



# South Coast Air Quality Management District

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

October 11, 2013

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

Dear Mr. Rios:

Owen Corning Roofing and Asphalt, LLC (ID 35302) has proposed to revise their Title V/RECLAIM permit by removing carbon monoxide monthly limit in permit condition A63.9, revising the rating of heater under device D114, and correcting typographical error in Rule citation for permit conditions A63.4, A433.1, A433.2 and H23.1.

This is a manufacturer of air-blown asphalt and roofing tiles (NAICS 324121) located at 1501 N. Tamarind Ave., Compton, CA 90222. This proposed revision under Application No. 556018 is considered as a "de minimus significant permit revision" to the Title V/RECLAIM permit. Attached for your review are the permit evaluation and draft permit for the proposed permit revision. With your receipt of the proposed Title V permit revision today, we will note that the EPA 45-day review period will begin on October 11, 2013.

If you have any questions or wish to provide comments regarding this project, please call Thai Tran (909) 396-2562.

Very truly yours,

Mohan Balagopalan  
Senior Manager  
Chemical, Mechanical, Ports Permitting  
Engineering and Compliance

Attachment

TT(C: Owen Corning 556018 Letter to EPA for proposed FP.DOC)



## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: ASPHALT MANUFACTURING</b>					
STILL, NO. 4, HEIGHT: 32 FT 6 IN; DIAMETER: 15 FT WITH A/N: 383382	D4	D5	SOX: PROCESS UNIT**	PM: (9) [RULE 405, 2-7-1986]; PM: 0.6 LB(S)/1000 LBS (8) [40CFR 60 Subpart UU, 8-5-1983]; SOX: 0.061 LBS/TON MATERIAL (1) [RULE 2011, 5-6-2005]	D323.1  D323.1
BLOWER, 3200 CU.FT./MIN	D119				
KNOCK OUT POT, HEIGHT: 16 FT ; DIAMETER: 10 FT A/N: 383382	D5	D4 C78			D323.1, H23.1
STILL, NO. 5, HEIGHT: 50 FT ; DIAMETER: 12 FT WITH A/N: 383382	D6	D7	SOX: PROCESS UNIT**	PM: (9) [RULE 405, 2-7-1986]; PM: 0.6 LB(S)/1000 LBS (8) [40CFR 60 Subpart UU, 8-5-1983]; SOX: 0.061 LBS/TON MATERIAL (1) [RULE 2011, 5-6-2005]	D323.1
BLOWER, 3200 CU.FT./MIN	D120				
KNOCK OUT POT, HEIGHT: 16 FT ; DIAMETER: 10 FT A/N: 383382	D7	D6 C78			D323.1, H23.1
DEHYDRATION UNIT A/N: 383382	D8	C78			D323.1
<b>System 2: PERMA MOP MANUFACTURING</b>					
STORAGE TANK, FIXED ROOF, NO. 15, ASPHALT, WITH AN AGITATOR, 30000 GALS; DIAMETER: 12 FT ; HEIGHT: 32 FT A/N: 422690	D82	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
<b>System 3: COOLING TOWER</b>					

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

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

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<b>Process 1: ASPHALT MANUFACTURING</b>					
COOLING TOWER, NO.1, ASPHALT MANUFACTURING, BALTIMORE AIR COIL, MODEL 3547-HX, A/N: 466122	D156			PM: 0.034 LBS PER 24-HOUR PERIOD (5) [RULE 405, 2-7-1986]	B27.2, C1.3
<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
<b>System 1: RAW ASPHALT</b>					
STORAGE TANK, NO.24, ASPHALT, 47780 GALS; DIAMETER: 12 FT ; HEIGHT: 32 FT A/N: 422695	D9	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, NO.26, ASPHALT, FIXED ROOF, 43590 GALS; DIAMETER: 26 FT ; HEIGHT: 21 FT 4 IN A/N: 422716	D10	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, NO.29, ASPHALT, FIXED ROOF, 49300 GALS; DIAMETER: 18 FT ; HEIGHT: 24 FT 6 IN A/N: 422718	D11	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, NO. 25, ASPHALT, FIXED ROOF, 47780 GALS; DIAMETER: 18 FT ; HEIGHT: 27 FT 6 IN A/N: 422714	D12	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1

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 (3) Denotes RECLAIM concentration limit  
 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
 (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit  
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
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<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
STORAGE TANK, NO.28, ASPHALT, FIXED ROOF, 49490 GALS; DIAMETER: 18 FT ; HEIGHT: 27 FT WITH A/N: 554252	D13	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
HEATER, ASPHALT, 0.8 MMBTU/HR	D114		NOX: PROCESS UNIT**	NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	
STORAGE TANK, NO. 34, CUTBACK ASPHALT, FIXED ROOF, STEAM HEATED, 23270 GALS; DIAMETER: 12 FT ; HEIGHT: 30 FT A/N: 422722	D14	C78 C132			A63.8, A433.1, D12.4, D323.1, E1.1, H23.1
STORAGE TANK, NO. 33, ASPHALT, FIXED ROOF, 23270 GALS; DIAMETER: 12 FT ; HEIGHT: 30 FT A/N: 422720	D15	C78 C132			A63.8, A433.1, D12.4, D323.1, E1.1, H23.1
STORAGE TANK, NO. 2, CONDENSATE, HEIGHT: 14 FT 9 IN; DIAMETER: 18 FT A/N: C13334	D83	C78			D323.1
LOADING ARM, TANK TRUCK, ASPHALT, WITH A 4 IN VAPOR RETURN LINE, WITH VAPOR LOCK BALANCE RECOVERY SYSTEM A/N:	D16	C78 C132			A63.9, A433.2, D323.1, E1.1, H23.1

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 (5) (5A) (5B) Denotes command and control emission limit  
 (7) Denotes NSR applicability limit  
 (9) See App B for Emission Limits  
 (2) (2A) (2B) Denotes RECLAIM emission rate  
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 (6) Denotes air toxic control rule limit  
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<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
LOADING ARM, TANK TRUCK, ASPHALT, WITH A 4 IN VAPOR RETURN LINE, WITH VAPOR LOCK BALANCE RECOVERY SYSTEM A/N:	D11	C78 C132			A63.9, A433.2, D323.1, E1.1, H23.1
<b>System 2: PROCESSED ASPHALT</b>					
STORAGE TANK, NO.11, PROCESSED ASPHALT, FIXED ROOF, 18270 GALS; DIAMETER: 11 FT 3 IN; HEIGHT: 24 FT A/N: 422441	D17	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, NO. 12, PROCESSED ASPHALT, 25280 GALS; DIAMETER: 11 FT 8 IN; HEIGHT: 32 FT 6 IN A/N: 422686	D18	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, FIXED ROOF, NO. 13, PROCESSED ASPHALT, 23180 GALS; DIAMETER: 11 FT 10 IN; HEIGHT: 32 FT 6 IN A/N: 422687	D19	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, FIXED ROOF, NO.14, PROCESSED ASPHALT, 19760 GALS; DIAMETER: 11 FT 10 IN; HEIGHT: 30 FT A/N: 422689	D20	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, NO.16, PROCESSED ASPHALT, 26990 GALS; DIAMETER: 12 FT ; HEIGHT: 31 FT A/N: 422691	D21	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1

