

**LANE REGIONAL AIR POLLUTION AUTHORITY
TITLE V OPERATING PERMIT
REVIEW REPORT**

Lane Regional Air Pollution Authority
1010 Main Street
Springfield, Oregon 97477

TABLE OF CONTENTS

LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT	2
INTRODUCTION	3
FACILITY DESCRIPTION/GENERAL BACKGROUND INFORMATION.....	3
EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION	4
EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING.....	6
PLANT SITE EMISSION LIMITS.....	7
HAZARDOUS AIR POLLUTANTS	12
COMPLIANCE HISTORY	15
SOURCE TEST RESULTS	15
PUBLIC NOTICE	15
EMISSIONS DETAIL SHEETS.....	18

LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT

AMB	Ambient
AQMA	Air quality management area
ASTM	American Society of Testing and Materials
BDT	Bone dry ton
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
COMPL	Compliance
COMS	Continuous opacity monitoring system
COND	Condition
CRED	Credit
DEQ	Oregon Department of Environmental Quality
dscf	dry standard cubic feet
EF	Emission factor
EPA	United State Environmental Protection Agency
EU	Emissions unit
FCAA	Federal Clean Air Act
gr/dscf	grains per dry standard cubic feet
HAP	Hazardous air pollutant
ID	Identification code
I&M	Inspection and maintenance
LRAPA	Lane Regional Air Pollution Authority
MB	Material balance
Mlb	1000 pounds
MON	Monitoring
NA	Not applicable
NESHAP	National emission standard for hazardous air pollutants
NO _x	Oxides of nitrogen
NSPS	New source performance standard
NSR	New source review
O ₂	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
Pb	Lead
PCD	Pollution Control Device
PM	Particulate matter
PM ₁₀	Particulate matter less than 10 microns in size
PSD	Prevention of significant deterioration
PSEL	Plant Site Emission Limit
SCHED	Schedule
SPEC	Special
SO ₂	Sulfur dioxide
ST	Source test
VE	Visible emissions
VMT	Vehicle mile traveled
VOC	Volatile organic compound

INTRODUCTION

1. The proposed permit is a new Title V Operating Permit. In accordance with OAR 340-028-2200(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.
2. This permit establishes construction and operation requirements as follows:
 - 2.a. Best Available Control Technology (BACT). In accordance with the Prevention of Significant Deterioration (PSD) review requirements of Title 38 of LRAPA's Rules and Regulations, this permit establishes BACT for volatile organic compound (VOC) emissions from this facility.
 - 2.b. Maximum Achievable Control Technology (MACT). In accordance with OAR 340-244-0200, Monaco is required to comply with the MACT Standard for Reinforced Plastic Composites Production upon promulgation of the standard.
3. Monaco Coach Corporation – Springfield (Monaco) is proposing modifications that will result in an increased potential to emit VOCs and HAPs. The proposed construction will result in an increase of VOC over the significant emissions rate (SER) of 40 tons per year. The primary air emission from this facility is styrene from the production of fiberglass parts. Styrene is a designated hazardous air pollutant, per the 1990 Clean Air Act Amendments. It is also a tropospheric ozone precursor.
4. The PSD Air Contaminant Discharge Permit (ACDP) application submitted by Monaco on September 15, 1999, proposes the relocation of the towables assembly operations to Monaco's Coburg, Oregon facility, the addition of new equipment, and a plant site emission limit (PSEL) of 73 tons per year for VOC emissions.

PERMITTEE IDENTIFICATION

5. Monaco owns and operates a recreational vehicle fiberglass component production facility located at 5280 High Banks Road in Springfield, Oregon.

