TECHNICAL SUPPORT DOCUMENT (TSD)
2005 AIR OPERATING PERMIT RENEWAL
LASCO YELM FACILITY

April 26, 2005

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DISCLAIMER

Information contained in this Technical Support Document is for purposes of background information only and is not directly enforceable.

FACILITY DESCRIPTION

Lasco's Yelm Washington facility produces bathroom fixtures including bathtubs, shower stalls and whirlpools in a variety of sizes and styles.

Major structures at Lasco's Yelm facility include two large warehouse buildings, an office building, a small resin mixing/storage building, four large above-ground tanks, a rail spur, outside storage area for finished product, a regenerative thermal oxidizer (RTO) unit, and a propane fuel tank. The two large warehouse buildings contain all of Lasco's production operations except for bulk mixing of resin, which takes place in a separate mixing building. Figure 1 provides a site map and other physical details of the facility layout.

Lasco operations result in emissions of Volatile Organic Compounds (VOCs) consisting primarily of the compound styrene, particulate dust, and minor amounts of combustion byproducts. Styrene emissions result from the curing of resin used to make Lasco's products. Particulate dust is generated during operations involving finishing of already cured parts. The minor amounts of combustion emissions result from combustion of natural gas to provide space heating for the two warehouse buildings, and from combustion of natural gas and VOC emissions in the Regenerative Thermal Oxidizer (RTO).

Bathware fixtures are produced in assembly lines by applying layers (laminating) of thermosetting plastic resin mixed with other inert materials on a mold. The liquid thermosetting plastic mixture is sprayed on to the mold in successive layers. Each primary layer is allowed to cure partially before the next layer is applied. After curing of the final layer, the product is separated from the mold. The mold is then cleaned and prepared for the next cycle.

The thermosetting plastic consist of resin which contains styrene monomer. While the production process relies upon the polymerization of styrene monomer to make the final product a rigid solid, a certain amount of the styrene is emitted as a volatile gas. These emissions occur primarily when the thermosetting plastic mixture is being spray applied and during the initial stages of curing.

TABLE 1- EMISSIONS UNITS & IEUS

	Description:	Specifications	Control Equipment
EU1	Production Line 1: Currently used to produce products with gelcoat as the 1st lamination. Referred to as the "FRP" line. For purposes of the AOP, EU1 is a distinct production line which uses gelcoat or a vacuum-formed acrylic sheet as the 1st laminate followed by polyester resin for subsequent laminates. All processes of EU1 are located in Building #1 except for the product trim and drill booth and parts repair. Emissions include VOC and particulates from spray coating operations.	Spray Booth Modules (9 total): 2 gelcoat booths 1 Specialty gelcoat booth 2 barrier coat booths 4 lamination booths Fans: One, 3 hp exhaust fan per booth. Filters: 4" dry filters Stacks: 8 exhaust stacks Mixing Room: 1 small exhaust fan Note: These specifications were correct at the time of permit issuance and do not constitute compliance limits.	Regenerative Thermal Oxidizer (RTO) serving the two gelcoat booths and the lamination #1 booth.
EU2	Production Line 2: Currently used to produce products with vacuum formed acrylic as the 1st laminate. Referred to as the "Acrylic" line. EU2 is a distinct production line which use a gelcoat or vacuum-formed acrylic sheet as the 1st laminate followed by polyester resin for subsequent laminates. All processes of EU2 are located in Building #2. Emissions include VOC and particulates from spray coating operations.	Spray Booth Modules (3 total): 3 acrylic line booths Fans: One, 3 hp exhaust fan per booth. Filters: 4" dry filters Stacks: 3 exhaust stacks Note: These specifications were correct at the time of permit issuance and do not constitute compliance limits.	None
EU3	Mixing Operations: VOC and particulate emissions from resin mixing operations which support both production lines. Conducted in separate mixing building.	Batch mixer, no air pollution controls.	None
IEU1	Bulk Resin Storage Tanks	Four, 6,000 gallon above ground resin storage tanks used to store bulk resin.	None
IEU2	Process Dust Emissions	Particulate dust from trimming, drilling, and abrasive forming of finished product.	Dust collection systems
IEU3	Heating Units	Natural gas fired, forced air, convection and infrared heaters used for space heating, make-up air heating and to provide heat for product curing. All less than 5 MMBtu/hr heat input.	None
IEU4	PVC Glue Use:	Use of PVC glue in finish plumbing of the whirlpool products.	None

FIGURE 1 – Facility Map

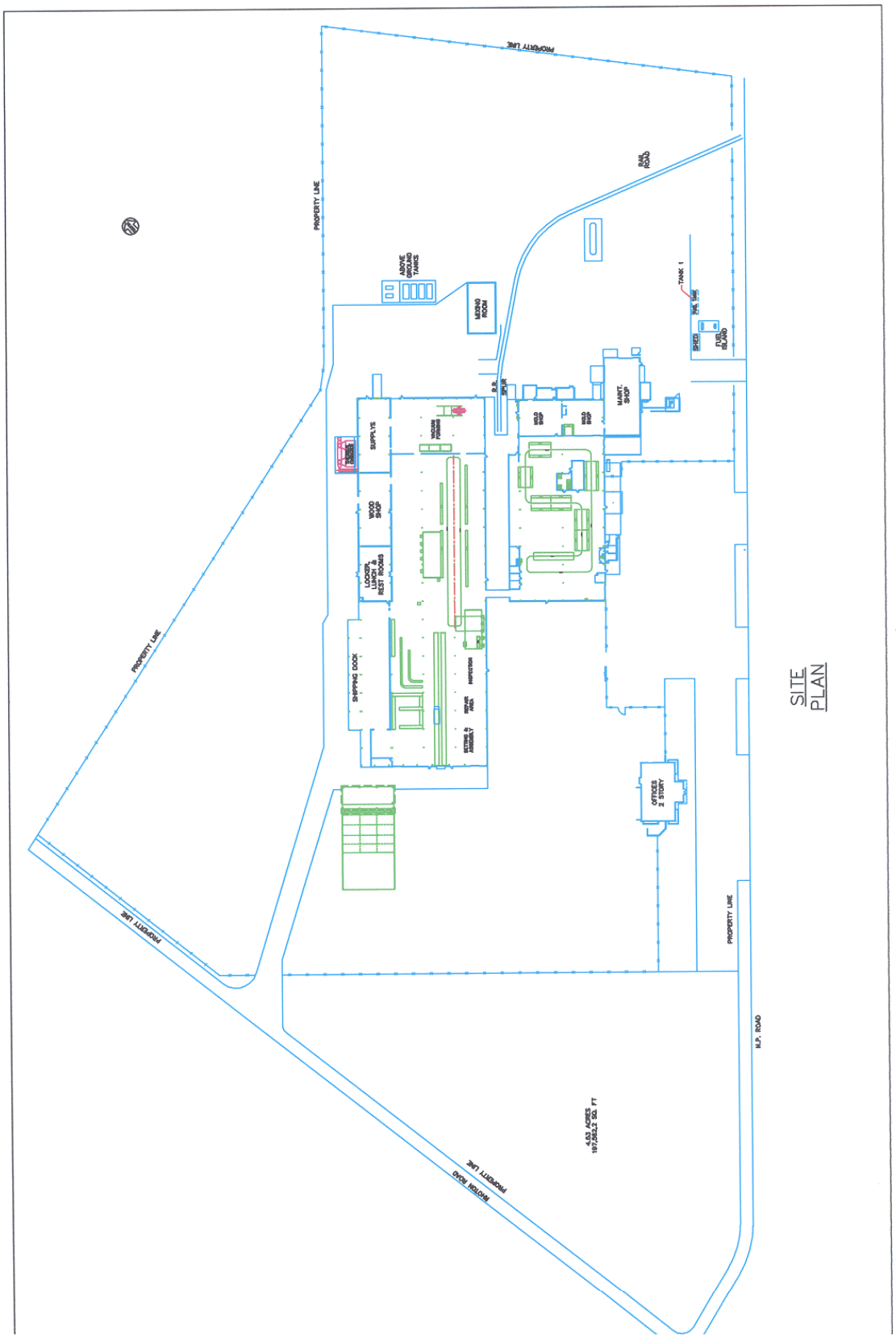


TABLE 2 - STACK SPECIFICATIONS

ID	Stack Serves	ACFM	Diameter	Height
RTO	Gelcoat Booth	30,000 acfm	34”	40’
	Lam 1 Booth Exhaust			
	Lam 1 Booth Exhaust			
S3	Barrier Coat Exhaust	15,000 scfm	34”	75’
S4	Barrier Coat Exhaust	15,000 scfm	34”	75’
S7	Lam 2 Booth Exhaust	10,000 scfm	34’	75’
S8	Lam 2 Booth Exhaust	10,000 scfm	34’	75’
S9	Lam 3 Booth Exhaust	15,000 scfm	34”	75’
S10	Lam 3 Booth Exhaust	15,000 scfm	34”	75’
S11	Acrylic Line Booth Exhaust	15,000 scfm	34”	75’
S12	Acrylic Line Booth Exhaust	15,000 scfm	34”	75’

As defined in the AOP, the entire facility is considered as a single stationary source. This distinction is consistent with current permitting practices in ORCAA's jurisdiction and in the state of Washington, and is consistent with the definition of a stationary source in WAC 173-400. WAC 173-400-030 (74) defines stationary sources as, "any building, structure, facility or installation which emits or may emit any contaminant." Buildings #1 and #2 at the facility are substantially joined such that production lines and operations can span both structures and, therefore, should be considered as a single stationary sources.