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 (3) Denotes RECLAIM concentration limit  
 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
 (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit  
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (9) See App B for Emission Limits  
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
STORAGE TANK, FIXED ROOF, NO. 30, ASPHALT/BLOWDOWN OIL, 31000 GALS; DIAMETER: 16 FT ; HEIGHT: 21 FT A/N: 436928	D23	C78 C132			A63.10, A433.1, D323.1, E1.1, H23.1
STORAGE TANK, FIXED ROOF, STEAM HEATED, NO. 27, FUEL OIL, 16239 GALS; DIAMETER: 10 FT ; HEIGHT: 18 FT 6 IN A/N: 308052	D34				E127.1
<b>System 4: CUT BACK ASPHALT</b>					
STORAGE TANK, STEAM HEATED, NO. 5, CUTBACK ASPHALT, HEIGHT: 32 FT ; DIAMETER: 12 FT A/N: C13328	D24			PM: (9) [RULE 405, 2-7-1986]	D323.1
STORAGE TANK, STEAM HEATED, NO. 4, CUTBACK ASPHALT, HEIGHT: 32 FT ; DIAMETER: 12 FT A/N: C13327	D27			PM: (9) [RULE 405, 2-7-1986]	D323.1
LOADING ARM, CUTBACK ASPHALT, DIAMETER: 3 IN A/N: C13318	D30			PM: (9) [RULE 405, 2-7-1986]	D323.1
<b>System 5: ASPHALT</b>					
STORAGE TANK, FIXED ROOF, NO. 23, ASPHALT, 44000 GALS; DIAMETER: 20 FT 6 IN; HEIGHT: 18 FT A/N: 422694	D31	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
<b>System 6: MINERAL SPIRITS</b>					

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 (4) Denotes BACT emission limit  
 (5) (5A) (5B) Denotes command and control emission limit  
 (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit  
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
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<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
STORAGE TANK, NO. 7, MINERAL SPIRITS, WITH SUBMERGED FILLING, 24000 GALS; DIAMETER: 14 FT ; HEIGHT: 20 FT A/N: 136964	D32				
STORAGE TANK, NO. 8, MINERAL SPIRITS, WITH SUBMERGED FILLING, 24000 GALS; DIAMETER: 14 FT ; HEIGHT: 20 FT A/N: 136964	D33				
<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
<b>System 1: ASPHALT STORAGE AND HANDLING</b>					
STORAGE TANK, ASPHALT, 37330 GALS; DIAMETER: 21 FT 6 IN; HEIGHT: 16 FT A/N: 422855	D39	C78 C132			A63.8, A433.1, D323.1, E1.1, H23.1
TANK, ASPHALT, 1500 GALS A/N: 456922	D125	C132 D158			D323.1, H23.1
TANK, HEATING, ASPHALT, 545 GALS A/N: 456922	D158	D125			
<b>System 2: GROUND LIMESTONE (FILLER) STORAGE AND HANDLING</b>					
STORAGE SILO, WITH FABRIC FILTER, HEIGHT: 40 FT 3 IN; DIAMETER: 15 FT 5 IN WITH A/N: 146860	D84			PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]	D12.1, D323.1, H23.1
FILTER, BAG, FLEX-KLEEN, MODEL 84-BVBS-25IIG, WITH FABRIC FILTER, 265 SQ.FT.	C122				D12.1, D322.1, D381.1, E102.1, K67.4

- |  |   |
|--|---|
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| (3) Denotes RECLAIM concentration limit                  | (4) Denotes BACT emission limit                               |
| (5) (5A) (5B) Denotes command and control emission limit | (6) Denotes air toxic control rule limit                      |
| (7) Denotes NSR applicability limit                      | (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) |
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<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
CONVEYOR, PNEUMATIC, LIMESTONE FOR FILLED ADHESIVE A/N: 465081	D147			PM: (9) [RULE 404, 2-7-1986]	
BIN, VENT NO. 1, J.D.B. DENSE FLOW, MODEL NO. DF90R, 84 SQ. FT. OF PTFE CLOTH, 24 IN DIA. A/N: 465081	D148			PM: (9) [RULE 404, 2-7-1986]	
BIN, HOPPER, FILLER FOR FILLED ADHESIVE A/N: 465081	D149			PM: (9) [RULE 404, 2-7-1986]	
CONVEYOR, PNEUMATIC, LIMESTONE, FOR FILLED SEALANT A/N: 465081	D150			PM: (9) [RULE 404, 2-7-1986]	
BIN, VENT NO. 2, J.D.B. DENSE FLOW, MODEL NO. DF90R, 84 SQ. FT. OF PTFE CLOTH, 24 IN DIA. A/N: 465081	D151			PM: (9) [RULE 404, 2-7-1986]	
BIN, HOPPER, FILLER FOR FILLED SEALANT A/N: 465081	D152			PM: (9) [RULE 404, 2-7-1986]	
HOPPER, SURGE, LIMESTONE, UPPER A/N: 465081	D68	C99		PM: (9) [RULE 405, 2-7-1986]	D323.1
FILTER, BAG, SENECA ENVIROMENTAL PRODUCTS, MODEL 49-IMBV-6, 346 SQ.FT. A/N: 465081	C99	D68		PM: (9) [RULE 404, 2-7-1986]	D12.1, D322.1, D381.1, E102.1, K67.4

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- (7) Denotes NSR applicability limit
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- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
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- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
HEATER, NATURAL GAS, WITH LOW NOX BURNER, 2.7 MMBTU/HR WITH A/N: 424381	D41		NOX: PROCESS UNIT**	CO: 400 PPMV (5A) [RULE 1146.1, 5-13-1994; RULE 1146.1, 9-5-2008]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 30 PPMV (4) [RULE 1303(a)(1) -BACT, 5-10-1996]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 0.83 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]	D332.2
BURNER, NATURAL GAS, MAXON, MODEL M-PAKT, 2.7 MMBTU/HR	D144				
CONVEYOR, SCREW, LIMESTONE A/N: 465081	D59	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BUCKET ELEVATOR, FILLER A/N: 465081	D58	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
HOPPER, SURGE, LIMESTONE, LOWER A/N: 465081	D69	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
CONVEYOR, SCREW, LIMESTONE A/N: 465081	D70	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
CONVEYOR, SCREW, LIMESTONE A/N: 465081	D71	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
HOPPER, DUMP, LIMESTONE A/N: 465081	D64	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
CONVEYOR, PNEUMATIC, LIMESTONE A/N: 465081	D65	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
MIXER A/N: 465081	D88			PM: (9) [RULE 405, 2-7-1986]	D323.1, H23.1