FACILITY DESCRIPTION/GENERAL BACKGROUND INFORMATION

6. Permit History: On March 27, 1997, Monaco notified LRAPA of its intent to lease property and production facilities formerly owned and operated by Blue Water Boats. At that time, Monaco indicated that the facility would be converted from boat manufacturing to towable recreational vehicle (travel trailers and fifth wheel trailers) manufacturing facility. Also, Monaco requested that LRAPA transfer the Blue Water Boats permit (ACDP No. 200562) to Monaco. In addition, Monaco requested a number of modifications to the permit language. The requested modifications included: increasing the long-term plant site emissions limit (PSEL) from 32.3 to 39.5 tons per year; converting the Styrene limit to a VOC limit; changing the short-term plant site emissions limit from a daily to monthly limit; changing the Styrene content limits for gel coat from 35% to 37%; and the removal of acetone from the PSEL. In July of 1997, Monaco began production of fiberglass recreational vehicle (RV) components and assembling towable RV units. On October 9, 1997, Monaco submitted a Title V Federal Operating Permit Application to LRAPA. A letter from Monaco to LRAPA dated October 23, 1997, indicates that a transfer of the Blue Water Boats ACDP to Monaco should be allowed since both operations share the SIC code classification of 3083. An ACDP application was not submitted to

LRAPA and an ACDP was not issued to Monaco. Monaco has indicated that actual emissions from the Springfield facility have not exceeded the emission limits in ACDP No. 200562. On August 19, 1999, Monaco submitted a revised Title V Federal Operating Permit Application to LRAPA. On September 15, 1999, Monaco submitted a potential for significant deterioration (PSD) ACDP application to LRAPA.

7. **SIC Classification:** The facility, as operated by Monaco, originally produced towable RV units. This manufacturing operation is classified under SIC code 3083 (Laminated Plastics Plate, Sheet, and Profile Shapes). However, in a letter to LRAPA regarding the production relationship between Monaco's Coburg and Springfield operations, dated October 15, 1998, Monaco states that its Springfield towable operations is classified as SIC code 3792 (Travel Trailers and Campers). The current permit applications on file with LRAPA classify Monaco's Springfield operations as SIC code 3083.
8. **Equipment Description:** The equipment present at Monaco upon its start up in 1997 included four (4) fiberglass chop stations and one (1) gel coat booth, a paint booth, a grinding booth, and a wood cabinet shop and wood cabinet assembly area. According to the Blue Water Boats permit, the facility used both atomized and non-atomized spray gun technologies.
9. **Equipment Changes:** Following the proposed facility modifications, Monaco will produce fiberglass RV parts to support Monaco's Coburg motor coach production operations using the equipment described in the table below. The requested plant site emissions limit (PSEL) is 73 tons per year for VOC.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

Emission Unit Description	EU ID	Pollution Control Device Description
Fiberglass- 5 Fiberglass chop stations	FG	VOC/HAP content limits and particulate filters
Gel coat Area- 4 Gel coat booths	GC	VOC/HAP content limits and particulate filters
Tooling- Mold building and tooling	TM	VOC/HAP content limits and particulate filters
Paint- 1 paint booth	PB	VOC/HAP content limits and particulate filters
Welding	WE	None
Woodworking	WO	Fabric filters
Fiberglass grinding- 3 grinding booths	GB	Fabric filters
Polymer cast sanding	PS	Fabric filters
Fuel burning equipment	FB	None
RV Service	RV	None
Parts 2000- (FG, GC, TM, and PB)	Parts	VOC/HAP content limits and particulate filters
Plastic 2000- (FG, GC, and TM)	Plastics	VOC emission limit

10. **Ventilation Systems:** All operations at Monaco are conducted in a single building with all gaseous emissions venting through the building's ventilation system. Exceptions are the four gel coat booths and the paint booth, with each booth operating an independent ventilation system. The building's main ventilation system consists of five (5) stacks each rated at 12,000 scfm. The intakes for the five stacks are located along walls adjacent to the fiberglass chop stations. Each gel coat booth is rated to operate at

19,000 scfm and is equipped with particulate filtration. The paint booth is rated at 10,000 scfm and is equipped with particulate filtration.

CATEGORICALLY INSIGNIFICANT ACTIVITIES

11. Monaco has the following categorically insignificant activities on site:

- Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under Divisions 20 through 32 of this chapter, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
- Evaporative and tail pipe emissions from on-site motor vehicle operation
- Distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
- Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr
- Office activities
- Food service activities
- Janitorial activities
- Personal care activities
- Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance
- Maintenance and repair shop
- Automotive repair shops or storage garages
- Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
- Refrigeration systems with less than 50 pounds of charge or ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems
- Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities
- Temporary construction activities
- Warehouse activities
- Accidental fires
- Air vents from air compressors
- Air purification systems
- Electrical charging stations
- Instrument air dryers and distribution
- Blueprint making
- Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking
- Electric motors
- Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids
- On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
- Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment
- Pressurized tanks containing gaseous compounds