The facility contains two major emission units. Emissions Unit #1 (EU1) is contained primarily in Building #1. Emissions Unit #2 (EU2) is contained primarily in Building #2. Both EU1 and EU2 are assembly lines containing several distinct areas where emissions result. EU1 contains six distinct spray booths. EU2 also contains several spray booths and stacks. A detailed description of both emissions units is provided in the Process Descriptions section of this document.

For purposes of this permit, the entire production line from mold preparation through final product storage is considered as part of an emissions unit. ORCAA believes that defining the entire production line as an emissions unit is consistent with current permitting practices at ORCAA and with the definition of “emissions unit” contained in WAC 173-400. Under WAC 173-400-030(23), emissions unit is defined as, "any part of a stationary source which emits or would have the potential to emit any air pollutant subject to regulation..."

Both EU1 and EU2 contain resin spray areas made up of modular spray booth segments. ORCAA considers individual spray booth segments as control devices associated with the emissions unit. In the case of EU1, emissions from the spray booths serving the gelcoating and lamination #1 segments of the production line are ducted to a Regenerative Thermal Oxidizer (RTO) to control VOCs by incineration.

Insignificant emissions units and activities at the facility include gas fired make-up air space heaters, gas fired radiant space heaters, four 6,000 gallon bulk resin storage tanks, process dust emissions from trimming, drilling and abrasive forming of finished products, minor uses of materials containing VOCs such as PVC glue, cans of spray paint, and minor amounts of cleaning solvents, an above ground propane storage tank, and use of fork lifts.

The four, 6,000 gallon bulk resin storage tanks are insignificant on the basis of size according to WAC 173-401-533(c), which defines storage tanks less than 10,000 gallons in capacity and storing volatile organic liquids with a vapor pressure of less than 80mm Hg at 21^{o}C as insignificant emissions units. According to MSDS provided in Lasco's original AOP application, the vapor pressure of resin is less than 4mm Hg.

Natural gas fired space heaters for heating the work areas are insignificant on the basis of size according to WAC 173-401-533(e). This section defines combustion sources less than five million Btu/hr exclusively using natural gas, butane, or propane as insignificant. Attachment 6 includes a listing of space heaters and corresponding heat rates for Lasco's Yelm plant.

REGULATORY BACKGROUND

Lasco's Yelm facility was established by the original owner, HYTEC, in 1981 under NOC #310. NOC #310 was reviewed and approved unconditionally by ORCAA on 2/26/81. After this date, records indicate one plant expansion that occurred in the mid 1980s. However, records of correspondence regarding this expansion indicate that ORCAA was aware of the expansion and did not consider it as a modification triggering a NOC. There have been several minor modifications and addition of new emission units and control devices at the facility since 1981 that have triggered new source review. The outcome of ORCAA's approval of these cases will be discussed in later sections.

NOC #310 provided unconditional approval to HYTEC to establish a Fiberglass Reinforced Plastics (FRP) plant at the Yelm site. Documentation of the application and ORCAA's review and approval of NOC #310 is sparse. The application consisted of a request letter which generally describes the facility and the company's intent to establish in Yelm. Record of ORCAA's approval of NOC #310 includes NOC Form 1 signed by ORCAA's Control Officer at that time and stamped "APPROVED". ORCAA recognizes these records as proof of compliance with new source review requirements for the facility when it was established in Yelm. However, though records associated with NOC #310 indicate that review and approval of the Yelm facility was consistent with the

"standard of care" for new source review at that time, both ORCAA's approval and the associated NOC application are deficient by today's air regulatory standards in that they lack specificity.

ORCAA's approval of NOC #310 did not include any associated Approval Order containing emission limitations and other conditions necessary for assuring compliance. Neither ORCAA's approval nor the NOC application describe emission units or document the facility's maximum capacity to emit. Also, there was a lack of documentation of any PSD threshold determination.

These deficiencies were later rectified prior to issuance of Lasco's initial AOP in July of 1997 through a Regulatory Order issued on 6/20/96 pursuant to WAC 173-400-091, Voluntary Limits on Emissions. This Regulatory Order established an enforceable limit on plant-wide VOC emissions, as well as monitoring, recordkeeping and reporting requirements.

Since 1996, Lasco has completed several additional modifications to the facility that have required ORCAA's prior approval through a NOC:

1. In 1998, Lasco increased the heights of all exhaust stacks serving the spray booths. Twelve separate stacks were increased to a height of 75' above grade. This action was approved through the special flexibility condition in Lasco's original Air Operating Permit (AOP) (condition 9.1).
2. In 2000, Lasco received approval to install a Regenerative Thermal Oxidizer (RTO) to serve the gelcoat booth (# 00NOC011).
3. In 2001, Lasco received approval to route emissions from the Lamination #1 spray booth in the "gelcoat" line to the RTO (01NOC119).
4. In 2002, Lasco received approval to install a polyurethane production line. However, this project has since been abandoned.

POTENTIAL TO EMIT

Maximum potential to emit was determined for purposes of issuing Lasco's initial AOP in 1997. Both daily and annual potential to emit were determined based on records of actual operating schedules, production rates, corresponding actual material usage rates and site specific emission factors.

ORCAA's file on Lasco contains emissions and operating records as part of the emissions inventory. The choice of what year or years to use was limited by the quality of this data. Though approval to construct the facility was granted in 1981, full operation of the facility did not occur until after 1987 when Lasco acquired the facility from HYTEC. Also, though annual emissions records are complete back to 1981, records on operating schedule up to 1990 appear to reflect the general plant operating schedule rather than the operating schedule of the production lines themselves. For these reasons, data from 1990 through 1995 was used.

For these years, emissions were calculated separately for the gel coat, lamination

coats, and barrier coats using mid range AP-42 emission factors (see spread sheet). The following formula was used:

(tons gel coat actual)*(% monomer$_{gel\ coat}$)*(EF$_{gel\ coat}$)
\+ (tons resin$_{lamination}$ actual)*(% monomer$_{resin}$)*(EF$_{resin}$)
\+ (tons resin$_{barrier}$ actual)*(% monomer$_{barrier}$)*(EF$_{resin}$)

= Actual Annual Emissions

The emission factors used in these equations were based on Lasco source tests conducted in June of 1996. For each year, actual annual emissions were divided by an annual capacity factor to approximate annual maximum capacity to emit. Annual capacity factors were obtained from reported operating schedule data which accompanies the Lasco's annual inventory submittal. Annual maximum capacity to emit was then divided by 365 to approximate the daily maximum capacity to emit.

Theoretically, the maximum annual capacity to emit results should be identical for all years. This, however, was not the result due to inaccuracies in the operating schedule and other data used. Therefore, it was assumed that the highest result best approximated the Lasco's maximum potential to emit. This result was 624 tons per year for the year 1995.

Therefore, Lasco's maximum daily potential emission rate for VOCs is:

(624 tpy)*(2000 lbs/ton)/365 = 3419 pounds per day VOCs

TABLE 3 - MAXIMUM POTENTIAL TO EMIT

Maximum Daily Potential to Emit = 3419 lbs/day (1.71 tons/day)
Maximum Annual Potential to Emit = 624 tons/year

ANNUAL EMISSIONS LIMIT

Though the potential to emit of the facility was significantly greater than 250 tons per year (tpy) since the facility was established in 1981, actual emissions since 1981 have remained below 250 tons per year. Figure 2 shows actual annual emissions from 1981 to the present. Annual emissions for years prior to 1997 were calculated using actual material use rates and emission factors from Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources (EPA, AP-42). For 1997 and

after, annual emissions were calculated using actual material use rates and emission factors based on source testing conducted at the facility.