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<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
<b>System 3: Calcium Carbonate, Sand, and Granule, Receiving, Storage and Handling</b>					
PIT, SAND, CALCIUM CARBONATE, GRANULE A/N: 275499	D35	C86		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
CONVEYOR, BELT, SAND, CALCIUM CARBONATE, GRANULE A/N: 275499	D36	C86		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
HOPPER, WEIGH, DISCHARGE STATION, CALCIUM CARBONATE, SAND AND GRANULE A/N: 275499	D37	C86		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BAGHOUSE, CLOTH FILTER, NORTHWEST, MODEL 36-10, 424 SQ.FT. A/N: 275498	C86	D35 D36 D37		PM: (9) [RULE 404, 2-7-1986]	D322.1, D381.1, E102.1, E193.3, K67.4
BIN, SURGE, GRANULES A/N: 456922	D50	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
CONVEYOR, BELT A/N: 456922	D51	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BIN, SURGE, GRANULE ACCUMULATOR AND DISTRIBUTOR A/N: 456922	D52	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BIN, SURGE, CALCIUM CARBONATE, SAND, AND GRANULES A/N: 456922	D53	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BIN, SURGE, GROUND SAND, CALCIUM CARBONATE A/N: 456922	D54	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
HOPPER, DUMP, GROUND SAND, CALCIUM CARBONATE A/N: 456922	D55	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
HOPPER, DUMP, SAND, CALCIUM CARBONATE A/N: 456922	D56	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BUCKET ELEVATOR, CALCIUM CARBONATE, SAND A/N: 456922	D57	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BUCKET ELEVATOR, WASTE A/N: 456922	D63	C75		PM: (9) [RULE 405, 2-7-1986]	D323.1, H23.1
BUCKET ELEVATOR, PRIME A/N: 456922	D104	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BUCKET ELEVATOR, WASTE A/N: 456922	D105	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
BUCKET ELEVATOR, HEADLAP A/N: 456922	D106	C75		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
<b>System 4: SEALANT STORAGE AND HANDLING</b>					
TANK, SURGE, LAMINATOR, ADHESIVE, 240 GALS A/N: 456922	D93	C132			
TANK, SURGE, LAMINATOR, SEALANT, 240 GALS A/N: 456922	D95	C132			
TANK, CIRCULATOR, SEALANT, 240 GALS A/N: 456922	D123	C132			
TANK, MELT, SEALANT, 240 GALS A/N: 456922	D124	C132			
TANK, MELT SEALANT ADHESIVE (MSA), 1500 GALS A/N: 456922	D135	C132			

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

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
TANK, HOT MELT, MODIFIED LAMINANT ADHESIVE (MLA),, 15000 GALS A/N: 456922	D136	C132			
COATER, MLA APPLICATOR A/N: 456922	D139	C132			
COATER, MSA APPLICATOR A/N: 456922	D140	C132			
<b>System 5: FIBERGLASS ROOFING PRODUCTION</b>					
TANK, MIXER NO. 1., FILLED ADHESIVES, 150 GALS; DIAMETER: 3 FT ; HEIGHT: 4 FT A/N: 456922	D154	C132			
TANK, MIXER NO. 2., FILLED SEALANT, 150 GALS; DIAMETER: 3 FT ; HEIGHT: 4 FT A/N: 456922	D155	C132			
COATER, ASPHALT A/N: 456922	D87	C132		PM: (9) [RULE 405, 2-7-1986]; PM: 0.04 LB(S)/1000 LBS (8) [40CFR 60 Subpart UU, 8-5-1983]	A63.6, C1.1, C1.5, D323.1, H23.1
TANK, SURGE, SEALANT, 1500 GALS A/N: 456922	D89				
COATER, CALCIUM CARBONATE OR SAND, AND GRANULES APPLICATOR A/N: 456922	D44	C75 C132		PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
PRESS, PRESSURE ROLLERS, GRANULE SETTING A/N: 456922	D45			PM: (9) [RULE 405, 2-7-1986]	A63.4, D323.1, H23.1
COOLER, ASPHALT A/N: 456922	D129			PM: (9) [RULE 405, 2-7-1986]	D323.1

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
COATER, SEALANT APPLICATOR/LAMINATOR A/N: 456922	D92	C132		PM: (9) [RULE 405, 2-7-1986]	
COATER, MLA APPLICATOR A/N: 456922	D161	C132			
COATER, MLA APPLICATOR A/N: 456922	D162	C132			
CONVEYOR, ACCUMULATION A/N: 456922	D100			PM: (9) [RULE 405, 2-7-1986]	D323.1
CUTTER, SHINGLE A/N: 456922	D49			PM: (9) [RULE 405, 2-7-1986]	D323.1
PACKAGING MACHINE A/N: 456922	D94			PM: (9) [RULE 405, 2-7-1986]	
ACCUMULATOR, WCS PULL ROLLS, CARRYOVER CONVEYORS, SHEET SLITTER, AND FINISH LOOPER A/N: 456922	D141				
CUTTER, WCS A/N: 456922	D142				
PACKAGING MACHINE, WCS A/N: 456922	D143				
<b>System 7: AIR POLLUTION CONTROL #2</b>					
BAGHOUSE, CLOTH FILTER, CP ENVIRONMENTAL FILTERS, MODEL 100 NF-288CM, 3658 SQ.FT. A/N: 254495	C75	D44 D50 D51 D52 D53 D54 D55 D56 D57 D58 D59 D63 D64 D65 D69 D70 D71 D104 D105 D106		PM: (9) [RULE 404, 2-7-1986]	D322.1, D381.1, E102.1, E193.2, K67.4

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

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 3: ASPHALT ROOFING MANUFACTURING</b>					
AFTERBURNER, NATURAL GAS, RTO, 2.5 MMBTU/HR WITH A/N: 456918	C132	D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D23 D31 D39 D44 D82 D87 D92 D93 D95 D111 D123 D124 D125 D135 D136 D139 D140 D154 D155 D161 D162	NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 0.014 LBS/TON PRODUCED (1) [RULE 2011, 5-6-2005]	D28.5, E193.1, K40.6
FILTER, FIBERGLASS, FIBERBED DIFFUSION FILTERS, ADVANCED ENVIRONMENTAL SYSTEMS, MODEL AIR-CLEAR, 1812 SQ.FT.	C138				
<b>System 8: COOLING TOWER</b>					
COOLING TOWER, NO.2, ASPHALT ROOF MANUFACTURING, BALTIMORE AIRCOIL, MODEL VT0-163-OC, ONE CELL A/N: 466123	D157			PM: 0.018 LBS PER 24-HOUR PERIOD (5) [RULE 405, 2-7-1986]	B27.2, C1.4
<b>Process 5: ASPHALT MANUFACTURING CONTROL EQUIPMENT</b>					
<b>System 1: Air Pollution Control System</b>					