- Emissions from wastewater discharge to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
- Storm water settling basins
- Fire suppression and training
- Paved roads and paved parking lots within an growth boundary
- Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils
- Health, safety, and emergency response activities
- Emergency generators and pumps used only during loss of primary equipment or utility service
- Oil/water separators in effluent treatment systems

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING

12. The following federal and /or LRAPA enforceable rules, that have specific limits and standards, have been determined to be applicable to this facility:
- 12.a. LRAPA rules: 32-010, 32-015, 32-055, 33-030, 38-010, 38-020, 48-015(2), 49-010, and 51-015.
 - 12.b. The facility is not subject to the federal New Source Performance Standards (NSPS) in 40 CFR Part 60.
 - 12.c. This facility is a new source for purposes of Section 112 of the Clean Air Act Amendments of 1990 (CAAA). Therefore, that requires LRAPA to make a case-by-case maximum achievable control technology (MACT) determination in accordance with the requirements of 40 CFR Part 63. The results of LRAPA's case-by-case MACT determination are included in this review report.
 - 12.d. The facility is in the source category to be regulated by the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for reinforced plastic composites production (RPC) upon promulgation of the standard.
13. 32-010(1): Visible emissions. This requirement is applicable to all sources in Lane County. Monaco will demonstrate compliance with the requirement to limit visible emissions to less than 20% opacity by conducting Method 22 and/or Method 9 observations in accordance with the schedule established in the permit. The permittee has the option of using Method 22 since visible emissions are not expected from this source.
14. 32-015(2): Particulate emissions. This requirement is applicable to all sources in Lane County. Monaco will demonstrate compliance with the requirement to limit particulate emissions to 0.1 gr/dscf by complying with the visible emissions limitations and operation and maintenance requirements of the permit. It is assumed that Monaco's particulate emissions will be well below the 0.1 gr/dscf while the source is in compliance with the opacity limits and operation and maintenance requirements. The operation and maintenance requirements should ensure that particulate control equipment is installed and functioning properly.
15. 32-055 and 49-010: Nuisance prohibition. These requirements are applicable to all sources in Lane County. Monaco will comply with the general nuisance prohibitions by maintaining a record of all complaints received and by reporting complaint response activities to LRAPA.
16. 48-015(2): Fugitive particulate emissions. This requirement is applicable to all sources in Lane County. Monaco will demonstrate compliance with the requirement to take reasonable precautions to prevent particulate matter from becoming airborne by conducting monthly surveys of the plant site to identify and

eliminate sources of fugitive particulate matter. This housekeeping survey is appropriate for Monaco since the plant site is paved and all dry materials are stored in normally closed containers.

17. 38-010 and 38-020: Monaco is subject to the requirements of Title 38, New Source Review, since it proposes construction and modifications that will result in an emissions increase of volatile organic compounds (VOC) greater than the significant emissions rate (SER) of 40 tons per year. The applicable requirements are established by this permit and described in the Determination of Best Available Control Technology.

PLANT SITE EMISSION LIMIT (PSEL) INFORMATION

18. BASELINE EMISSIONS RATE (BER) AND NETTING BASELINE

The baseline emission rate (BER) for the source is zero for all pollutants.

19. PLANT SITE EMISSIONS LIMITS (PSELs)

- The plant can be operated as much as 10 hours per day, 5 days per week, and 50 weeks per year. This equates to 2500 hours per year.
- The projected annual production at the facility is 8000 vehicle component parts per year.
- The annual PSEL is based on the maximum projected emissions from the source when the plant is in full operation.
- The annual PSEL (ton per year) is shown below:

Emissions Unit ID	PM (ton/yr)	PM ₁₀ (ton/yr)	CO (ton/yr)	NO _x (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)
Facility wide	6.4	6.4	NA	1.56	NA	73.0
Total	6.4	6.4	NA	1.56	NA	73.0

NA = A PSEL need not be established for the emissions unit for the pollutant.
 Insig. = The emissions unit is not a significant source for the pollutant.

20. PLANT SITE EMISSION LIMITS

The source was constructed after the baseline period of 1977 or 1978. Therefore, the baseline emission rate (BER) for the facility is zero for all pollutants.

