

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:

Valero Benicia Asphalt Plant
Facility #A0901

Facility Address:

3001 Park Road
Benicia, CA 90748-1257

Mailing Address:

3001 Park Road
Benicia, CA 90748-1257

Responsible Official

Doug Comeau,
Vice President and General Manager
Valero Refining Company - California
(707) 745-7724

Facility Contact

Clark Hopper,
Environmental Engineering Manager
(707) 745-7385

Type of Facility: Asphalt Refinery
Primary SIC: 2911
Product: Asphalt

BAAQMD Permit Division Contact:
Brenda Cabral

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Jack Broadbent, Executive Officer/Air Pollution Control Officer

Date

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

Table IV - AL
Source-specific Applicable Requirements
S70-ASPHALT ADDITIVE MIXING TANK

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann #1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 5	Organic Compounds, Storage of Organic Liquids (11/27/02)		
8-5-117	Exemption, Low Vapor Pressure	N	
BAAQMD Regulation 8, Rule 15	Organic Compounds, Emulsified and Liquid Asphalts (6/1/94)		
8-15-305	Prohibition of Manufacture and Sale	Y	
8-15-501	Records	Y	
40 CFR 60 Subpart UU	Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture (8/6/82)		
60.472(c)	Opacity standard	Y	
60.473(c)	Parametric monitoring	Y	
60.473(d)	Exemption from quarterly reports	Y	
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Pollutants for Petroleum Refining (8/18/95)		
63.646(b)(1)	Storage Vessel Provisions--Determine stored liquid % OHAP for group determination	Y	
63.646(b)(2)	Storage Vessel Provisions--Determine stored liquid % OHAP-method 18 to resolve disputes	Y	
63.654(i)(1)	Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels	Y	
63.654(i)(1)(iv)	Reporting and Recordkeeping Requirements--Recordkeeping for storage vessels	Y	
63.654(i)(4)	Reporting and Recordkeeping Requirements--Recordkeeping--Record retention	Y	

Table IV - AL
Source-specific Applicable Requirements
S70-ASPHALT ADDITIVE MIXING TANK

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition #1240			
Part I.14	Facility Limits (Cumulative Increase)	Y	
Part I.18	Cumulative Increase Monitoring (Cumulative Increase)	Y	
Part I.18a	NMHC and NOx estimates (Cumulative Increase)	Y	
Part I.18c	Estimates of NMHC emissions from tanks (Cumulative Increase)	Y	
Part I.18j	Summary of emissions estimates and reports of non-compliance (Cumulative Increase)	Y	
Part II.49	Prohibition against cutback asphalt (Toxics)	Y	
Part II.50	Vapor Pressure Limit (Cumulative Increase, Offsets)	Y	
Part II.55	Control and Destruction Efficiency Requirements (Cumulative Increase, Offsets)	Y	
Part II.58	Recordkeeping Requirement (Cumulative Increase)	Y	
Part II.58b	Continuous Temperature Monitoring (40 CFR 60.113b(c)(1)(ii) and 60.113b(c)(2); 40 CFR 60.473(c); 40 CFR 61.354(c)(4), 61.356(f)(2)(i)(A), and 61.356(f)(2)(i)(C), Regulation 2-6-409.2.2, 2-6-414)	Y	
BAAQMD Condition #20278			
Part 1	Throughput limit (2-2-212, Cumulative Increase)	Y	
Part 3	Control requirement (2-2-212, Cumulative Increase)	Y	
Part 4	Public nuisance (1-301)	N	
Part 5	Hours of operation (Cumulative Increase) <u>Daily throughput limit (2-2-212, Cumulative Increase)</u>	Y	
Part 6	Recordkeeping (2-6-501)	Y	

VI. PERMIT CONDITIONS

Condition 20278

For Sources S69, Asphalt Additive Loading Bin, and S70, Asphalt Additive Mixing Tank