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

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 5: ASPHALT MANUFACTURING CONTROL EQUIPMENT</b>					
CYCLONE, COMMON FOR AFTERBURNERS NO. 1 AND 2, HEIGHT: 25 FT ; DIAMETER: 5 FT A/N: 427699	C78	D3 D5 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D23 D31 D39 C77 D82 D83 C101 D111			D323.1
AFTERBURNER, NO. 1, NATURAL GAS, 18 MMBTU/HR WITH A/N: 427699  BURNER, MAXON, MODEL KINIDIZER, 18 MMBTU/HR	C77	C78	NOX: LARGE SOURCE**; SOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 143 PPMV NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 0.83 LBS/MMSCF NATURAL GAS (1) [RULE 2011, 5-6-2005]	D12.3, D28.5, D323.1, E193.1, K40.6
AFTERBURNER, NO. 2, NATURAL GAS, 18 MMBTU/HR WITH A/N: 427701  BURNER, MAXON, MODEL KINIDIZER, 18 MMBTU/HR	C101	C78	NOX: LARGE SOURCE**; SOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 135 PPMV (3) [RULE 2011, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 0.83 LBS/MMSCF NATURAL GAS (1) [RULE 2011, 5-6-2005]	D12.3, D28.5, D323.1, E193.1, K40.6
<b>Process 6: External Combustion Equipment</b>					
<b>System 1: Boilers</b>					

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

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6: External Combustion Equipment</b>					
BOILER, NATURAL GAS, CLEAVER BROOKS, MODEL CB-200-80, WITH LOW NOX BURNER, 3.347 MMBTU/HR WITH A/N: 333465  BURNER, NATURAL GAS, CLEAVER BROOKS, MODEL CB-200-80, WITH LOW NOX BURNER, 3.347 MMBTU/HR	D127		NOX: PROCESS UNIT**	CO: 400 PPMV (5) [RULE 1146.1, 5-13-1994; RULE 1146.1, 9-5-2008]; CO: 2000 PPMV (5A) [RULE 407, 4-2-1982]; NOX: 30 PPMV (4) [RULE 2005, 5-6-2005]; NOX: 47.75 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	D12.6, D332.2
<b>Process 7: Rule 219 Exempt Equipment Subject to Source Specific Rules</b>					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE ARCHITECTURAL COATINGS	E126			VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	K67.2
RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT USING HALONS	E130				H23.1, H23.4
HEATER, 1.2 MMBTU/HR GAS FIRED HOT OIL HEATER	E153				H23.1, H23.3

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

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

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC**

**SECTION D: DEVICE ID INDEX**

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

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC  
SECTION D: DEVICE ID INDEX**

Device ID	Section D Page No.	Process	System
D1	1	1	1
D2	1	1	1
D3	1	1	1
D4	2	1	1
D5	2	1	1
D6	2	1	1
D7	2	1	1
D8	2	1	1
D9	3	2	1
D10	3	2	1
D11	3	2	1
D12	3	2	1
D13	4	2	1
D14	4	2	1
D15	4	2	1
D16	4	2	1
D17	5	2	2
D18	5	2	2
D19	5	2	2
D20	5	2	2
D21	5	2	2
D23	6	2	2
D24	6	2	4
D27	6	2	4
D30	6	2	4
D31	6	2	5
D32	7	2	6
D33	7	2	6
D34	6	2	2
D35	10	3	3
D36	10	3	3
D37	10	3	3
D39	7	3	1
D41	9	3	2
D44	12	3	5

Device Index For Section D

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC  
SECTION D: DEVICE ID INDEX**

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D45	12	3	5
D49	13	3	5
D50	10	3	3
D51	10	3	3
D52	10	3	3
D53	10	3	3
D54	10	3	3
D55	10	3	3
D56	11	3	3
D57	11	3	3
D58	9	3	2
D59	9	3	2
D63	11	3	3
D64	9	3	2
D65	9	3	2
D68	8	3	2
D69	9	3	2
D70	9	3	2
D71	9	3	2
C75	13	3	7
C77	15	5	1
C78	15	5	1
D82	2	1	2
D83	4	2	1
D84	7	3	2
C86	10	3	3
D87	12	3	5
D88	9	3	2
D89	12	3	5
D92	13	3	5
D93	11	3	4
D94	13	3	5
D95	11	3	4
C99	8	3	2
D100	13	3	5

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC  
SECTION D: DEVICE ID INDEX**

Device ID	Section D Page No.	Process	System
C101	15	5	1
D104	11	3	3
D105	11	3	3
D106	11	3	3
D111	5	2	1
D114	4	2	1
D118	1	1	1
D119	2	1	1
D120	2	1	1
C122	7	3	2
D123	11	3	4
D124	11	3	4
D125	7	3	1
E126	16	7	0
D127	16	6	1
D129	12	3	5
E130	16	7	0
C132	14	3	7
D135	11	3	4
D136	12	3	4
C138	14	3	7
D139	12	3	4
D140	12	3	4
D141	13	3	5
D142	13	3	5
D143	13	3	5
D144	9	3	2
D147	8	3	2
D148	8	3	2
D149	8	3	2
D150	8	3	2
D151	8	3	2
D152	8	3	2
E153	16	7	0
D154	12	3	5

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC  
SECTION D: DEVICE ID INDEX**

<b>Device Index For Section D</b>			
<b>Device ID</b>	<b>Section D Page No.</b>	<b>Process</b>	<b>System</b>
D155	12	3	5
D156	3	1	3
D157	14	3	8
D158	7	3	1
D161	13	3	5
D162	13	3	5

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

#### SYSTEM CONDITIONS

S2.1 The operator shall limit emissions from this system as follows

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 3050 LBS IN ANY ONE MONTH
PM10	Less than or equal to 910 LBS IN ANY ONE MONTH
PM10	Less than or equal to 10924 LBS IN ANY ONE YEAR
ROG	Less than or equal to 1140 LBS IN ANY ONE MONTH
ROG	Less than or equal to 13629 LBS IN ANY ONE YEAR

[RULE 1303(b)(2)-Offset, 5-10-1996]

{Systems subject to this condition : Process 1, System 1}

#### DEVICE CONDITIONS

##### A. Emission Limits

A63.4 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 1 Percent opacity

[40CFR 60 Subpart UU, 8-5-1983]

**FACILITY PERMIT TO OPERATE  
 OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

[Devices subject to this condition : D35, D36, D37, D44, D45, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D64, D65, D69, D70, D71, D104, D105, D106]

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
Visible emissions	Less than or equal to 20 Percent opacity

[40CFR 60 Subpart UU, 8-5-1983]

[Devices subject to this condition : D87]

A63.8 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT	QUANTITY	UNITS
CO	Less than or equal to	29	LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to	10	LBS IN ANY CALENDAR MONTH
ROG	Less than or equal to	35	LBS IN ANY CALENDAR MONTH

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

[Devices subject to this condition : D9, D10, D11, D12, D13, D14, D15, D17, D18, D19, D20, D21, D31, D39, D82]

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

A63.9 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT	QUANTITY	UNITS
PM10	Less than or equal to	9	LBS IN ANY CALENDAR MONTH
ROG	Less than or equal to	34	LBS IN ANY CALENDAR MONTH