- The PSD/ACDP application indicates that the plant will operate 10 hours per day, 5 days per week, 50 weeks per year. This equates to 2500 hours per year.
- The projected annual production at the facility is 8000 fiberglass parts per year, and 500 parts tools per year.
- The maximum projected monthly production is 1500 fiberglass parts, and 100 parts tools per month.
- The annual PSEL is based on the maximum projected emissions from the source.

- The annual PSEL serve as short-term limits since Monaco is required to determine compliance monthly.

21. EMISSION FACTORS

Currently, there are two sources of emission factors available for estimating emissions: One that was developed by EPA and another developed by the Composite Fabricators Association (CFA). This permit is based on emissions estimates, and requires compliance demonstrations, using the emission factors developed and published by the CFA.

Fiberglass Process	Application Technology	VOC Limit (%VOC)	VOC Emissions (Lbs Styrene Emitted/Ton Resin or Gel Coat Applied)	Emission Factors *
Neat Resin	Mechanical Non-Atomized	32	68.5	UEF Table
Filled Resin	Mechanical Non-Atomized	35	77	UEF Table
Pigmented Gel Coats	Mechanical Atomized	27	240	UEF Table
Clear Gel Coats	Mechanical Atomized	44	522	UEF Table
Tooling Gel Coats	Mechanical Atomized	38	398	UEF Table
Tooling Resins	Mechanical Non-Atomized	43	102	UEF Table
Casting Resins	Marble Casting	37	22	AP-42

* The Emission Factors are from the Composite Fabricators Association's (CFA) *Unified Emission Factors for Open Molding of Composites (UEF)*. The factors are based on Styrene content of resin or gel coat and the application method. The UEF is included in Attachment A to the Review Report.

BACT DETERMINATION

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

22. A BACT analysis was conducted by Monaco for the proposed construction of a fiberglass production facility located at 5280 High Banks Road, Springfield, Oregon. Pursuant to LRAPA's regulations, BACT is required for those pollutants, which exceed the significant emission rate. The facility will result in VOC emissions being emitted in excess of the significant emission rate. Therefore, this permit will establish BACT for VOC emissions from this facility.
23. In accordance with LRAPA 38-020 (1)(A), BACT is an emissions limitation based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act that would be emitted from any proposed major source or major modification. This determination, taking into account energy, environmental, and economic impacts, establishes BACT for VOC emission from Monaco's Springfield

operations. The determination includes limits on VOC emissions from gel coat, resin spray-up, resin casting (closed molding), and parts painting operations.

24. Evaluation of Potential Add-On and Work Practice Control Options

In order to determine BACT for this type of facility, a variety of technical databases and information sources were consulted. A search of EPA's RACT/BACT/LAER database was conducted. This search indicated that add-on control technology has not been identified as BACT for any sources in the fiber reinforced plastics industry. However, the results of the search indicated that use of low VOC content resins to reduce VOC emissions is achieved in practice and is cost effective.

25. Evaluation of Technical Feasibility of Available Add-On Control Options

Based on a review of the available information, LRAPA determined that the following options are candidate control technologies at this facility. The technical feasibility and cost effectiveness of each is discussed below:

- 25.a. Carbon Adsorption: Carbon adsorption removes VOC from the gas stream by adsorbing organic compounds to activated carbon. This technology was considered technically feasible with an assumed removal efficiency of 90 percent. The economic feasibility showed that carbon adsorption was too costly given Monaco's high airflow (> 140,000 cfm) and relatively low VOC concentration (10-50 ppm) gas stream. This option was eliminated as too costly at \$9,354 per ton of VOC removed.
- 25.b. Recuperative Thermal Oxidation: Thermal oxidation is a combustion technology that converts VOC to carbon dioxide and water. This technology was considered technically feasible with VOC removal efficiencies estimated to be greater than 95 percent. The cost of this technology was driven up by the high airflow rate and low VOC concentration waste stream from Monaco's operations. This option was eliminated as too costly at \$16,985 per ton of VOC removed.
- 25.c. Catalytic Oxidation: Catalytic oxidation is combustion technology that uses a catalyst to initiate oxidation of VOC. This technology was considered technically feasible with VOC removal efficiencies estimated to be greater than 95 percent. The technology was eliminated as too costly at \$12,594 per ton of VOC removed.
- 25.d. Rotary Concentrator with RTO: A concentrator system allows high volume/low concentration waste streams to be reduced to lower volume/high concentration streams, thereby lowering thermal treatment costs. This system was determined to be technically feasible. This technology was eliminated as too costly at \$10,033 per ton of VOC removed.
- 25.e. Zeolite Adsorption with Catalytic Oxidation: A concentrator system that allows high volume low concentration waste streams to be reduced to lower volume high concentration streams, thereby lowering thermal treatment costs. This system was determined to be technically feasible. This cost for this system was estimated at \$15,050 per ton of VOC removed. This technology was eliminated as too costly.
- 25.f. Regenerative Thermal Oxidation: This technology was determined to be technically feasible. However, it was determined to be too costly at \$9,893 per ton of pollutant removed.
- 25.g. Biofiltration: This technology utilizes biologically activated media to "consume" VOC. The technical feasibility of this technology was discussed at length. The applicant provided information by numerous suppliers of biofiltration. Following a careful review it was determined that biofiltration technology could be used to control VOC emissions from a composites manufacturing operation, however, the guaranteed efficiency would be highly variable, as would

the cost. Biofiltration, with an estimated removal efficiency of approximately 50%, was eliminated as too costly at \$15,560 per to of VOC removed.

- 25.h. Low-VOC Coatings: According to the best available information on emissions of styrene, VOC emissions are a function of the styrene content.
- 25.i. Non-atomized Spray Technology: Emissions from the reinforced fiberglass industry are directly related to the method of application of the materials used. The typical method of application of resins and gel coats is through the use of atomized spray equipment. Recent technology developments have resulted in significant improvements in resin application efficiency. This pollution preventing technology was determined to be included as part of the BACT determination for this facility.
- 25.j. Chemical Scrubber: This technology was determined to be technically infeasible due to the insolubility of styrene in water.
- 25.k. Condensation: This technology was determined to be technically infeasible due to the extremely low temperature required for effective control.

Control Technology	Typical Control Efficiency	Technology Used as Control in Fiberglass Manufacturing?	Technically Feasible?	Capital Costs of Control Technology	Economically Feasible? \$/ton
Recuperative Thermal Oxidation	< 95%	Yes	Yes	\$2,714,712	No \$16,985
Catalytic Oxidation	< 95%	Yes	Yes	\$3,037,892	No \$12,594
Zeolite Adsorption with Catalytic Oxidation	< 95%	Yes	Yes	\$3,673,292	No \$15,050
Regenerative Thermal Oxidation	< 95%	Yes	Yes	\$2,585,440	No \$9,893
Rotary Concentrator with Regenerative Thermal Oxidation	< 95%	Yes	Yes	\$2,973,256	No \$10,033
Carbon Adsorption	< 90%	Yes	Unknown	\$2,256,384	No \$9,354
Low VOC Materials	< 25%	Yes	Yes	Not Determined	Yes \$360
Non-atomized Spray Technology	> 25%	Yes, neat resins	Yes	\$20,000	Yes \$1000
Chemical Scrubber	NA	No	No	Not Determined	NA
Condensation	NA	No	No	Not Determined	NA
Biofiltration	< 50%	Yes, Europe	No	Not Determined	No \$15,560

26. LRAPA has determined that limits on VOC content of raw materials and work practices constitute BACT for VOC emissions from this source. The limits and work practices are as follows:
27. The VOC contents of all resins and gel coats used in Parts 2000 shall not exceed the VOC content limits contained in the following table:

Resin or Gel Coat	VOC Content, Weight Percent
Non-corrosion resistant resin (unfilled)	32
Non-corrosion resistant resin (filled)	35
Tooling resin	48
Pigmented gel coat	27
Clear gel coat	45
Tooling gel coat	43
Polymer casting resin	38