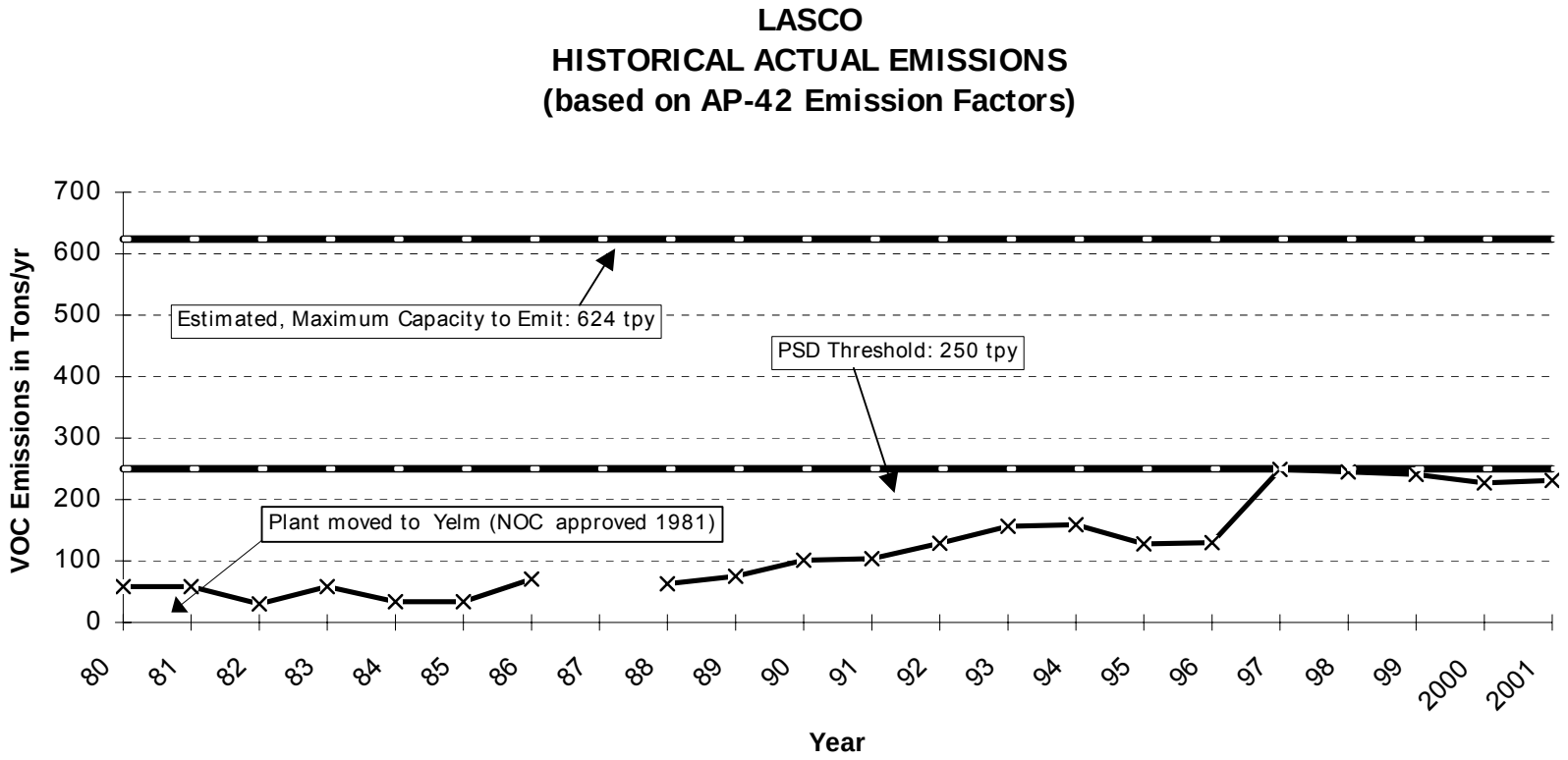
Since applicability of federal and state air regulations are generally based on maximum potential to emit rather than actual emissions, ORCAA concluded in 1997, just prior to issuance of Lasco's first AOP, that a federally enforceable limit on VOC emissions was needed to rectify the difference between Lasco's potential to emit and actual emissions. This was accomplished prior to issuance of Lasco's first AOP through a Regulatory Order issued by ORCAA on 6/20/96, pursuant to WAC 173-400-091, Voluntary limits on emissions. This Regulatory Order established an enforceable limit on plant-wide VOC emissions to no more than 249 tons per consecutive 12 month period. Conditions from this order are included in Lasco's AOP.

DAILY EMISSIONS LIMIT

Lack of a daily emission limit through NOC #310 was also a deficiency since VOCs are precursors to ozone and styrene, the predominant VOC emitted, is an air toxic with acute health impacts that can occur from short term exposures to elevated styrene concentrations. For these reasons a daily VOC limit of 3419 pounds per day is included in Lasco's AOP pursuant to WAC 173-401-600(1) which gives ORCAA authority to include conditions in permits necessary for assuring continuous compliance. In this case, without the limit, it would be difficult to determine whether emission rates exceed levels that were previously reviewed and approved through the agency's NSR process that existed at the time. The limit reflects Lasco's maximum potential daily emissions assuming a capacity factor that represents the facility as it was originally approved.

Lasco's previous AOP required daily VOC emissions monitoring by calculating the daily VOC emission rate using mass balance calculations and based on the amount of material used during the day, composition of the material, and representative emission factors. Lasco's previous AOP also required emission factors to be approved by ORCAA and determined through source testing, and specific conditions for monitoring material use and composition. These conditions are included in Lasco's current permit with a few amendments for clarification.

Figure 2 – Actual Historical Emissions



PERMIT FLEXIBILITY PROVISIONS

Flexibility provisions established in Lasco's initial AOP have been removed from the 2005 permit as a result of complications and conflicts with the new National Emissions Standards for Hazardous Air Pollutants under Subpart WWWW (Subpart WWWW). This new subpart imposes new requirements and emissions limits on Lasco that preclude the flexibility provisions that were part of Lasco's original permit. Physical changes or changes in the methods of operation subject to new source review (NSR) that were previously pre-approved under the flexibility provisions of the former permit now need to go through the standard NSR approval process. Also, the former requirement for Lasco to maintain a pollution prevention (P2) plan and meet P2 goals as a condition for flexibility have been removed.

NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS.

National Emissions Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 63, Subpart WWWW will apply to Lasco as will the corresponding applicable subsections from 40 CFR Part 63, Subparts A and SS. The table in Attachment 1 provides a thorough summary of applicability of each individual subsection from these subparts and where applicable requirements are located in the AOP.

COMPLIANCE ASSURANCE MONITORING (CAM) RULE

The CAM rule under 40 CFR Part 64 applies at major sources to emissions units with an uncontrolled emission rate greater than 100 tons per year of a pollutant subject to an emissions limit. The CAM rule applies to EU1 and EU2 at Lasco since:

1. The combined emissions from EU1 and EU2 are subject to a daily and an annual VOC emission limitation;
2. A control device, the Regenerative Thermal Oxidizer (RTO) is used to comply with both the limitations; and,
3. The pre-control potential to emit from EU1 and EU2 is greater than 100 tons per year.

CAM requirements are incorporated into Lasco's permit through several conditions as indicated in the following table:

TABLE 4 - CAM PERMIT CONDITIONS

CAM Requirement Citation	Requirement	AOP Condition
§64.3(a)	General criteria (CAM)	7.8, Table 7.3
§64.3(b)	Performance criteria (CAM)	7.8, Table 7.3
§64.6(c)	Permit requirements	7.8
§64.7(a)	Commencement of Operation. The owner or operator shall conduct the monitoring required under this part upon issuance of a part 70 or 71 permit...	7.8(a)
§64.7(b)	Proper Maintenance. At all times the owner or operator shall maintain the monitoring, including but not limited to maintaining necessary parts for routine repairs...	5.2(l)
§64.7(c)	Continued Operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities... the owner or operator shall conduct all monitoring in continuous operation...	7.8(b)
§64.7(c)	... Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part...	7.8(c)
§64.7(d)	Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device) to its normal or usual manner of operation...	5.1(f)
§64.7(e)	Documentation of need for improved monitoring.	9.7
§64.8	Quality Improvement Plan Required	7.8(e)
§64.9(a)	General reporting requirements.	9.4
§64.9(b)	General recordkeeping.	8.10; 8.11; 8.12

MONITORING

The monitoring conditions from Lasco's previous AOP were incorporated into the new AOP with a few revisions to integrate requirements from 40 CFR 60, Subpart WWWW and to add CAM conditions. The following describes current monitoring methods and techniques for Lasco, which are required in the AOP.

Monitoring compliance with daily and annual emissions limits is accomplished indirectly by monitoring material inputs and outputs, material composition, and production rate. Material flows monitored include resin, gelcoat, and resin and gelcoat additives. Production is monitored in terms of the number of marketable units produced.

In general, daily emissions are computed by multiplying the amount of styrene monomer used per day times the appropriate plant specific emission factor. The plant specific emission factors are required to be based on source testing and approved by OACPA. The amount of styrene monomer used is computed by multiplying the amount of resin

and gelcoat used, times the percent composition of styrene monomer in those materials respectively. The amount of styrene monomer in the resin and gelcoat used by Lasco is verified in the Material Safety Data Sheets (MSDS) and "Certificates of Analysis" which accompany shipments of these materials. The amount of resin and gelcoat used is monitored by Lasco and is used as the basis for computing daily emissions.

TABLE 5 - DAILY EMISSIONS EQUATION

$Emissions_{lbs/day} = \Sigma_i(Usage_{i,\ lbs/day})*(\%\ Styrene_i)*(EF_i)$

Where:

1. Subscript "i" denotes the specific process and material: gelcoat, barrier coat, lamination coats.
2. EF_i denotes the plant specific emission factor for process "i".

On a daily basis, monitoring is conducted and the data is input into Lasco's computer system. Lasco's computer system stores the data in a database, and, on a monthly basis, computes certain production parameters which are used to evaluate the plant's production and material use efficiency.