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

[Devices subject to this condition : D16, D111]

A63.10 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT	QUANTITY	UNITS
CO	Less than or equal to	13.2	LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to	3.4	LBS IN ANY CALENDAR MONTH
ROG	Less than or equal to	12	LBS IN ANY CALENDAR MONTH

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

[Devices subject to this condition : D23]

A433.1 The operator shall limit emissions from this equipment as follows::

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

POLLUTANT	LIMIT	UNITS
VISIBLE EMISSIONS	0	PERCENT OPACITY

[40CFR 60 Subpart UU, 8-5-1983]

[Devices subject to this condition : D9, D10, D11, D12, D13, D14, D15, D17, D18, D19, D20, D21, D23, D31, D39, D82]

A433.2 The operator shall limit emissions from this equipment as follows::

POLLUTANT	LIMIT	UNITS
VISIBLE EMISSIONS	1	PERCENT OPACITY

[40CFR 60 Subpart UU, 8-5-1983]

[Devices subject to this condition : D16, D111]

#### **B. Material/Fuel Type Limits**

B27.2 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 03-04-2005.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D156, D157]

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

#### **C. Throughput or Operating Parameter Limits**

- C1.1 The operator shall limit the material processed to no more than 1200 ton(s) in any one day.

For the purpose of this condition, material processed shall be defined as finished roofing line product.

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

[Devices subject to this condition : D87]

- C1.3 The operator shall limit the material processed to no more than 332 gallon(s) per minute.

For the purpose of this condition, material processed shall be defined as maximum cooling tower water circulation rate..

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

[Devices subject to this condition : D156]

- C1.4 The operator shall limit the material processed to no more than 370 gallon(s) per minute.

For the purpose of this condition, material processed shall be defined as maximum cooling tower water circulation rate..

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

[Devices subject to this condition : D157]

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

C1.5 The operator shall limit the material processed to no more than 28320 ton(s) in any one month.

**[RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : D87]

#### **D. Monitoring/Testing Requirements**

D12.1 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the filter media.

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

[Devices subject to this condition : D84, C99]

D12.2 The operator shall install and maintain a(n) gauge to accurately indicate the flue gas flow from the exhaust stack to the burner.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1]

D12.3 The operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage in the burner.

**[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008; RULE 1303(a)(1)-BACT, 5-10-1996;  
RULE 2012, 3-16-2001; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C77, C101]

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

D12.4 The operator shall install and maintain a(n) gauge to accurately indicate the temperature of the asphalt stored in this device.

**[RULE 1303(a)(1)-BACT, 5-10-1996]**

[Devices subject to this condition : D14, D15]

D12.6 The operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage of the boiler.

**[RULE 2011, 5-6-2005; RULE 2012, 5-6-2005]**

[Devices subject to this condition : D127]

D28.5 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least once during the life of the permit.

The test shall be conducted to determine the ROG emissions at the inlet and outlet simultaneously.

The test shall be conducted to determine the ROG emissions using District method 25.1 measured over a 60 minute averaging time period.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

**[RULE 1303(a)(1)-BACT, 5-10-1996]**

[Devices subject to this condition : C77, C101, C132]

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

D322.1 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

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

**[Devices subject to this condition : C75, D84, C86, C99]**

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

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

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

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

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

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

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

[Devices subject to this condition : D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D23, D24, D27, D30, D31, D35, D36, D37, D39, D44, D45, D49, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D63, D64, D65, D68, D69, D70, D71, C77, C78, D82, D83, D84, D87, D88, D100, C101, D104, D105, D106, D111, D125, D129]

D332.1 The operator shall determine compliance with the CO emission limit(s) by conducting a test at least once every five years using a portable analyzer and AQMD-approved test method or, if not available, a non-AQMD approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 1146 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

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

[Devices subject to this condition : D1]

D332.2 The operator shall determine compliance with the CO emission limit(s) by conducting a test at least once every five years using a portable analyzer and AQMD-approved test method or, if not available, a non-AQMD approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 1146.1 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

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

[Devices subject to this condition : D41, D127]

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

D381.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

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

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

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

[Devices subject to this condition : C75, D84, C86, C99]

#### **E. Equipment Operation/Construction Requirements**

E1.1 The operator shall vent the emissions from this equipment to only one of the devices identified in the "connected to" column of this facility permit at any given time.

[RULE 204, 10-8-1993]

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

[Devices subject to this condition : D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D23, D31, D39, D82, D111]

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

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

[Devices subject to this condition : C75, D84, C86, C99]

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

**[RULE 1146, 11-17-2000; RULE 1146, 9-5-2008; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D1]

E127.1 The operator shall keep gauge/sample hatches closed except during actual gauging/sampling operations.

**[RULE 1303(a)(1)-BACT, 5-10-1996]**

[Devices subject to this condition : D34]

E179.1 For the purpose of the following condition number(s), boiler load shall be defined as heater load.

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

Condition Number 113-1

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D1]

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

The combustion chamber temperature shall be maintained at a minimum of 1,400 degrees Fahrenheit whenever the equipment it serves is in operation.

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

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

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

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

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

after the due date for the semi-annual monitoring report.

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

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

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]**

[Devices subject to this condition : C77, C101, C132]

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

The bag house pressure differential across the filter bags shall be maintained between 2" and 8" of water column whenever the equipment it serves is in operation.

The operator shall operate and maintain a pressure differential gauge to measure and indicate the pressure differential across the bag house filter bags pursuant to the operation and maintenance requirements in 40 CFR Part 64.7. The pressure differential across the filters shall be recorded continuously with a recording device.

For the purpose of this condition, a deviation shall be defined as when the pressure differential across the filters is less than 2" of water column or more than 8" of water column occurs during the normal operation of the equipment it serves except a startup exemption period of 14 days after new filters are installed, when the 2" limit will not apply.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the pressure differential across the filters between 2" and 8" of water column, and keep records of the duration and cause(including unknown cause, if applicable) of the deviation and the corrective actions taken.

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

The operator shall submit an application with an Quality Improvement Plan(QIP) in accordance with 40 CFR Part 64.8 to the AQMD if more than six deviations occurs in any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

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

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]**

[Devices subject to this condition : C75]

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

## **FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

The bag house pressure differential across the filter bags shall be maintained between 2" and 8" of water column whenever the equipment it serves is in operation.

The operator shall operate and maintain a pressure differential gauge to measure and indicate the pressure differential across the bag house filter bags pursuant to the operation and maintenance requirements in 40 CFR Part 64.7. The pressure differential across the filters shall be recorded at least once a day.

For the purpose of this condition, a deviation shall be defined as when the pressure differential across the filters is less than 2" of water column or more than 8" of water column occurs during the normal operation of the equipment it serves except a startup exemption period of 14 days after new filters are installed, when the 2" limit will not apply.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the pressure differential across the filters between 2" and 8" of water column, and keep records of the duration and cause(including unknown cause, if applicable) of the deviation and the corrective actions taken.