28. Compliance with the VOC content limits shall be monthly determined using material safety data sheets, certified product data sheets, or an equivalently reliable source of VOC content information.
29. Compliance with the VOC emissions limits shall be determined monthly using the VOC Content of materials and the Table of Unified Emission Factors as published by the Composite Fabricators Association.
30. LRAPA has also determined that BAAQMD Rule 31 represents BACT for the painting operations.
31. As part of BACT, personnel training on proper application and pollution prevention techniques, using closed containers, and draining line-cleaning solvent into closed containers are all required for both the original and proposed portions of the facility.
- 31.a. The permittee is required to incorporate the following work practices:
- 31.a.i. Non-atomized spray for application all resins and production gel coats.
 - 31.a.ii. HVLP spray for all paints and coatings applied.
 - 31.a.iii. Container management – closed lids for storage and mixing
- 31.b. The VOC content of all paint materials as applied, other than gel coats and resins, shall not exceed 2.8 pounds VOC per gallon, less water and exempt compounds.
- 31.c. Compliance with the VOC content limits for paints, coatings, and solvents will be based on mass balance calculation and determined monthly.
32. This determination of BACT for Monaco is based on information assembled and presented following the methods described in the EPA's PSD and Non-attainment Area Permitting guidance document titled: *New Source Review Workshop Manual*.
33. A BACT analysis was presented by Monaco on December 3, 1999 and supplemented with additional or updated information on February 2, 2000, March 23, 2000, April 20, 2000, and July 12, 2000.

HAZARDOUS AIR POLLUTANTS

- 34. The facility is a new major source of Hazardous Air Pollutants (HAPs).
- 35. 40 CFR 63 Subpart B applies to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants after the effective date of Section 112(g)(2)(B). The effective date of the Program 112(g) program is September 24, 1993, and LRAPA has had authority to implement the State program in Lane County since September 24, 1993. Monaco did not have a permit to operate a reinforced plastic composites production facility prior to the effective date of the Oregon 112(g) program. Therefore, LRAPA had determined that 40 CFR 63 Subpart B would apply to Monaco. However, since the publication of the proposed MACT standard for reinforced plastic composites production in the Federal Register on August 2, 2001, LRAPA has determined that Monaco is subject to that standard, as a new source, upon promulgation of 40 CFR 63 Subpart WWWW.

CONTROL TECHNOLOGY EVALUATION

- 36. In addition to reviewing the BACT analysis provided by Monaco, which included technology feasibility, economic feasibility, and vendor quotes, the RACT/BACT/LAER Clearinghouse was queried for fiberglass process determinations since 1991. There were a number of determinations requiring limits on styrene content, work practices, and pollution prevention to limit VOC emissions. There were no determinations identified that required add-on controls for fiberglass reinforced plastics manufacturing similar to operations at Monaco's Springfield operations.

CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY DETERMINATION

- 38. Although LRAPA determined that Monaco was subject to the requirements of 40 CFR 63 Subpart B- Case-by-case MACT determinations, the publication of the proposed MACT standard for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW, in the Federal Register on August 2, 2001.

TOXIC AND FLAMMABLE SUBSTANCE USAGE

- 39. The following toxic and flammable substances are used at the facility in the approximate quantities listed below:

CAS Number	Chemical Name	Insignificant	1,001_10,000 lbs/yr	10,001_20,000 lbs/yr	20,001_50,000 lbs/yr	>50,000 lbs/yr
108-88-3	Toluene		X			
1330-20-7	Xylene	X				
78-93-3	2-Butanone		X			
110-82-7	Cyclohexane					
100-41-4	Ethyl Benzene	X				
50-00-0	Formaldehyde	X				
101-68-8	Isocyanic Acid	X				

CAS Number	Chemical Name	Insignificant	1,001_10,000 lbs/yr	10,001_20,000 lbs/yr	20,001_50,000 lbs/yr	>50,000 lbs/yr
67-63-0	Isopropyl Alcohol	X				
67-56-1	Methanol	X				
7664-38-2	Phosphoric Acid	X				
85-68-7	Phthalic Acid Benzyl Ester	X				
117-81-7	Phthalic Acid Bis Ester	X				
84-74-2	Phthalic Acid Dibutyl Ester	X				
78-92-2	Sec-Butyl Alcohol	X				
100-42-5	Styrene					X

STRATOSPHERIC OZONE-DEPLETING SUBSTANCES

40. The facility does not manufacture, sell, distribute, or use in the manufacturing of a product any stratospheric ozone-depleting substances and the 1990 Clean Air Act, as amended, Sections 601-618, do not apply to the facility except that air conditioning units and fire extinguishers containing Class I or Class II substances must be serviced by certified repairmen to ensure that the substances are recycled or destroyed appropriately.

