

Department of Environmental Quality
 Western Region
 Air Quality Program

SIMPLE
 AIR CONTAMINANT DISCHARGE PERMIT
 REVIEW REPORT

Specialty Polymers, Inc.
 2475 Progress Way
 Woodburn, Oregon 97071
 (503) 981-7523

Assigned emissions	
Emission credits	
Source test	
COMS	
CEMS	
Compliance schedule	
Special conditions	
Annual report	X
Semi-annual report	
Quarterly report	

Monthly report	
Excess emissions report	
NSPS	
NESHAP	
NSR	
PSD	
RACT	
FCE	X
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PERMITTING


PERMITTING TION

1. The permit is an issuance of a new Simple Air Contaminant Discharge Permit (ACDP)

OTHER PERMITS

2. The source does not have any other DEQ permits.

ATTAINMENT STATUS

3. The source is located in an attainment area for all pollutants.
4.  source is not located within 10 kilometers of a Class I Air Quality Protection Area.

SOURCE DESCRIPTION

OVERVIEW

The permittee operates batch production processes of aqueous polymer emulsions. The facility consists of three production buildings, tank farms and ancillary equipment. Monomers are mixed in reactor vessels to make various polymer emulsions. The polymers are stored in finished product tanks. The polymer emulsions are used in various industries including paint and coatings manufacturing, paper and wood products manufacturing. The permittee also manufactures a product called woodsure. The woodsure process impregnates and polymerizes a monomer within wood to make durable countertops and other durable surface material used in the construction industry.

PROCESS AND CONTROL VICES

Emission Sources

5. Existing air contaminant sources at the facility consist of the following:

- a. Ten Monomer Storage Tanks – Fugitive Emissions.

T-1 : 15,000 gallon styrene tank

T-2 : 15,000 gallon styrene tank

T-3 : 15,000 gallon methyl methacrylate tank

T-4 : 15,000 gallon methyl methacrylate tank

T-5 : 36,000 gallon vinyl acetate tank
T-6 : 36,000 gallon butyl acrylate tank
T-7: 12,000 gallon methyl acrylate tank
T-8: 12,000 gallon 2-ethyl hexyl acrylate tank
T-9: 12,000 gallon butyl methacrylate tank
T-10:12,000 gallon 2-ethyl hexyl acrylate tank

b: Monomer Feed Tanks, Reactors and Condensers:

1MF-8: 118 gallon monomer feed tank containing VA, BA, 2-EHA (R&D)
1MF-9: 265 gallon monomer feed tank containing VA, BA, 2-EHA (R&D)

BR2: 350 gallon reactor (R&D)

1E-1: reactor condenser
1E-2: reactor condenser
1E-3: reactor condenser

2E-4: reactor condenser
2E-5: reactor condenser
2E-6: reactor condenser

KO-1: knock out condenser
KO-2: knock out condenser

c: Woodsure Process:

T-IBMA: 9,400 isobutyl methacrylate storage tank
WS238IM: 1,200 gallon monomer feed tank (IBMA)
Color Tanks 1-10 (two additional future tanks 11-13 proposed)

d. T-NH₃ – Ammonia storage tank (not regulated)

e. Nine Natural Gas Fired Boilers and One Natural Gas Fired Pressure Washer - Combustion

1B1 - 1.4 MMBTU/hr rated boiler built in 1986
1B2 - 1.2 MMBTU/hr rated boiler built in 1973
2B1 - 1.4 MMBTU/hr rated boiler built in 1989
2B2 - 0.4 MMBTU/hr rated boiler built in 2005
2B3 - 1.5 MMBTU/hr rated boiler built in 1995
3B1 - 2.1 MMBTU/hr rated boiler built in 1995

- 3B2 - 2.1 MMBTU/hr rated boiler built in 1995
- 3B3 - 0.4 MMBTU/hr rated boiler built in 1998
- 3B4 - 0.4 MMBTU/hr rated boiler built in 1998
- PW1 - 0.4 MMBTU/hr rated pressure washer built 1993

e. Railcar loading and unloading

Fugitive emissions from loading and unloading of railcars to bulk storage tanks



Control Devices


There are no control devices used. The condensers on the reactors are considered process equipment.