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

The operator shall submit an application with an Quality Improvement Plan(QIP) in accordance with 40 CFR Part 64.8 to the AQMD if more than six deviations occurs in any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

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

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

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

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR Part 64, 10-22-1997]**

[Devices subject to this condition : C86]

#### H. Applicable Rules

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

Contaminant	Rule	Rule/Subpart
PM	40CFR60, SUBPART	UU

**[40CFR 60 Subpart UU, 8-5-1983]**

[Devices subject to this condition : D3, D5, D7, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D23, D31, D35, D36, D37, D39, D44, D45, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D63, D64, D65, D69, D70, D71, D82, D84, D87, D88, D104, D105, D106, D111, D125, E130, E153]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	District Rule	1146.2
CO	District Rule	1146.2

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

[RULE 1146.2, 5-5-2006]

[Devices subject to this condition : E153]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Halon	District Rule	1418

[RULE 1418, 9-10-1999]

[Devices subject to this condition : E130]

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

K40.6 The operator shall provide to the District a source test report in accordance with the following specifications:

## FACILITY PERMIT TO OPERATE OWENS CORNING ROOFING AND ASPHALT, LLC

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

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

Source test results shall be submitted to the District no later than 30 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen, dry basis.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Emission data shall be expressed in terms of mass rate (lbs/hr).

The control efficiency of the control device. Source test results shall also include production rate under which the test was conducted

**[RULE 1303(a)(1)-BACT, 5-10-1996]**

[Devices subject to this condition : C77, C101, C132]

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

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

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

**FACILITY PERMIT TO OPERATE  
OWENS CORNING ROOFING AND ASPHALT, LLC**

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

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

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

[Devices subject to this condition : E126]

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

the name of the person performing the inspection and/or maintenance of the filter media

the date, time and results of the inspection

the date, time and description of any maintenance or repairs resulting from the inspection

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

[Devices subject to this condition : C75, D84, C86, C99]

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 1
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

**REVISION OF PERMITS**

**COMPANY NAME AND ADDRESS**

Owen Corning Roofing & Asphalt, LLC  
1501 N. Tamarind Ave.  
Compton, CA 90222  
Contact: Mr. Mike Thomas  
AQMD Facility ID: 035302

**EQUIPMENT LOCATION**

1501 N. Tamarind Ave.  
Compton, CA 90222

**EQUIPMENT DESCRIPTION (Section D of the Facility Permit)**

Application No. 556018: Title V/RECLAIM Permit Revision

Application No. 556019: Change of permit condition of existing Asphalt Loading Arm, previously under permit G12169 (A/N 422439), and

Application No. 556020: Change of permit condition of existing Asphalt Loading Arm, previously under permit G12170 (A/N 422440):

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
<b>Process 2: ASPHALT STORAGE AND TRANSFER</b>					
<b>System 1: RAW ASPHALT</b>					
LOADING ARM, TANK TRUCK, ASPHALT, WITH A 4 IN VAPOR RETURN LINE, WITH VAPOR LOCKBALANCE RECOVERY SYSTEM,  A/N 556019	D16	C78 C132			A63.9, A433.2, D323.1, E1.1, H23.1
LOADING ARM, TANK TRUCK, ASPHALT, WITH A 4 IN VAPOR RETURN LINE, WITH VAPOR LOCKBALANCE RECOVERY SYSTEM,  A/N 556020	D111	C78 C132			A63.9, A433.2, D323.1, E1.1, H23.1

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 2
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

## BACKGROUND

Owen Corning produces blown asphalt and manufactures asphalt roof tiles. This facility is a NOx and SOx RECLAIM facility. It is also a Title V facility. Owen Corning Roofing and Asphalt, LLC (Owen Corning) submitted the above applications on September 10, 2013 to revise its facility permit and to change permit conditions on two Loading Arms for higher Carbon Monoxide (CO) monthly limits based on updated operation data - Lower Explosion Limit (LOL). Also the company would like to correct the typographical errors in rule citation for permit conditions A63.4, A433.1, A433.2 and H23.1. The company requested for expedite permit processing for applications of the Loading Arms.

Revising LEL also triggers re-assessment of H<sub>2</sub>S emissions.

## PROCESS DESCRIPTION

Raw asphalt is delivered by tank trucks and rail cars, and is stored in heated fixed roof storage tanks. The tanks are either steam heated or heated by small process heaters, no more than 2 MMBtu/hr. Asphalt is then oxidized with air blown from 3 stills. The blown asphalt is transferred to heated fixed roof storage tanks and subsequently shipped to customers by tank trucks or rail cars, or for use in manufacturing asphalt roof shingles. Emissions from these storage tanks and two Loading Arms at this facility are vented to a cyclone and an afterburner.

Based on a study conducted by David Trumbore published in the Environmental Progress, volume 18, No. 4, 1999, the CO concentration is related to LEL percentage. Monthly CO emission limits at the Loading Arms recorded in the previous permits were at 0% LEL to be 2 lb/month. The applicant therefore requested to revise these limits to a more realistic level of LEL, i.e., 60% based on historical operation data. The CO emissions will increase to 17 lb/mo. for each Loading Arm. H<sub>2</sub>S emissions are also re-assessed based on the same study. It shows that at 60%LEL, about 2.5 lb of H<sub>2</sub>S are emitted a month.

Other criteria pollutants are not re-assessed and will remain the same. Those emissions will be transferred from the previous respective permit.

The revision will result in CO emission increase so as defined by Rule 301, this revision is a modification to the permits. Fees for modification will be charged accordingly.

## COMPLIANCE RECORD

No Notice to Comply or Notice of Violation has been issued to this facility for the last two years.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 3
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

## EMISSIONS ASSESSMENT

CO and H<sub>2</sub>S emissions at the Loading Arms are assessed based on the following equations:

$$\text{CO (ppmv)} = (142 \times \text{LEL}) + 800^1$$

$$\text{H}_2\text{S (ppm)} = (12.43 \times \text{LEL}) + 400.5^1$$

$$\text{CO Emission} = \text{CO vapor density} \times \text{CO (ppmv)} \times \text{FR}$$

$$\text{H}_2\text{S Emission} = \text{H}_2\text{S vapor density} \times \text{H}_2\text{S (ppmv)} \times \text{FR}$$

Where: CO (ppmv): CO concentration in parts per million in volume  
 H<sub>2</sub>S (ppmv): H<sub>2</sub>S concentration in parts per million in volume  
 LEL: percentage of Lower Explosive Limit<sup>2</sup>  
 FR: displacement rate

<sup>1</sup> Estimates of Air Emissions from Asphalt Storage Tanks and Truck Loading, Environmental Progress, volume 18, No. 4, 1999, David Trumbore.

<sup>2</sup> As seen from applicant's submitted records, the LEL no higher than 20% for most of the time. But on one occasion it peaked at 58% so the applicant requested to assess CO emission at 60%LEL.