TEST METHODS AND PROCEDURES

41. This section is provided so that the permittee and LRAPA will know what test methods should be used to measure pollutant emissions in the event that testing is conducted for any reason. Although the permit may not require testing because other routine monitoring is used to determine compliance, LRAPA and EPA always have the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct testing to confirm the compliance status. In either case, the methods to be used for testing in the event that testing is conducted are included in the permit.

MONITORING REQUIREMENTS

42. The permittee is required to conduct routine visual emissions inspections of the facility. These are not compliance tests, but the information will be used to initiate corrective action if potential sources of visible emissions are observed from any source at the facility. Since corrective action is triggered by any visible emissions, a non-certified observer can determine if visible emissions are present. Compliance with the visible emissions limit in LRAPA 32-010 will be considered compliance with the grain-loading limit in LRAPA 32-105 and the process weight limit in LRAPA 32-045.

43. The permittee is required to keep a log of complaints received pertaining to odors and PM fallout. The facility is required to investigate each complaint and resolve it within at most five (5) days of receiving the complaint. If the complaint cannot be resolved, the facility shall notify LRAPA of the complaint within ten (10) days. The complaint, investigation, and resolution shall be recorded in the complaint log.
44. The permittee is required to disclose any information related to new construction that could be used by LRAPA to determine compliance with the prohibition against concealment and masking of emissions.
45. The permittee is required to keep records of all VOC-containing raw materials used in the manufacturing process. Pertinent information on the properties and amount of each material shall be recorded. This will allow for a calculation of monthly and annual VOC emissions.
46. The permittee is required to keep records of the quantity of material collected from particulate control equipment discharging to the atmosphere and calculate the monthly and annual PM emissions based on the rated removal efficiency for the baghouses and cyclones.

RECORDKEEPING REQUIREMENTS

47. The permit includes requirements for maintaining records of all monitoring information. These records must be maintained for at least five (5) years.

REPORTING REQUIREMENTS

48. The permit includes a requirement for submitting semi-annual and annual monitoring reports that include semi-annual compliance certifications. Excess emissions are required to be reported to LRAPA immediately as well as recorded in a logbook attached to the annual report. Emissions fee reports are required annually.

MONITORING AND RECORDKEEPING FOR INSIGNIFICANT ACTIVITIES

49. Section 70.6(a)(3) of the federal Title V permit rules, requires all monitoring and analysis procedures or test methods required under applicable requirements be contained in Title V permits. In addition, where the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.
50. However, the requirements to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. Where compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by a lack of a regular program of monitoring and where periodic testing or monitoring is not otherwise required by the applicable requirement, then in this instance, the status quo (i.e., no monitoring) will meet Section 70.6(a)(3). For this reason, this permit does not include any monitoring for insignificant emissions units and activities.

COMPLIANCE ASSURANCE MONITORING

51. The source is not subject to the provisions of 40 CFR Part 64, "Compliance Assurance Monitoring", since the operations at the source do not meet the criteria in those provisions.

COMPLIANCE HISTORY

52. There have been no enforcement actions against this facility.

SOURCE TEST RESULTS

53. This source has not performed source testing.

PUBLIC NOTICE

54. This permit was on public notice from July 24, 2001 to August 23, 2001. There was no request for a public hearing, so none was held. Written comments were received from Kurt W. Anderson, Monaco Coach Corporation. Following is the response to those comments.

Response To Comments Received On The Draft Title V Operating Permit For Monaco Coach Corporation -- Springfield

The comments were received from Kurt W. Anderson and dated August 20, 2001.

Comment No. 1:

Monaco commented that Condition 21.a. should be listed as enforceable by "LRAPA -only.

The change was made.

Comment No. 2:

Monaco commented that elimination of fugitive emission is not required by the applicable requirement and asked for a clarification of Condition 4.a.i.

Condition 4.a.i. was clarified by changing the requirement to "take corrective action" rather than eliminate.

Comment No. 3:

Monaco commented that Condition 9.b.ii. should be changed to clarify the visible emissions monitoring requirement.