Bulk polyester resin is stored in four, 6,000 gallon storage tanks located outside and to the east of buildings 1 and 2. These tanks are referred to as the "bulk tanks". The daily input and output of resin from these tanks is determined daily through tank level monitoring.

Resin is pumped from the bulk tanks to the mixing building where fillers are added in a batch mixer. After a batch is mixed, the resin is pumped to one of three "day tanks" which are located in the mixing room of building 2. The day tanks keep the mixture agitated and at the proper temperature for application. The resin is circulated from each day tank in a continuous loop to a specific spray booth for use.

Resin comes to the Yelm plant by either rail cars or tanker trucks and is off-loaded directly into either of the four bulk tanks. The amount of resin received during a shipment is determined by measuring tank levels before and after off-loading and converting the difference into gallons using a conversion chart which relates the tank's level with the volume in gallons of material stored. The amount of resin off-loaded in gallons is then converted to pounds using a resin density provided in the "Certificate of Analysis" or Material Safety Data Sheet (MSDS) which accompanies the shipment.

Bulk tank levels are measured each day to determine resin usage since the last reading. In a similar fashion as discussed above, the displacement in tank level is converted to volume in gallons and then pounds. This monitoring accounts for the material outflow from the bulk tanks.

At the mixing building, fillers are added to the raw resin in a batch mixer according to the required material specifications for the particular batch. For example, a barrier coat batch is different compared to a laminate coat batch. The amount of each particular filler

is weighed and the composition of the batch is verified by comparing the material's measured density to the computed density based on the formula for the mixture. After mixing the mixture of resin and fillers is pumped to a specific day tank.

The level of material remaining in each day tank at the end of the last shift is measured daily either by measuring the tank level or by taking a reading from the load cell if the tank is equipped with a load cell. If the day tank is equipped with a load cell, the amount of resin in pounds is directly recorded. If tank level is measured, the day tank level in inches is converted to gallons using a tank conversion chart which relates tank level to volume, and then to pounds using the density of the mixture. In either case, the amount of raw resin remaining in the day tank is computed by "backing-out" the amount of fillers added.

The amount of resin usage in pounds on a daily basis can then be computed by the following formula:

TABLE 6 - RESIN MONITORING

$\text{Bulk Tanks}_{\text{daily output}} - \text{Day Tanks}_{\text{pounds remaining}} = \text{Daily Usage}$

where:

1. $\text{Bulk Tanks}_{\text{daily output}}$ is the total daily amount of raw resin output from the bulk resin storage tanks, in units of pounds.

2. $\text{Bulk Tanks}_{\text{daily output}} = \Sigma_{i=\ 1\ \text{to}\ 4}\ \text{Bulk Tank}_{i,\ \text{beginning}} - \text{Bulk Tank}_{i,\ \text{end}} + \text{Bulk Tank}_{i,\ \text{inputs}}$

3. $\text{Day Tanks}_{\text{pounds remaining}}$ is the total remaining amount of raw resin left in the day tanks at the end of the day, in units of pounds.

4. Pounds computed from volume in gallons using known density of the raw resin and known amount of fillers added.

5. Volume in gallons computed using the tank's unique level to volume conversion chart.

6. Tank level measured directly.

Gelcoat is stored in portable drums, primarily 55 gallon drums. The amount of gelcoat usage is monitored daily by taking a daily inventory of drums storing gelcoat. Partially used drums are accounted for by measuring the remaining level in the drum and computing the amount of gelcoat used.

Lasco currently monitors unit production for purposes of evaluating plant performance.

Monitoring unit production also will provide useful information for purposes of evaluating pollution prevention (P2) status and improvements. The number per day of marketable units produced is monitored and input into Lasco's computer database along with daily material use data. On a monthly basis this information is used to compute efficiency parameters such as the amount of material used per unit, the amount of waste per marketable unit, and the amount of material per unit. These parameters are then compared to Lasco's standard rates which reflect optimal efficiency and performance.

The pounds of available styrene used per volume of material applied will be computed to track the Lasco's progress towards reducing styrene in the process. The volume of waste per volume of useful product produced will be computed to track Lasco's progress towards improving spray application efficiency. The pounds of styrene emitted per pound of available styrene in the process will be computed periodically after source testing to evaluate improvements in the styrene emission factor.

REGULATORY BASIS

The following table provides the regulatory basis for each permit condition.

TABLE 7 - STATEMENT OF BASIS

CONDITION	REGULATORY BASIS
2.1 Duty to comply.	Standard Term or Condition Authority: WAC 173-401-620(2)(a)
2.2 Duty to Provide Information.	Standard Term or Condition Authority: WAC 173-401-620(2)(e)
2.3 Need to Halt or Reduce Activity Not a Defense.	Standard Term or Condition Authority: WAC 173-401-620(2)(b)
2.4 Property Rights.	Standard Term or Condition Authority: WAC 173-620(2)(d)
2.5 Annual Fees.	Standard Term or Condition Authority: ORCAA 1.6
2.6 Severability.	Standard Term or Condition Authority: WAC 173-620(2)(h)
2.7 Federally Enforceable Requirements	Standard Term or Condition Authority: WAC 173-401-625
2.8 Permit Actions.	Standard Term or Condition Authority: WAC 173-401-620(2)(c)
2.9 Permit Appeals.	Standard Term or Condition Authority: WAC 173-401-620(2)(l)
2.10 Permit Renewal and Expiration.	Standard Term or Condition Authority: WAC 173-401-705, WAC 173-401-610 and 620(2)(j)
2.11 Duty to Supplement or Correct Application.	Standard Term or Condition Authority: WAC 173-401-500(6)
2.12 Reopening for Cause.	Standard Term or Condition Authority: WAC 173-401-730
2.13 Changes Requiring Permit Revision/Off Permit Changes.	Standard Term or Condition Authority: WAC 173-401-722; WAC 173-401-724
2.14 Permit Modifications.	Standard Term or Condition

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
	Authority: WAC 173-401-720; WAC 173-401-725
2.15 Emission Trading.	Standard Term or Condition Authority: WAC 173-401-620(2)(g)
2.16 Compliance Maintenance.	Standard Term or Condition Authority: WAC 173-401-630(3)
2.17 False or Misleading Statements .	Standard Term or Condition Authority: ORCAA 3.07; WAC 173-400-105(7)
2.18 Inspection and Entry.	Standard Term or Condition Authority: WAC 173-401-630(2)
2.19 Access for Inspection	Standard Term or Condition Authority: **State/Local Only:** ORCAA 1.3.01(e)
2.20 Credible Evidence	Standard Term or Condition Authority: 40 CFR 52.12; 40 CFR 53.33; 40 CFR 60.11; 40 CFR 61.12
2.21 Emergency as Affirmative Defense.	Standard Term or Condition Authority: WAC 173-401-645(2)&(5)
2.22 Unavoidable Excess Emissions Excused.	Standard Term or Condition Authority: WAC 173-400-107(2); ORCAA 1.9.15
3.1 New Source Review	Actions Requiring Prior Approval Authority: WAC 173-400-110 ORCAA 1.7
3.2 Replacement or Substantial Alteration of Existing Control Equipment	Actions Requiring Prior Approval Authority: WAC 173-400-114
3.3 Demolition and Asbestos Projects.	Actions Requiring Prior Approval Authority: ORCAA 1.14.05
3.4 Demolition and Renovation Projects	Actions Requiring Prior Approval Authority: 40 CFR 61.145(b)
3.5 Temporary Sources	Actions Requiring Prior Approval Authority: ORCAA 1.7.01; ORCAA 1.07
4.1 Demolition and Renovation Projects	Facility-Wide & General Applicable Requirement

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
	Authority: 40 CFR 61.145(b); ORCAA1.14.05
4.2 Protection of Stratospheric Ozone	Facility-Wide & General Applicable Requirement Authority: 40 CFR 82
4.3 Emissions Detrimental to Persons or Property	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(5): ORCAA 1.9.23
4.4 Fallout	Facility-Wide & General Applicable Requirement Authority : WAC 173-400-040(4); ORCAA 1.9.05(e)
4.5 Odors	Facility-Wide & General Applicable Requirement Authority**:** WAC 173-400-040(4); ORCAA 1.9.11(a)
4.6 Odors	Facility-Wide & General Applicable Requirement Authority: ORCAA 1.9.11(c)
4.7 Fugitive Emissions Control	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(3)(a)
4.8 Fugitive Dust Control	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(8)(a); ORCAA 1.9.05(c)
4.9 Concealment and Masking	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(7); ORCAA 1.9.12
4.10 Maintenance and Repair of Air Pollution Control Equipment and Processes	Facility-Wide & General Applicable Requirement Authority: ORCAA 1.9.03
4.11 General Standards for Maximum Visual Emissions	Facility-Wide & General Applicable Requirement Authority: ORCAA 1.9.03; WAC 173-400-040(1)