Data:

LEL = 60%  
 CO vapor density: 1.14 mg/m<sup>3</sup>/ppmv  
 H<sub>2</sub>S vapor density: 1.39 mg/m<sup>3</sup>/ppmv  
 Volume of 1 truck load: 6500 gallon/truck  
 Max. truck load: 2 truck/hr  
 Total displacement: 1738 ft<sup>3</sup>/hr  
 Schedule: 24 hr/day, 30 day/mo.

Uncontrolled  
 CO concentration = (142 x 60) + 800 = 9320 ppmv

CO Emission = (1.14 mg/m<sup>3</sup>/ppmv)(9320 ppmv)(0.02832 m<sup>3</sup>/ft<sup>3</sup>)(lb/454000mg)(1738 ft<sup>3</sup>/hr)  
 = 1.15 lb/hr

Controlled CO  
 Emission = 1.15 lb/hr (1 - 0.98) = 0.023 lb/hr  
 = 0.553 lb/day = 16.59 lb/mo.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 4
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

Uncontrolled  
H<sub>2</sub>S concentration = (12.43 x 60) + 400.5 = 1146.3 ppmv

H<sub>2</sub>S Emission = (1.39 mg/m<sup>3</sup>/ppmv)(1146.3 ppmv)(0.02832 m<sup>3</sup>/ft<sup>3</sup>)(lb/454000mg)(1738 ft<sup>3</sup>/hr)  
= 0.17 lb/hr

Controlled H<sub>2</sub>S  
Emission = 0.17 lb/hr (1 - 0.98) = 0.004 lb/hr  
= 0.083 lb/day = 2.49 lb/mo.

As provided in footnote 2 above, based on applicant's records, LEL in the storage tanks and at the Loading Arms mostly stay around 20%. But for NSR purposes, "worst" case scenario is used for emission assessment. However, rather than 100% LEL, the evaluator used 60%LEL because the LEL rarely came close to this level, and that emissions are calculated with the assumption that 60%LEL occurs 30 days a month.

Emissions of PM10 and ROG remain the same and are transferred from their previous respective permits. They are as follows:

PM10: R1 = 0.66 lb/hr R2 = 0.01 lb/hr  
ROG: R1 = 2.34 lb/hr R2 = 0.05 lb/hr

## PROHIBITORY RULE EVALUATION

### RULE 212-Standards for Approving Permits

Rule 212 requires that a person shall not build, erect, install, alter, or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants without first obtaining written authorization for such construction from the Executive Officer. Rule 212(c) states that a project requires written notification if there is an emission increase for ANY criteria pollutant in excess of the daily maximums specified in Rule 212(g), if the equipment is located within 1,000 feet of the outer boundary of a school, or if the MICR is equal to or greater than one in a million (1EE-6) during a lifetime (70 years) for facilities with more than one permitted unit, source under Regulation XX, or equipment under Regulation XXX, unless the applicant demonstrates to the satisfaction of the Executive Officer that the total facility-wide maximum individual cancer risk is below ten in a million (10EE-6) using the risk assessment procedures and toxic air contaminants specified under Rule 1402; or, ten in a million (10EE-6) during a lifetime (70 years) for facilities with a single permitted unit, source under Regulation XX, or equipment under Regulation XXX.

These Loading Arms are not located within 1000 feet of a school, that their CO emission increase are within the threshold limits, and that re-assessed H<sub>2</sub>S emissions are well within the pre-screening emission level of Rule 1401 so they are not subject to public notice requirements of this rule.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 5
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

**RULE 301-Permitting and Associate Fees**

Changing permit conditions which results in emission increase is defined as permit modification by this rule. Since the permit revision requests are for two identical equipment, 50% reduced fee will be applied to the second unit. These applications were evaluated expeditiously as requested so appropriate fees are charged accordingly to this rule.

**RULE 401-Visible Emissions**

This rule limits visible emissions to an opacity of less than 20 percent (Ringlemann No.1), as published by the United States Bureau of Mines. The modification is unlikely impact the visible emission of the equipment which will continue to vent to a cyclone and an afterburner. Continue in compliance with this rule is expected.

**RULE 402-Nuisance**

This rule requires that a person not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The equipment has been operated in compliance with rule. Modifying the permits will unlikely cause nuisance. Therefore, compliance with Rule 402 is expected.

**REGULATION 13 - NEW SOURCE REVIEW (NSR) ANALYSIS**

In previous evaluations, CO emissions were assessed at 100%LEL, but recorded at 0%LEL. As discussed above, the evaluator has determined that assessing CO emissions at 60%LEL is more reasonable/realistic and yet very conservative.

The increase of CO and H<sub>2</sub>S from this modification is less than 1 lb/day so BACT requirements are not triggered.

CO emission is less than 3.7 lb/hr threshold limit from Table A-1 of Rule 1303, no detail modeling is required.

In the previous permits, monthly CO emission limits were required for these Loading Arms for emission offset purposes. This was because at the time those permits were evaluated, CO was nonattainment air pollutant in the South Coast basin, and that offset could be triggered if the facility emit CO at a level higher than the threshold limit allowed by Regulation 13.

Now, CO is declared by EPA to be in attainment air pollutant in the South Coast basin. It is recommended that the CO limits are removed from the Loading Arm permits. The assessed values are entered to NSR for tracking purposes only.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>ENGINEERING ANALYSIS / EVALUATION</b>	<b>PAGES</b> 6	<b>PAGE</b> 6
	<b>APPLICATION NO.</b> 556018, 556019, 556020	<b>DATE</b> 10-05-2013
	<b>PROCESSED BY:</b> TT	<b>REVIEWED BY:</b>

**Rule 1401 – New Source Review of Toxic Air Contaminants:**

The modification will not increase emissions of any air toxic contaminant so it is not subject to the requirements of this rule.

Re-assessment shows that controlled hourly emission of H<sub>2</sub>S is 0.004 lb. This is much less than 0.021 lb/hr screening emission level at 25 meters. No risk assessment is required for H<sub>2</sub>S.

**Rule 2005(b)(2)**

The modification will not cause increase of emissions of NO<sub>x</sub> or SO<sub>x</sub>, it is not subject to the requirements of this rule.

**Regulation XXX – Title V Permits**

This modification is defined as a De minimus Significant Title V permit revision so it is subject to EPA review. The files will be submitted to EPA for review/comments.

**40CFR Part 60 Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacturer**

Subpart UU is applicable to PM. This modification will not change PM emissions so it is not subject to the requirements of this subpart.

**OVERALL EVALUATION / RECOMMENDATION(S)**

It is recommended CO emissions at the Loading Arms are re-assessed and recorded in NSR, and that the CO emission limits are removed from permit condition A63.9.

Also typographical errors in Rule citation for permit conditions A63.4, A433.1, A433.2 and H23.1 are corrected to 40 CFR 60 subpart UU, accordingly.