COMPLIANCE

6. This is a new permit for this facility and no enforcement actions are on record.

7. Proposed PSEL  information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting  is		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL  (tons/yr)	PSEL Increase (tons/yr)
PM	0	0	0	0	de minimus	--
PM ₁₀	0	0	0	0	de minimus	--
SO ₂	0	0	0	0	de minimus	--
NO _x	0	0	0	0	39	39
CO	0	0	0	0	99	99
VOC	0	0	0	0	39	39
Single HAP	0	0	0	0	9	9
Combined HAPs	0	0	0	0	24	24

a.  proposed PSELs for NO_x, CO, and VOC are equal to the Generic PSEL in accordance with OAR 340-222-0040(1) and the netting basis is zero in accordance with OAR 340-222-0040(2).

- b. No PSELS are being established for PM, PM₁₀ and SO₂ as the potential to emit of these pollutants is less than the Department's de minimis value of one ton/year.
- c. Because the facility has the potential to emit HAPs at greater than the major source thresholds, the facility has requested that the PSELS for those pollutants be set at the Generic PSEL level to avoid the necessity of an Oregon Title V Operating Permit.
- d. Detailed emission calculations actual anticipated and potential emission levels are shown in Appendix A.
- e. The PSEL is a federally enforceable limit on the potential to emit.

SIGNIFICANT EMISSION RATE ANALYSIS

8.  Each pollutant, the proposed Plant Site Emission Limit is less than the Netting Basis plus the significant emission rate, thus no further air quality analysis is required.

MAJOR SOURCE APPLICABILITY

CRITERIA POLLUTANTS

9. A major source is a facility that has the potential to emit more than 100 tons per year of any criteria pollutant. This facility is not a major source of criteria pollutant emissions.

HAZARDOUS AIR POLLUTANTS

10. A major source is a facility that has the potential to emit more than 10 tons/year of any single HAP or 25 tons/year of combined HAPs. Facility emissions calculated using the maximum production capacity exceed 10 tons/year of a single HAP. The facility has elected use production limitations and a PSEL of 9 and 24 tons/year to maintain emission below 10 tons/year. The PSEL is the PTE and therefore this source is not a major source of hazardous air pollutants.

ADDITIONAL REQUIREMENTS

NSPS APPLICABILITY

11. There are no sources at this facility for which NSPS standards have been promulgated.

NESHAPS/MACT PLICABILITY

12. 40 CFR Part 60, Subpart Dc does not apply to the boilers at this facility because they are all rated at less than 100 million Btu/hr heat input.


RACT PLICABILITY

13. The RACT rules are not applicable to this source because it is not in the Portland AQMA, Medford AQMA, or Salem SKATS.

TACT APPLICABILITY

14. The source is meeting the states TACT/Highest and Best Rules by controlling VOC/HAP emissions with condensers.

PUBLIC NOTICE

15.  suant to OAR 340-216-0064(5)(a), issuance of Simple Air Contaminant Discharge permits require public notice in accordance with OAR 340-209-0030(3)(b), which requires that the Department provide notice of the proposed permit action and a minimum of 30 days for interested persons to submit written comments. The public notice was mailed on March 8, 2007, and the comment period will end on April 9, 2007. No public comments were received.

APPENDIX A
PSEL CALCULATION
DETAIL SHEETS

Specialty Polymers Emissions		
Pollutant	Proposed emissions (tons/year)	Potential Emissions (tons/yr)
PM	0.37	0.37
PM ₁₀	0.37	0.37
NOx	4.9	4.9
VOC	12	15.3
CO	4.1	4.1
SO ₂	0.03	0.03
Individual HAP (VA)	9.3	12.8
Combined HAPs	11.5	14.5

The actual and potential emissions are based upon all natural gas burning equipment running at full capacity continuously throughout the year. Additional detail sheets are included in the following pages.