Applicable Limits and Compliance MonitYoring 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
November 1, 2016 - April 30, 2017
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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)
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
November 1, 2016 - April 30, 2017
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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)
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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)
NOx	BAAQMD Condition 26282, Part 23	21.21 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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)
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 typ	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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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)
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
November 1, 2016 - April 30, 2017
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 ≥ 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
November 1, 2016 - April 30, 2017
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 to the 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
November 1, 2016 - April 30, 2017
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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)
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
November 1, 2016 - April 30, 2017
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 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
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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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 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 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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 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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
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 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 typ	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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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 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	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
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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:

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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 typ	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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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 (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:

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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 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
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 4	Periodic (Monthly)	Records	Y	N

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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 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:

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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 (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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017

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 (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:

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report
November 1, 2016 - April 30, 2017
Owens Corning Insulating Systems, LLC - Santa Clara, CA

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

Semi-Annual Monitoring Report

November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA

Comments

Semi-Annual Monitoring Report

November 1, 2016 - April 30, 2017

Owens Corning Insulating Systems, LLC - Santa Clara, CA