

Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit – Simple ACDP

REVIEW REPORT

Ridgeline Pipe Manufacturing
dba Eugene Pipe LLC

Permit No. 207488

Permitting

Permitting Action

1. General Background Information

Ridgeline Pipe Manufacturing dba Eugene Pipe LLC manufactures plastic pipe out of imported dry PVC resin and other minor constituents at its facility in Eugene, Oregon. The facility produces approximately 38 million pounds per year of finished product. The operation consists of pneumatically conveying the resin from rail car to storage silos, weighing and mixing the resin with calcium carbonate and wax, extruding the plastic to specified size, and reclaiming any sub-standard product. The air contaminant associated with the operation is particulate matter (PM) and particulate matter less than 10 microns in diameter (PM₁₀) from product loss to atmosphere during material conveyance. The operating schedule for the facility is 8,760 hours/year (24 hours/day, 7 days/week, and 52 weeks/year).

2. Reasons for Permit Action

The facility operates a process listed in Table 1, Part B of LRAPA Rule 37, and is therefore required to obtain a permit. The company's ACDP expired on December 31, 2009. The primary reason for the permit issuance is to renew the expired permit.

3. Enforcement History

There have been no enforcement actions taken against the facility by LRAPA.

4. Performance Test Results

A test was performed on February 28, 2000 by Columbia River Carbonates (CRC) to determine the particle size distribution of the plastic shaving materials produced by the cutting process of PVC pipe and the affect these materials will have on emissions. The test results indicated that the smallest particles are approximately 10 microns in diameter. Since the vacuum system and baghouses will filter out particles greater than one (1) micron in diameter, the test estimated that 100% of the particles generated and collected will be removed.

5. Plant Site Emission Limits

In accordance with LRAPA 42-0043 and 42-0080, the PSELs for PM and PM₁₀ are set at the Generic PSEL level and established on a 12-month rolling basis.

<u>Source</u>	PM	PM ₁₀
Totals	24	14

The attachment to this report contains estimations of emissions and details about the emission points.

The facility emits an estimated 100 lbs of VOC per year from ink jet printers for pipe marking (see detail sheets attached). Because this level is well below the 1 ton/year VOC de minimis rate defined in LRAPA Title 12, no PSEL is required.

Baseline Emission Rate

The facility existed in the 1978 baseline year but has chosen to not retain the baseline by opting for a Simple ACDP.

6. Other Emission Limitations

LRAPA's process weight rule specifies limits on the emissions of particulate matter for specific processes as a function of the amount of material processed [LRAPA 32-045(A)]. Using the cumulative maximum hourly design rate for the 29 baghouses of 131,000 pounds per hour, the title 32 table I limit corresponding to this process weight is approximately 47.1 lbs/hr. Since the maximum hourly emissions have been estimated at 10.3 pounds per hour, compliance with the annual PSEL will ensure compliance with the process weight rule.

The permit includes general visible emissions limitations for the facility. The permit includes general grain loading limitations for the source.

7. Hazardous Air Pollutants

The projected HAP emissions from the facility are estimated to be negligible. The facility was formerly a source of Methyl Ethyl Ketone (MEK). However, the source of these emissions was the ink-jet printers and they have been removed from the facility. Likewise, MEK has been de-listed as a HAP. An MSDS for currently used ink is on file at LRAPA. The ink primarily contains cyclohexanone which is not a HAP.

8. Typically Achievable Control Technology (TACT)

LRAPA Title 32-008 requires an existing emission unit at a facility to meet TACT if the emissions unit has emissions of criteria pollutants greater than ten (10) tons per year of any gaseous pollutant or five (5) tons per year of particulate, the emissions unit is not subject to the emissions standards under LRAPA Title 32, Title 33, Title 39, or Title 46 for the pollutants emitted, and the source is required to have a permit. The emissions at this facility are subject to the grain loading standards in Title 32 and are therefore not required to meet TACT. However, the baghouse control devices would be considered TACT for this type of facility.

9. New Source Review and Prevention of Significant Deterioration

Because the proposed PSELs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 38, the facility is not subject to LRAPA's New Source Review (NSR) requirements for PM₁₀ nor the Prevention of Significant Deterioration (PSD) requirements for SO_x, NO_x, CO, and VOC.

10. New Source Performance Standards

There are no sources at the facility that are subject to the new source performance standards.

11. Continuous Compliance

To ensure compliance with the hourly and annual PSELs, the source is required to keep a record of the following information for a period of two years.