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
4.12 Sulfur Dioxide	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(6)
4.13 General Particulate Standards for Combustion Units	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-050(1); ORCAA 1.9.05(a)
4.14 General Emission Standards for Process Units	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-060; ORCAA 1.9.05(a)
4.15 Annual Emissions Limit	Facility-Wide & General Applicable Requirement Authority: Regulatory Order Issued 6/20/96 Pursuant to WAC 173-400-091
4.16 No Net Emissions Increase	Facility-Wide & General Applicable Requirement Authority: WAC 173-401-630(1)
5.1(a) RTO Emission Reduction Credit	Requirement Specific to EU1 and EU2 Authority: 00NOC011, conditions 2, 3, and 5
5.1(b) RTO Combustion Chamber Temperature Monitoring	Requirement Specific to EU1 and EU2 Authority: 00NOC011, condition 4
5.1(c) RTO Opacity Standard	Requirement Specific to EU1 and EU2 Authority: 00NOC011, condition 8
5.1(d) RTO Operation and Maintenance Plan	Requirement Specific to EU1 and EU2 Authority: 00NOC011, condition 9
5.1(e) Maintenance and Repair of the Regenerative Thermal Oxidizer	Requirement Specific to EU1 and EU2 Authority: ORCAA 1.9.16
5.1(f) Proper Maintenance of Monitoring Systems	Requirement Specific to EU1 and EU2 Authority: §64.7(b)
5.1(g) Response to Excursions or Exceedances	Requirements Specific to EU1 and EU2 Authority: §64.7(d)
6.1 Subpart WWWW Compliance Dates	Subpart WWWW Authority: 40 CFR 63: §63.6(c)(1) and §63.5800
6.2 Applicable Emissions and Work Practice Standards.	Subpart WWWW Authority: 40 CFR 63: §63.5805(a)&(g);

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
	§63.5810; §63.5835(a)&(b)
6.3 Performance Testing and Compliance Demonstration.	Subpart WWWW Authority: 40 CFR 63: §63.5840; §63.5845, §63.5850, §63.5855, §63.5860, and §63.7; 40 CFR 63, subpart SS
6.4 Emission Calculations	Subpart WWWW Authority: 40 CFR 63: §63.5796; §63.5797; §63.5798; §63.5810
6.5 Requirements for Add-on Control Devices	Subpart WWWW Authority: 40 CFR 63: §63.5855, §63.5805(h), §63.988(c), and §63.983(a)(2)&(3); WAC 173-401-615(1)(b)
6.6 Activities Prohibited Under 40 CFR 63, Subpart A	Subpart WWWW Authority: 40 CFR 63, §63.4
6.7 General Duty To Minimize Emissions Under 40 CFR 63, Subpart A	Subpart WWWW Authority: 40 CFR 63: §63.5835(c); §63.6(e)(1)(i)
6.8 Startup, Shutdown and Malfunction, Operation and Maintenance Requirements	Subpart WWWW Authority: §63.6(e)(3)(ii)
6.9 Shutdown and Malfunction Plan Required	Subpart WWWW Authority: 40 CFR Part 63: §63.5835(d), §63.6(e)(3
6.10 Startup, Shutdown and Malfunction, Required Records, Notifications and Reports.	Subpart WWWW Authority: 40 CFR 63.6(e)(3)
6.11 Monitoring Continuous Compliance.	Subpart WWWW Authority: 40 CFR 63: §63.5895, §63.5805 and §63.5900
6.12 Notifications.	Subpart WWWW Authority: 40 CFR 63: §63.5905
6.13 Reporting	Subpart WWWW Authority: 40 CFR 63: §63.5910
6.14 Records	Subpart WWWW Authority: 40 CFR 63: §63.5915 and §63.5920
6.15 Construction or Reconstruction of an Affected Source	Subpart WWWW Authority: 40 CFR Part 63, §63.5

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
6.16 Alternatives	Subpart WWWW Authority: 40 CFR 63, Subpart WWWW and Subpart A
7.1 Opacity Surveys	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.2 Certified Opacity Reading Required	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.3 Certified Opacity Reading Procedures	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.4 Monitoring Air Impacts Which are Detrimental or a Nuisance to Persons or Property	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.5 Fugitive Emissions and Dust Control Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.6 Sulfur Dioxide Emissions Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.7 Pollution Control Equipment Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.8 Compliance Assurance Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b); 40 CFR Part 64; 00NOC011, Conditions 1, 4, and 5, 4/13/2001
7.9 Particulate Testing Required	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.10 Performance Testing	Compliance Monitoring Conditions Authority: Specific to each subpart: a) WAC 173-400-105(4); b) ORCAA 1.3.01(j)
7.11 Emission Calculations	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.12 Monitoring Compliance with Annual Emissions Limit.	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
7.13 Monitoring Compliance with Daily Emissions Limit	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
8.1 Retention and Availability of Records.	Recordkeeping Authority: WAC 173-401-615(2)
8.2 Record of Changes.	Recordkeeping Authority: WAC 173-401-615(2)(b)

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
8.3 Monitoring Records.	Recordkeeping Authority: WAC 173-401-615(2)(a)
8.4 Record of Permit Deviations.	Recordkeeping Authority: WAC 173-401-615(3)(b)
8.5 Availability of Emissions Records	Recordkeeping Authority: ORCAA 1.13.02(b)
8.6 Emissions Records	Recordkeeping Authority: WAC 173-400-105(1); ORCAA 1.13.02(a)
8.7 Unlawful Reproduction or Alteration of Documents.	Recordkeeping Authority: ORCAA 1.3.09
8.8 Display of Orders, Certificates and Other Notices.	Recordkeeping Authority: ORCAA 1.3.11
8.9 Record of Complaints.	Recordkeeping Authority: WAC 173-401-615(1)(b)&(2)
8.10 Record of Actions Taken to Maintain Air Pollution Control Equipment	Recordkeeping Authority: WAC 173-401-615(2)(a); §64.9(b)(1)
8.11 Paperless Records	Recordkeeping Authority: WAC 173-401-615(2)(a); §64.9(b)(2)
8.12 EU1 & EU2 Startup/Shutdown Records	Recordkeeping Authority: §64.9(b)
8.13 MACT Applicability Records	Recordkeeping Authority: 40 CFR 63.1(b)(3); 40 CFR 63.10(b)(3)
8.14 Material Composition Records	Recordkeeping Authority: WAC 173-401-615(2)(a)
8.15 Material Use Records	Recordkeeping Authority: WAC 173-401-615(1)(b) & (2); ORCAA Regulatory Order dated June 20, 1996 issued pursuant to WAC 173-400-091
9.1 Certification of Reports.	Reporting Authority: WAC 173-401-630(1)
9.2 Annual Compliance Certification.	Reporting Authority: WAC 173-401-630(5)

TABLE 7 CONTINUED

CONDITION	REGULATORY BASIS
9.3 Confidential Information	Reporting Authority: ORCAA 1.3.03
9.4 Monitoring Summary Reports.	Reporting WAC 173-401-615(3)(a); §64.9(a)
9.5 Reporting Deviations From Permit Conditions.	Reporting Authority: WAC 173-401-615(3)(b); WAC 173-400-107(3); WAC 173-401-645
9.6 Notification of Control Equipment Malfunction	Reporting Authority: WAC 173-401-615(2)
9.7 Notification of Need for Improved Monitoring of EU1 and EU2	Reporting Authority: §64.7(e)
9.8 Notification of Complaint Received	Reporting Authority: WAC 173-401-615(2)
9.9 Annual Inventory Report.	Reporting Authority: WAC 173-400-105(1); ORCAA 1.13 (**Local Only)**
9.10 Source Test Plans.	Reporting Authority: WAC 173-401-630(1)
9.11 Source Test Reports.	Reporting Authority: WAC 173-401-630(1)
10.1 Permit Shield.	Permit Shield Authority: WAC 173-401-640(1)
10.2 Inapplicable or Exempt Requirements.	Permit Shield Authority: WAC 173-401-640
10.3 Exclusions	Permit Shield Authority: WAC 173-401-640

PROCESS FLOW

GELCOAT LINE

Operation A1- Mold Preparation

This area is the beginning of the manufacturing cycle on the conveyor. Bare molds are cleaned, repaired if necessary, waxed and polished prior to gel coating.

Operation A2- Gel Coat Spray

A highly pigmented and filled polyester resin gel coat is sprayed on the male bathtub/shower mold through the center nozzle of a three nozzle airless spray gun. The gel coat is supplied by air driven pumps from 55 gallon drums. The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

Exhaust from the spray booths serving the gelcoat segment of the production line is routed to the RTO for control of VOC emissions. On a very limited basis, gelcoat is also spray applied in a small spray booth located adjacent to, but separate from the production line. This spray booth is used to apply gelcoat with specialty color combinations and is considered as a separate segment in the process (see A17 below).

Acetone is used in this area for cleaning gun tips.

Operation A3- Barrier Coat Spray

A polyester resin barrier coat is sprayed on the previously gel coated bathtub/shower mold through the center nozzle of a three nozzle airless spray gun. The barrier coat resin is mixed with calcium carbonate by a Hy-Solve disperser and then is delivered to the holding tank. The highly filled barrier coat resin is supplied to the gun, from the holding tank, by an air driven pump.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle. The barrier coat functions as a barrier between the gelcoat and subsequent layers to prevent fiberglass from penetrating the gelcoat surface. The barrier coat is spray applied within the fully enclosed spray booths following the gelcoat spray booths. Since less styrene is emitted during barrier coat application, exhaust from the spray booth serving the barrier coat segment of the production line is emitted directly to the atmosphere via the barrier coat booth exhaust stack.

