

# Bay Area Air Quality Management District

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

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## 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

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**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**

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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**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann #1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 8, Rule 5</b>	<b>Organic Compounds, Storage of Organic Liquids (11/27/02)</b>		
8-5-117	Exemption, Low Vapor Pressure	N	
<b>BAAQMD Regulation 8, Rule 15</b>	<b>Organic Compounds, Emulsified and Liquid Asphalts (6/1/94)</b>		
8-15-305	Prohibition of Manufacture and Sale	Y	
8-15-501	Records	Y	
<b>40 CFR 60 Subpart UU</b>	<b>Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture (8/6/82)</b>		
60.472(c)	Opacity standard	Y	
60.473(c)	Parametric monitoring	Y	
60.473(d)	Exemption from quarterly reports	Y	
<b>40 CFR 63 Subpart CC</b>	<b>National Emission Standards for Hazardous Pollutants for Petroleum Refining (8/18/95)</b>		
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**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Condition #1240</b>			
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	
<b>BAAQMD Condition #20278</b>			
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	<del>Hours of operation (Cumulative Increase)</del> <u>Daily throughput limit (2-2-212, Cumulative Increase)</u>	<del>Y</del>	
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		<del>2,650</del> <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		<del>400,000</del> 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	<del>BAAQMD Condition 20278, part 5</del>	<del>Y</del>		<del>1248 hours in any 12 months</del>	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.