1. The annual throughput of asphalt (excluding additives) at S-70 shall not exceed ~~17,591,400,000~~ tons during any consecutive 12-month period. (Basis: Regulation 2-2-212, Cumulative Increase)
2. The annual throughput of additives at S-69 shall not exceed ~~20,000,650~~ tons during any consecutive 12-month period. (Basis: Regulation 2-2-212, Cumulative Increase)
3. Hot Oil Heater (S-24) or the Thermal Oxidizer (A-31) shall abate emissions from S-70 at all times that S-70 is in operation. (Basis: Regulation 2-6-503)
- *4. Visible dust and smoke emissions from S-69 and S-70 shall not result in fallout on adjacent property in such quantities so as to cause a public nuisance as described in Regulation 1-301 (Basis: Regulation 1)
5. ~~The total hours of operation of S-70 shall not exceed 1248 hours in any consecutive 12-month period. (Basis: Cumulative Increase)~~ The daily throughput of asphalt (excluding additives) at S-70 shall not exceed 18,500 tons per calendar day. [Basis: Regulation 2-2-212, Cumulative Increase] Amended Application 7471, June 2004, effective upon proposal.
6. In order to demonstrate compliance with the above permit conditions, the following records shall be maintained in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least 5 years from the date on which a record is made.
 - a. Total daily throughput of modified asphalt at S-70 and additives at S-69
 - Total daily hours of operation of S-70
 - c. The daily throughput of product and hours of operation shall be totaled on a monthly basis.
 - d. Results of all visible emissions checks and any corrective action (Basis: Regulation 2-6-501)
7. A visible emissions check shall be performed on S69 on an annual basis. The visible emissions check shall take place while the equipment is operating and during daylight hours. If any visible emissions are detected, the operator shall take corrective action, and check for visible emissions the next time that the equipment is operated. If no visible emissions are detected, the operator shall continue to check

for visible emissions on an annual basis.
(basis: 2-6-409.2)

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

Table VII – AJ
Applicable Limits and Compliance Monitoring Requirements
S69- ASPHALT ADDITIVE LOADING BIN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for no more than 3 minutes in any hour	BAAQMD Condition 20278, parts 6d and 7	P/A	visible emissions inspection
FP	BAAQMD 6-310	Y		0.15 gr/dscf	None	N	N/A
	BAAQMD 6-311	Y		$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	None	N	N/A
Through-put	BAAQMD Condition 20278, part 2	Y		2,650 <u>20,000</u> tons in any 12 months	BAAQMD Condition 20278, part 6	P/D	records

Table VII – AK
Applicable Limits and Compliance Monitoring Requirements
S70- ASPHALT ADDITIVE MIXING TANK

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for no more than 3 minutes in any hour	BAAQMD Condition #1240, part II.58b	C	Temperature monitoring
	40 CFR 60.472(c)	Y		0 percent opacity except for one consecutive 15-min period in any 24-hr period for cleaning	40 CFR 60.473(c) and BAAQMD Condition #1240, part II.58b	C	Temperature monitoring
FP	BAAQMD 6-310	Y		0.15 gr/dscf	BAAQMD Condition #1240, part II.58b	C	Temperature monitoring
VOC	BAAQMD 8-15-305			None	BAAQMD 8-15-501	P/E	Records
	BAAQMD Condition 1240, part I.14	Y		Emissions of NMHC < 49.345 tons per year excluding marine emissions	BAAQMD Condition 1240, parts I.18a, I.18c and I.18j	P/SA	Calculations
	BAAQMD Condition #1240, part II.50	Y		Vapor pressure may not exceed 0.5 psia	BAAQMD Condition #1240, part II.58	P/M	Records
	BAAQMD Condition #1240, part II.55	Y		98.5% destruction of vapors	BAAQMD Condition 1240, part II.58b	C	Temperature monitoring
Through-put	BAAQMD Condition 20278, part 1	Y		400,000 17,591 tons in any 12 months	BAAQMD Condition 20278, part 6	P/D	records

Table VII – AK
Applicable Limits and Compliance Monitoring Requirements
S70- ASPHALT ADDITIVE MIXING TANK

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	<u>BAAQMD Condition 20278, part 5</u>	<u>Y</u>		<u>18,500 tons in any calendar day</u>	<u>BAAQMD Condition 20278, part 6</u>	<u>P/D</u>	<u>records</u>
Hours of operation	BAAQMD Condition 20278, part 5	Y		1248 hours in any 12 months	BAAQMD Condition 20278, part 6	P/D	records

X. REVISION HISTORY

Initial Major Facility Review Permit Issuance
(Application 17468) December 1, 2003

Administrative Amendment (no application) May 27, 2004
Deferral of effective date for monitoring
conditions for BAAQMD Regulation
9, Rule 10 in Section IV and VII tables
for sources S19, S20, and S21 and in
BAAQMD Condition 20617.

Minor Revision (Application 7471)

Increase annual throughput limit for S69, Asphalt
Additive Loading Bin, in BAAQMD Condition
20278 and the Section IV and VII tables for S69.
Add new daily throughput limit, increase annual
throughput limit, and delete operating hours
limit for S70, Asphalt Additive Mixing Tank,
in BAAQMD Condition 20278 and the Section IV and
VII tables for S70.