Acetone is used in this area for cleaning gun tips.

Operation A4- Lamination I Spray

A highly pigmented and filled fiberglass reinforced laminate is sprayed on the previously barrier coated bathtub/shower mold through the center nozzle of a three nozzle airless spray gun. The laminate resin is mixed with calcium carbonate by a Hy-Solve disperser and delivered to the holding tank. The highly filled laminate resin is supplied to the gun, from the holding tank, by an air driven pump. The gun has a fiberglass chopper unit mounted on top and is driven by an air motor.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

The volatile portion of resin is styrene monomer, a reactive diluent of the resin system, which polymerizes with the polyester resin solid to become part of the finished product. The catalyst is neutralized by the polymeric reaction and locked within the polymer.

Exhaust from the spray booths serving the lamination I segment of the production line are routed to the RTO for control of VOCs.

Acetone is used in this area for cleaning gun tips.

Operation A5- Laminate I Roll and Trim

In this are, the first lamination is rolled out with disc rollers. Corrugated fiber board for sandwich construction reinforcing is applied to key parts of the laminate prior to curing. The edges of the cured parts are knife trimmed while traversing this area.

A non-VOC liquid emulsifier is used in the cleaning of the rollers.

Operation A6- Lamination II Board and Prep

Wood and other reinforcing materials are laid, but not applied, on the part at this location so they will be ready for application of the second lamination.

Operation A7- Lamination II Spray

A highly pigmented and filled fiberglass reinforced laminate is sprayed on the previously laminated bathtub/shower mold through the center nozzle of a three nozzle airless spray gun.

The laminate resin is mixed with calcium carbonate by a Hy-Solve disperser and is then delivered to the holding tank. The highly filled laminate resin is supplied to the gun from the holding tank by an air driven pump. The gun has a fiberglass chopper unit mounted on top which is driven by an air motor.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

The volatile portion of resin is styrene monomer, a reactive diluent of the resin system, which polymerizes with the polyester resin solid to become part of the finished product. The catalyst is neutralized by the polymeric reaction and locked within the polymer.

Acetone is used in this area for cleaning gun tips.

Operation A8- Laminate II and III Spray

A third layer of highly pigmented and filled fiberglass reinforced laminate is sprayed on the previously laminated bathtub/shower mold through the center nozzle of a three nozzle airless spray gun.

The laminate resin is mixed with calcium carbonate and aluminum trihydrate by a Hy-Solve disperser and is then delivered to the holding tank. The highly filled laminate resin is supplied to the gun from the holding tank by an air driven pump. The gun has a fiberglass chopper unit mounted on top which is driven by an air motor.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

The volatile portion of resin is styrene monomer, a reactive diluent of the resin system, which polymerizes with the polyester resin solid to become part of the finished product. The catalyst is neutralized by the polymeric reaction and locked within the polymer.

Acetone is used in this area for cleaning gun tips.

Operation A9- Laminate III Roll and Trim

In this area, the second lamination is rolled out with disc rollers and the edges are knife trimmed.

A non-VOC liquid emulsifier is used in the cleaning of the rollers.

Operation A10- Curing Tunnel #2

The part transits through this elevated temperature room to cure the second laminate and to thoroughly harden all the thermoset polyester materials. Heat is introduced to the room by a 100% fresh air direct fired make-up air heater using natural gas as fuel.

Operation A11- Part De-mold

The cured bath fixture is loosened from the mold and transported to the grinding booth.

Operation A12- Trim Booth

This is a two sided booth with a top and a catch basin below the grated floor. Finished bathtub/shower units are trimmed by air powered equipment (primarily grinders and drills). The booth maintains a negative pressure with respect to the surrounding area, thus essentially no dust escapes the booth. The lighter grinding dust is controlled by the use of a bag type dust collector.

Operation A13- Inspection

The parts are checked for structural weaknesses, dimensional tolerances and finish flaws. The parts are also weighed for material control purposes. The unit is routed to the warehouse, if accepted, or to parts repair if minor touch-ups are needed.

Operation A14- Part Repair

Parts are routed here for touch-up repair of minor defects and are then inspected and forwarded to the warehouse.

Operation A15- Mixing Room

Virgin polyester resin is mixed with Hydrated Alumina, and/or mineral fillers, Titanium Dioxide Pigment and microspheres in a closed 500 gallon tank with a 20 hp Hy-Solve disperser. The newly mixed high filled resin is pumped directly to the holding tanks which are located in the same room. Virgin resin is supplied to the disperser from a 7000 gallon storage tank by pumping through a closed loop piping system. Fillers are manually loaded into the mixer. The dust generated in this area is collected by a bag type dust collector.

Operation A16- Mold Repair

Defective molds (cracked or scratch, etc.), from the production line, are brought to this area for repair. Cracked molds are repaired with tooling resins and gel coats. Mold surfaces are wet and dry sanded, rouged (rubbing compound), buffed, waxed and polished before going back to the production line.

Operation A17- Specialty Gel Coat Spray

On a very limited basis, gelcoat is also spray applied in a small spray booth located adjacent to, but separate from the production line. This spray booth is used to apply gelcoat with specialty color combinations. Emissions from this booth exhaust directly to the atmosphere through a stack.

ACRYLIC MANUFACTURING

Operation B1- Vacuum Forming

Solid acrylic sheet stock is fed into an automatic forming machine which heats the sheet to soften it. The sheet is then moved to the mold and is vacuum formed into the mold cavity. After a brief cooling period the formed shell is de-molded and placed on a transport fixture.

Operation B2- Loading

Formed acrylic shells are positioned on a support fixture mounted on a cart. The cart is pulled by a mechanical overhead conveyor.

Operation B3- Laminate I Spray

A highly pigmented and filled fiberglass reinforced laminate is sprayed on the shell through the center nozzle of a three nozzle airless spray gun. The gun has a fiberglass chopper unit mounted on top and is driven by an air motor.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

The volatile portion of resin is styrene monomer, a reactive diluent of the resin system, which polymerizes with the polyester resin solid to become part of the finished product. The catalyst is neutralized by the polymeric reaction and locked within the polymer.

Acetone is used in this area for cleaning gun tips.

Operation B4- Laminate 2 Spray

A highly pigmented and filled reinforced laminate is sprayed on the previously laminated shell through the center nozzle of a three nozzle airless spray gun. The highly filled laminate resin is supplied to the gun, from the holding tank, by an air driven pump. The gun has a fiberglass chopper unit mounted on top, which is driven by an air motor.

The two side nozzles of the spray gun deliver catalyst from a pressure pot. The catalyst is a methyl ethyl ketone peroxide (MEKP) solid dissolved in dimethylphalate (DMP) which is a carrier vehicle.

The volatile portion of resin is styrene monomer, a reactive diluent of the resin system, which polymerizes with the polyester resin solid to become part of the finished product. The catalyst is neutralized by the polymeric reaction and locked within the polymer.

Acetone is used in this area for cleaning gun tips.

Operation B5- Ambient Cure

The part transits through this ambient temperature area to cure the lamination and to thoroughly harden all the thermoset polyester materials. The cured part is removed from the fixture and transported to the part removal area.

Operation B6- Part Removal

The cured bath fixture is loosened, remove and transported to the drilling and trimming area.

Operation B7- Trim & Drill

Fully cured units are net-trimmed by air power equipment (primarily grinders and drills).

Trimmed parts, directly from the trimming area or storage area, are drilled at this station to provide holes for drainage and piping connections. Some units requiring bottom boards, are also installed at this location.

Operation B8- Assembly

The drilled finished whirlpools are placed on a gravity conveyor where the pipes and pumps are installed. Controls for the water pump and water temperature are also installed.

Operation B9- Hydrostatic Test

Completely assembled whirlpools are tested by circulating water to insure there are no leaks prior to shipping the units to the customer.

Operation B10- Quality Inspection

The parts are checked for structural weaknesses, dimensional tolerances and finish flaws. The parts are also weighed for material control purposes. The units are routed to the warehouse, if accepted, or to parts repair if minor touch-ups are needed.