## Thai Tran

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**From:** Kathy Prokey [KProkey@YorkeEngr.com]  
**Sent:** Friday, September 20, 2013 2:36 PM  
**To:** Thai Tran  
**Cc:** 'Thomas, Michael'; 'Perales, Antonio'  
**Subject:** Owens Facility ID #35302 Loading Racks - %LEL  
**Attachments:** 13Monthly Tanks\_Racks\_CO PM10 ROG.pdf

Thai,

This email is provided in response to your request for data on the typical %EL reading for the loading arms. A typical reading is zero but asphalt has the potential to generate higher readings. The records were reviewed to find any spikes in the readings. The attached records include a reading of 58% for Tank 26, indicating that asphalt has potential to generate readings on the order of 60%. The application for change of condition was based on a reading of 100% (worst-case) as the maximum potential to emit.

Please let me know if you have questions or need additional information.

 Thank you,

**Kathy Prokey, CPP**  
**Sr. Engineer, B.S. ChE.**  
Office: (805) 376-0088  
Mobile: (805) 558-7924  
E-mail: [KProkey@YorkeEngr.com](mailto:KProkey@YorkeEngr.com)

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Tank: 26		Fraction: 0.52		
Day	LEL	CO, lb	PM10, lb	ROG, lb
1	9	0.26	0.06	0.21
2	2	0.13	0.01	0.05
3	0	0.10	0.00	0.00
4	0	0.10	0.00	0.00
5	6	0.20	0.04	0.14
6	4	0.17	0.03	0.09
7	4	0.17	0.03	0.09
8	6	0.20	0.04	0.14
9	4	0.17	0.03	0.09
10	0	0.10	0.00	0.00
11	14	0.34	0.09	0.33
12	7	0.22	0.05	0.16
13	8	0.24	0.05	0.19
14	5	0.19	0.03	0.12
15	6	0.10	0.04	0.14
16	13	0.33	0.08	0.30
17	11	0.29	0.07	0.26
18	10	0.27	0.07	0.23
19	22	0.48	0.14	0.51
20	20	0.45	0.13	0.47
21	21	0.46	0.14	0.49
22	20	0.45	0.13	0.47
23	22	0.48	0.14	0.51
24	58	1.11	0.38	1.35
25	36	0.73	0.23	0.84
26	0	0.10	0.00	0.00
27	0	0.10	0.00	0.00
28	0	0.10	0.00	0.00
29	0	0.10	0.00	0.00
30	4	0.17	0.03	0.09
31	0	0.10	0.00	0.00
Total:		8.39	2.03	7.26

Tank: 28		Fraction: 0.52		
Day	LEL	CO, lb	PM10, lb	ROG, lb
1	0	0.10	0.00	0.00
2	0	0.10	0.00	0.00
3	4	0.17	0.03	0.09
4	5	0.19	0.03	0.12
5	13	0.33	0.08	0.30
6	6	0.20	0.04	0.14
7	4	0.17	0.03	0.09
8	2	0.13	0.01	0.05
9	6	0.20	0.04	0.14
10	4	0.17	0.03	0.09
11	5	0.19	0.03	0.12
12	0	0.10	0.00	0.00
13	4	0.17	0.03	0.09
14	8	0.24	0.05	0.19
15	4	0.17	0.03	0.09
16	3	0.15	0.02	0.07
17	7	0.22	0.05	0.16
18	4	0.17	0.03	0.09
19	6	0.20	0.04	0.14
20	6	0.20	0.04	0.14
21	5	0.19	0.03	0.12
22	4	0.17	0.03	0.09
23	5	0.19	0.03	0.12
24	5	0.19	0.03	0.12
25	6	0.20	0.04	0.14
26	4	0.17	0.03	0.09
27	0	0.10	0.00	0.00
28	0	0.10	0.00	0.00
29	11	0.29	0.07	0.26
30	0	0.10	0.00	0.00
31	5	0.19	0.03	0.12
Total:		5.42	0.89	3.17

Tank: 29		Fraction: 0.52		
Day	LEL	CO, lb	PM10, lb	ROG, lb
1	0	0.10	0.00	0.00
2	0	0.10	0.00	0.00
3	0	0.10	0.00	0.00
4	0	0.10	0.00	0.00
5	0	0.10	0.00	0.00
6	0	0.10	0.00	0.00
7	0	0.10	0.00	0.00
8	0	0.10	0.00	0.00
9	0	0.10	0.00	0.00
10	0	0.10	0.00	0.00
11	4	0.17	0.03	0.09
12	0	0.10	0.00	0.00
13	0	0.10	0.00	0.00
14	0	0.10	0.00	0.00
15	0	0.10	0.00	0.00
16	0	0.10	0.00	0.00
17	0	0.10	0.00	0.00
18	0	0.10	0.00	0.00
19	4	0.17	0.03	0.09
20	6	0.20	0.04	0.14
21	5	0.19	0.03	0.12
22	5	0.19	0.03	0.12
23	6	0.20	0.04	0.14
24	5	0.19	0.03	0.12
25	4	0.17	0.03	0.09
26	5	0.19	0.03	0.12
27	4	0.17	0.03	0.09
28	14	0.34	0.09	0.33
29	0	0.10	0.00	0.00
30	0	0.10	0.00	0.00
31	4	0.17	0.03	0.09
Total:		4.20	0.43	1.54

Tank: 33		CO, lb
Day	LEL	CO, lb
1	0	0.10
2	0	0.10
3	0	0.10
4	0	0.10
5	0	0.10
6	0	0.10
7	0	0.10
8	0	0.10
9	0	0.10
10	0	0.10
11	0	0.10
12	0	0.10
13	0	0.10
14	0	0.10
15	0	0.10
16	8	0.24
17	0	0.10
18	0	0.10
19	0	0.10
20	0	0.10
21	0	0.10
22	0	0.00
23	0	0.10
24	0	0.10
25	0	0.10
26	0	0.10
27	0	0.10
28	0	0.10
29	0	0.10
30	0	0.10
31	0	0.10
Total:		3.09



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**M E M O R A N D U M**

**DATE:** September 4, 2013  
**TO:** File  
**FROM:** Thai Tran, A.Q. Engineer II *T. Tran*  
**SUBJECT:** Permit Applications 554251 and 554252, ID 35302

On July 16, 2013, the applicant submitted the above two applications to administratively revise the description of device D114 and the RECLAIM/TITLE V permit respectively.

Device D114 is a heater rated at 1.5 MMBtu/hr used to heat storage tank under device D13. The heater by itself would be exempt from permit requirement pursuant to Rule 219 so it is listed as a secondary device for the tank. The applicant recently found out that the heater is actually rated at 0.8 MMBtu/hr, therefore, requested to revise its description. The undersigned engineer researched the previous files but could not determine how 1.5 MMBtu/hr rating came from. Since this heater by itself is exempt from permit requirements and that the revised rating is lower, it is anticipated that no additional requirements are triggered. No engineering evaluation is needed.

It is recommended that the rating of device D114 be administratively revised to 0.8 MMBtu/hr, and that emission data from the corresponding previous file, i.e., 422717, is carried over. It is also recommended that the wording of the device D114 is revised administratively in the facility permit.