No change.

Comment No. 4:

Monaco commented that Condition 14.b. could be interpreted to require testing of the entire facility if there was an isolated source of visible emissions, and that training should not be linked to testing.

The condition was modified to remove the linkage between operator training and testing since a lack of training may not result in an increased potential to violate particulate emissions limits. Facility-wide testing would not be required if an individual stack or process violated visible emissions standards.

Comment No. 5:

Monaco requested a clarification of the notification language in Condition 22.a. to specify what types of complaints would trigger a notification requirement.

This condition was clarified to specify that only formal complaints received trigger the notification requirement.

Comment No. 6:

Monaco requested Condition 26.a. be modified to allow for averaging of VOC content to demonstrate compliance.

This request is denied at this time since the VOC content limits in the permit are based on the VOC content of the materials as specified in the permit application.

Comment No. 7:

Monaco requested that Conditions 27.b.1.B, 30.b.1.B, and 38.b.1.B should be modified to allow the permittee to determine compliance with VOC content limits by using the mean value when material data sheets provide a range of VOC content.

This request is denied since it could result in an underestimation of emission and does not assure compliance with the applicable requirement.

Comment No. 8:

Monaco requested a typographical correction and a clarification of Condition 33.b. to include gel coat and fluid impingement technology.

The typo was corrected and the definition of non-atomized spray technology was clarified to include gel coat and fluid impingement technology.

Comment No. 9:

Monaco requested that the permit should be modified to remove the 112(g) case-by-case MACT language, and replace it with a requirement to comply with the proposed MACT standard for reinforced plastic composites production.

The permit was modified. The 112(g) language was removed and replaced with a requirement to comply with the MACT standard for reinforced plastic composites production, as a new source, upon promulgation of the standard.

Comment No. 10:

Monaco requested that the Plant Site Emissions Limits be modified to reflect emissions increases resulting from revised emissions estimates.

This request is denied since the draft permit was based on estimates contained in the application. Monaco may apply for a permit modification after the permit is issued to request increased PSELS.

Comment No. 11:

Monaco requested a typographical correction to Condition 48.b.

The correction was made to a cross-reference included in the condition.

Comment No. 12:

Monaco requested a clarification of the constant "K" used to calculate emissions and contained in Condition 43.a.

No change was made since the constant used in that equation is dependant on the units used in the calculation. It is simply a conversion constant to be used as needed to present emissions calculations in terms consistent with permit limits.

Comment No. 13:

Monaco requested that the table of emission factors be removed from the permit since the emission factors are included as an attachment to the permit.

The table of sample emission factors was removed from the permit as it was only included as a summary of factors. A complete table of resin and gel coat factors (CFA) is included as an attachment to the permit.

Comment No. 14:

Monaco requested additional permit language that clarifies that emission factors are not enforceable.

This request was denied as un-necessary. LRAPA and the Oregon DEQ do not consider emission factors enforceable; however, any emissions violations resulting from the use of inaccurate emission factors are enforceable.

Comment No. 15:

Monaco requested that Condition 49.b.ii be removed from the permit as not applicable.

This condition states that it only applies when applicable.

Comment No. 16:

Monaco requested a clarification of Condition 49.b.v., which relates to risk management plans.

This is a general condition with specific applicability conditions.

Comment No. 17:

Monaco requested clarification of DEQ and LRAPA rule citations in Condition 58.

Condition 58 was modified to be consistent with the permit application. The permittee specified two non-applicable requirements; however these were not included since they are applicable requirements.

55. The proposed permit was sent to EPA on October 15, 2001, for a 45-day review period. Because there were no substantive or adverse comments during the comment period, LRAPA requested and EPA agreed to an expedited review of five (5) days. On November 9, 2001, LRAPA received notice that EPA has no objection to issuance of this permit prior to the end of the 45-day review period. The public will have 105 days (45-day EPA review period plus 60 days) from the date the proposed permit is sent to EPA to appeal the permit with EPA

EMISSIONS DETAIL SHEETS

55. Following are the estimates for current and projected PM, VOC, CO, NO_x, SO₂, and total HAP emissions from the source (see Review Report Attachment B). Included with the emissions detail sheets are explanatory notes and the formulas that were used to estimate emissions

DJ
1/14/01