FIGURE 3 - EMISSION UNIT #1

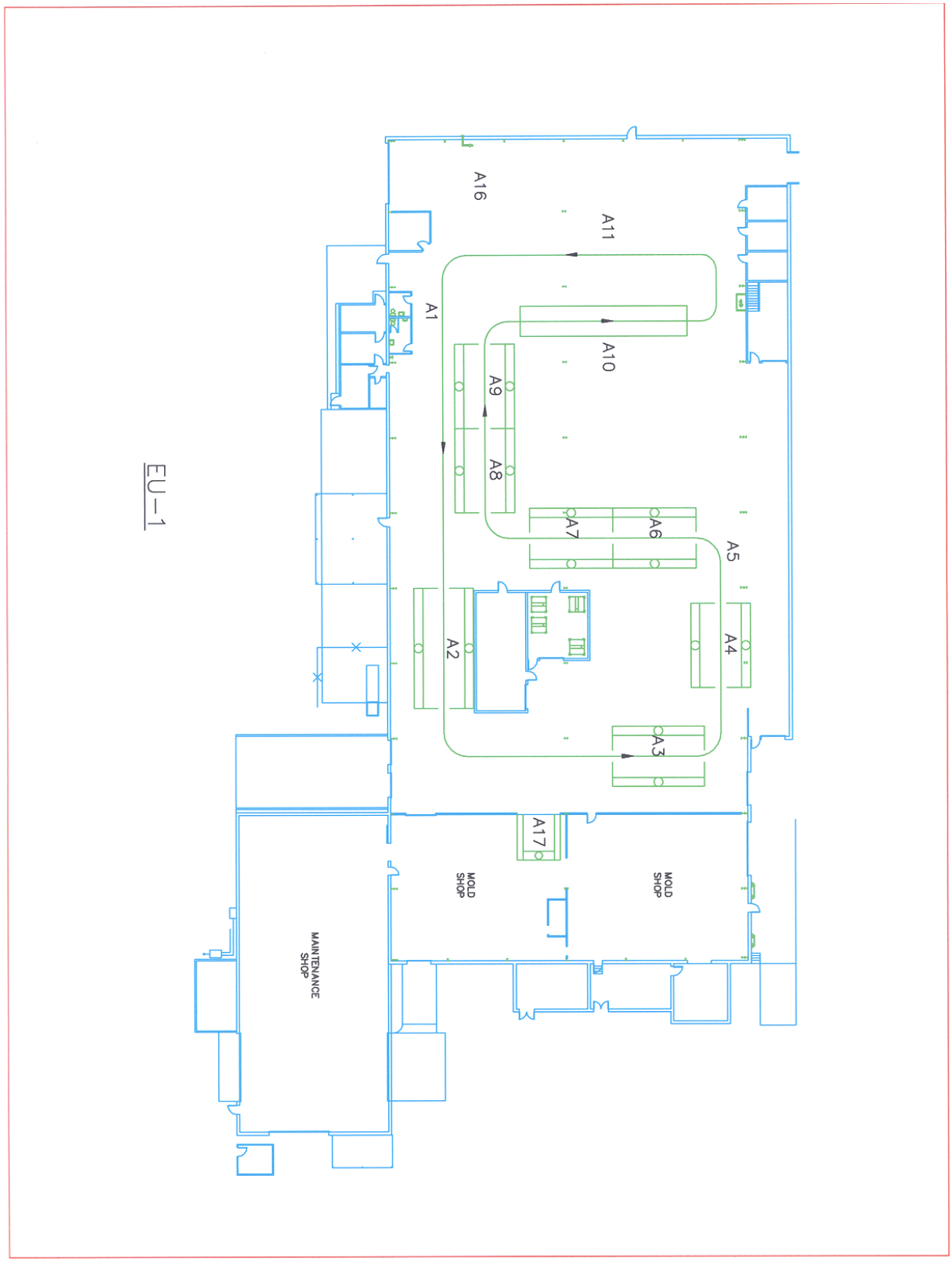
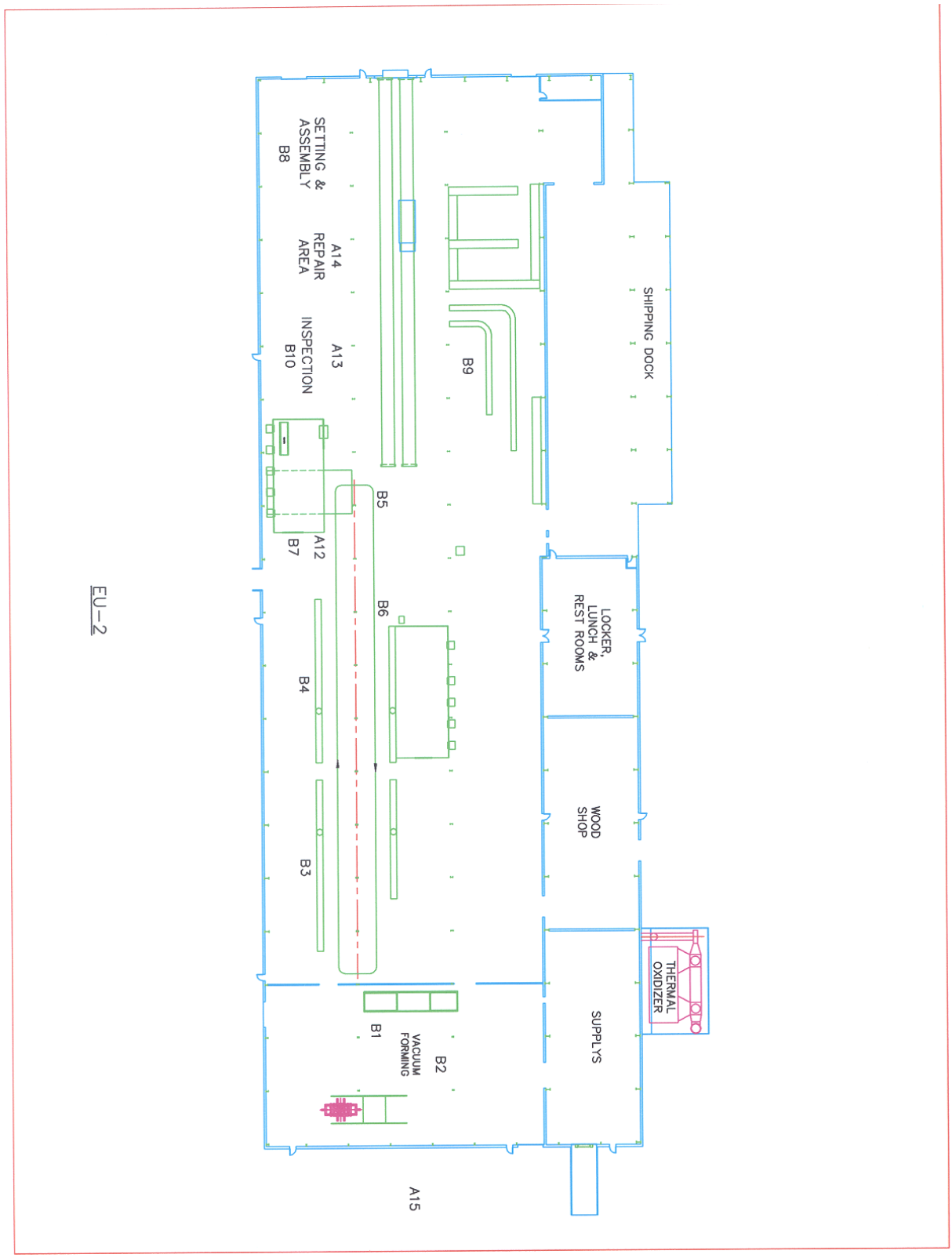


FIGURE 4 - EMISSION UNIT #2



ATTACHMENT 1

MACT Summary for Lasco
Reinforced Plastic Composites Production (WWWW)
March 18, 2005

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.5780	Defines purpose of the subpart	no	Section does not contain applicable requirements.	na
§63.5785	Defines applicability of the subpart.	no	This section defines applicability of subpart WWWW in general. According to this section, subpart WWW applies to LASCO. However, this section does not contain any specific applicable requirements.	na
§63.5790(a)	What parts of a plant does this subpart cover? • Subpart WWWW applies to each new or existing affected source at a reinforced plastics composites production facilities.	no	This sub-section clarifies that the subpart applies to both new and existing affected sources, but does not contain applicable requirements.	na
§63.5790 (b)	The **Affected Source consists** of all parts of the facility engaged in the following operations: • Open molding • Centrifugal casting • Continuous lamination • Polymer casting • Pultrusion • Sheet molding compound manufacturing • Bulk molding compound manufacturing • Mixing • Cleaning of equipment • HAP containing material storage • Repair of parts you did manufacture.	no	This sub-section defines the "Affected Source" for the subpart, but does not contain any specific applicable requirements. LASCO is subject to subpart WWWW and includes affected sources.	na
§63.5790(c)&(d)	The **Affected Source excludes** the following: • Application of mold sealing and release agent. • Mold stripping and cleaning • Repair of parts you did not manufacture • Personal activities such as hobby shops • Non-gel coat surface coatings • Repair or production materials that do not contain resin or gel coat • Research and development operations • Production resins that must meet military specifications	no	This sub-section defines units that are excluded from the definition of "Affected Source," but does not contain and specific applicable requirements.	na
§63.5795	A new affected source is one that commenced construction after August 2, 2001.	no	This section clarifies how to determine if a reinforced plastic composites production facility is a **new** affected source or an **existing** affected source?	na
§63.5796	Emission factors are used to determine compliance with certain organic HAP emissions limits in Tables 3 and 5. Two Options are available: 1. Use EFs from Table 1; or, 2. Use source-specific EFs based on source test and in AOP.	yes	This section defines the two basic options for determining organic HAP emission factors. LASCO is subject to subpart WWWW including the organic HAP emission limits in Tables 3 and 5.	6.4
§63.5797	How does a source determine the organic HAP content of resins and gel coats? Use manufacturer's formulation data and MSDS: • For **carcinogens**, include each HAP that is present at 0.1 % or more by	yes	LASCO is subject to subpart WWWW.	6.4