	<u>Parameter</u>	<u>Minimum Recording Frequency</u>
a.	Operating hours at each baghouse.	Weekly
b.	Routine baghouse maintenance	Upon Occurrence
c.	Visual inspection of baghouses.	Weekly

Reporting Requirements

12. The facility is required to submit any information as required per Condition G13.

Open Burning

13. Open burning is prohibited in accordance to the requirements of LRAPA 47-020.

Public Notice

14. The draft permit was on public notice from February 8, 2010 to March 13, 2010. No written comments were submitted during the 35-day comment period.

MH/cmw
3/18/10

Emissions Calculations										
PM/PM10 Emissions										
Device No.	Description	Operating (Hours per Day)	Flow Rate (Cubic feet per Min)	Grain Load (gr/dscf)	Hourly Actual Emissions (lb/hr)	Annual Actual Emissions (tons/yr)				
1	Seneca Bag Filter	17.32	600	0.03	0.15	0.49				
2	Seneca Bag Filter	10.74	850	0.03	0.22	0.43				
3	Seneca Bag Filter	13.57	850	0.03	0.22	0.54				
4	Carter Day Baghouse	0.17	850	0.03	0.22	0.01				
5	Tortt Filter	24	5,500	99.9% eff	0.00	0.00				
6	Carter Day Baghouse	4.93	850	0.03	0.22	0.20				
7	Carter Day Baghouse	5.53	850	0.03	0.22	0.22				
8	Premier Bag Filter	24	850	0.03	0.22	0.96				
9	Seneca Filter	4.06	850	0.03	0.22	0.16				
10	Seneca Filter	0.38	850	0.03	0.22	0.02				
11	Western Pneumatics F	19.51	1,500	0.03	0.39	1.37				
12	Carothers	17.1	311	0.03	0.08	0.25				
13	Carothers	6.3	311	0.03	0.08	0.09				
14	Carothers	9.43	311	0.03	0.08	0.14				
15	Carothers	9.75	311	0.03	0.08	0.14				
16	Carothers	16.06	311	0.03	0.08	0.23				
17	Carothers	12.05	311	0.03	0.08	0.18				
18	Carothers	3.78	311	0.03	0.08	0.06				
19	Western Pneumatics F	17.07	3,500	0.03	0.90	2.80				
20	Seneca Bag Filter	3.74	850	0.03	0.22	0.15				
21	Horizon Bag Filter	6.76	850	0.03	0.22	0.27				
22	Fair Bin Vert	0.25	na	0.03	NA	NA				
33	Carothers	2	311	0.03	0.08	0.03				
34	Carothers	51	1000	0.03	0.26	2.39				
35	Carothers	5	1000	0.03	0.26	0.23				
36	Carothers	5	1000	0.03	0.26	0.23				
37	Carothers	5	1000	0.03	0.26	0.23				
38	Carothers	10	1000	0.03	0.26	0.47				
TOTAL PM/PM10 EMISSIONS					4.2	8.7				

Device No., Description, Operation Time, and Flow were obtained from the facilities Application for ACDP dated 12/17/99.
 Based on particle size distribution and baghouse manufacturer warranty, the facility states that the effluent gas from the baghouses will not exceed 0.03 grains per dry standard foot (gr/dscf) of air.
 Actual Hourly emissions = Flow rate (cubic feet per minute) x grain loading x 1 lb/7000 grains x 60 minutes/ hour.
 Actual Annual emissions = Actual hourly emissions x Operating time x 365 days/year x 1 ton/ 2000 pounds.
 Except for Device No. 5 (Tortt Filter), which uses an estimated 99.9% efficiency because the equipment handle little material relative to air flow.
 Actual Hourly emissions for Device No. 5 = 2,500 pounds throughput/year x 1 year/8,760 hours x 99.9% efficiency (0.001).
 Actual Annual emissions for Device No. 5 x 8,760 hour/year x 1 ton/2,000 tons.

VOC
 8 bags/month of ink used or 96 bags ink used in 2009
 Each bag is 500 mL or 0.5 L or 48 L per year.
 48 L per year equates to 12.7 gallons/year
 12.7 gal/year is approx 100 lb ink/year if we conservatively assume a density of 8lb/gal
 At 100% VOC content the annual emissions from pipe marking is estimated to be 100 lbs VOC/year and well below 1 ton/year de minimis level defined in LRAPA Title 12.