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
	weight. • For **non-carcinogens**, include each HAP present at 1.0 percent or more by weight. • Carcinogens defined by **Occupational Safety and Health Administration** as specified in 29 CFR 1910.1200(d)(4). • If HAP concentration provided as a range, then need to use the **upper limit of the range**. • If testing shows that the actual % of the HAP is different from the MSDS, then need to follow the procedures in §63.5797(b)&(c).			
§63.5798 Alternatives to Table 1 Equations	If using an application technology (new or existing), whose emission characteristics are not represented by the equations in Table 1, you may use the procedures in §63.5798 to establish a unique HAP emission factor. This involves: 1. Performing a organic HAP emissions test to determine a site-specific HAP emission factor using test procedures in §63.5850. 2. Submitting a petition to the Administrator.	yes	LASCO is subject to subpart WWWW.	6.4
§63.5799 How to calculate organic HAP emissions on a tpy basis for purposes of determining which paragraphs of §63.5805 apply?	• Use mass balance calculation techniques and either: 1. EF reflecting the weighted average organic HAP emissions factor on a lb/ton of resin and gel coat basis. 2. EF based on testing. • **Initial Notification Report** - Existing facilities must initially perform this calculation based on their 12-months of operation prior to April 21, 2003, and include this information with their initial notification report. • **Initial Compliance Report** – Existing facilities must repeat the calculation based on their resin and gel coat use in the 12 months prior to their initial compliance date, and submit this information with their initial compliance report. • **Ongoing** - After their initial compliance date, existing and new facilities must recalculate organic HAP emissions over the 12-month period ending June 30 or December 31, whichever date is the first date following their compliance date specified in §63.5800. **Exemption** – Existing facilities that do not have centrifugal casting or continuous lamination/casting operations are not required to calculate and report emissions per this section only (**Note: Lasco** and **AMTECH** seem to qualify for this exemption). However, the exemption clause in this section stresses that the exemption applies only to this section and that emission calculation and reporting procedures in other sections still apply.	exempt	LASCO is exempt from the requirements of this section since LASCO does not include centrifugal casting or continuous lamination/casting operations.	na
§63.5800 When does a facility need to comply with the subpart?	Based on the schedules in Table 2: • Existing – April 21, 2006 • Existing area source that becomes major – 3 years after becoming major • New major source – at startup • New area source that becomes major after startup – immediately upon becoming major **Note –** Facilities subject to a organic HAP emissions standard based on a 12-month rolling average must begin collecting data on the compliance date in order to demonstrate compliance.	yes	LASCO is subject to subpart WWWW. The compliance date for LASCO based on Table 2 is April 21, 2006.	6.1

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.5805(a) Standards - Existing facilities **without** centrifugal casting or continuous lamination/casting.	Subject to: • Annual average organic HAP emissions limits in Table 3. • Work practice standards in Table 4.	yes	LASCO is subject to these subpart WWWW standards since LASCO is an existing facility that does not include centrifugal casting or continuous lamination/casting operations.	6.2
§63.5805(b) Standards - Existing facilities that emit 100 or more tons of HAP from the combination of all centrifugal casting or continuous lamination/casting.	Subject to: • Organic HAP control requirement of 95% by weight. • Work practice standards in Table 4.	no	LASCO does not include centrifugal casting or continuous casting/lamination operations.	na
§63.5805(c) Standards - New facilities that emit less than 100 or more of HAP.	Subject to: • Annual average organic HAP emissions limits in Table 3. • Work practice standards in Table 4.	no	LASCO is an existing facility.	na
§63.5805(d) Standards - New facilities that emit more than 100 or more of HAP.	Subject to: • Organic HAP control requirement of 95% by weight. • Work practice standards in Table 4. Several alternatives apply. Consult section §63.5805(d).	no	LASCO is an existing facility.	na
§63.5805(e) Standards - New and existing facilities that **increase** emissions above 100 tpy after their initial compliance date.	Requires notification when a source subject to §63.5805(a) or (c) exceeds the 100 tpy threshold. Offers a one time exemption from the requirements in §63.5805(b) and (d) provided that the excess emissions was due to circumstances that will not be repeated, the average HAP emissions for the last 3 years was below 100 tpy, and projected HAP emissions for the next calendar year is less than 100 tpy.	no	LASCO is already classified as an existing facility with organic HAP emissions greater than 100 tpy.	na
§63.5805(f) Standards – Sources that apply for an exemption under §63.5805(e) and that subsequently exceed the 100 tpy threshold.	Must notify the permitting authority through the semiannual report and must comply with paragraphs (b) or (d) of §63.5805(f).	no	LASCO is already classified as an existing facility with organic HAP emissions greater than 100 tpy.	na
§63.5805(g) Standards - Repair operations subject to the subpart as defined in §63.5785.	Subject to: • Annual average organic HAP emissions limits in Table 3. • Work practice standards in Table 4.	yes	LASCO includes repair operations that are not routine and are, therefore, subject to these requirements.	6.2
§63.5805(h) Standards - If add-on control device used to comply with subpart.	Must meet all requirements in 40 CFR part 63, Subpart SS.	yes	LASCO will be using an RTO to comply	6.5
§63.5810 Options for Meeting **Open Molding** and Centrifugal	• Must use one of the methods in §63.5810(a) through (d) for demonstrating compliance. • To achieve compliance with emission limits in Tables 3 or 5, may use any	yes	LASCO is subject to subpart WWWW standards	6.2

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
Casting Standards – General	control method that reduces organic HAP emissions including: 1. Reducing HAP content 2. Changing to non-atomized application method 3. Covered curing techniques 4. Routing part or all emissions to control device • Calculations must be completed within 30 days after end of each month • May switch between compliance options in (a) through (d) (consult §63.5810 for specifics on how to)			
§63.5810(a) Options for Meeting **Open Molding** and Centrifugal Casting Standards - Meet the individual organic HAP emission limits for each operation.	Demonstrate compliance with the HAP emissions limits for each open molding and centrifugal casting operation type in Tables 3 or 5 that apply: • **First** – determine an organic HAP EF for each process stream. A process stream is defined as each individual combination of resin or gel coat, application method, and control method: o Must use appropriate equations in Table 1 or site-specific EFs in accordance with §63.5796. o If relying on a vapor suppressant to meet limits, must determine the suppressant effectiveness according to the procedures in Appendix A. o If relying on an add-on control device to meet limits, must determine the add-on control factor by conducting capture and control efficiency testing using the procedures specified in §63.5850. The HAP EF calculated from equations in Table 1, or the site-specific EF, is multiplied by the add-on control factor to calculate the organic HAP EF after control. • **Second** – For each particular operation type, calculate a weighted average of the organic HAP EFs based on the neat resin plus and gel coat plus used over the previous 12 calendar months. • **Third** – Compare 12-month rolling average EF for each operation with limits in Tables 3 or 5. • **Neat resin or gel coat** – means the resin as purchased from the supplier, but not including any inert fillers. • **Neat resin or gel coat plus** – means neat gel coat plus any organic HAP-containing materials that are added to the resin by the supplier or facility, excluding catalysts and promoters.	yes	LASCO is subject to subpart WWWW standards	6.2
§63.5810(b) Options for Meeting **Open Molding** and Centrifugal Casting Standards - HAP Emissions factor averaging option.	Demonstrate monthly that the weighted average of the actual organic HAP EF for all operations meets the weighted average of the organic HAP emissions limits that apply: • **Calculate Weighted Average Limit Over All Applicable Operations** - Multiply individual organic HAP emission limits in Tables 3 or 5 for each open molding operation type employed by the amount of neat resin plus or neat gel coat plus used in the last 12 months for this operation type. Sum these results and then divide by the total amount of neat resin plus and neat gel coat plus used overall for the last 12 months. • **Calculate Actual Weighted Average HAP EF Over All Applicable Operations**. Multiply actual open molding operation organic HAP EFs by the corresponding amount of neat resin plus or neat gel coat plus, sum	yes	LASCO is subject to subpart WWWW standards	6.2

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
	these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used overall in all open molding operations. • **Compare The Two Results** • **Neat resin or gel coat** – means the resin as purchased from the supplier, but not including any inert fillers. • **Neat resin or gel coat plus** – means neat gel coat plus any organic HAP-containing materials that are added to the resin by the supplier or facility, excluding catalysts and promoters.			
§63.5810(c) Options for Meeting **Open Molding** and Centrifugal Casting Standards - Options for multiple operation types	This option is limited to non-corrosion-resistant, corrosion-resistant and/or high strength, and tooling resins of the same type used in multiple operations (consult the section).	yes	LASCO is subject to subpart WWWW standards	6.2
§63.5810(d) Options for Meeting **Open Molding** and Centrifugal Casting Standards - Use of resins and gel coats that are compliant to begin with.	Use resins and gel coats that do not exceed the maximum organic HAP contents of Table 3.	yes	LASCO is subject to subpart WWWW standards	6.2
§63.5820 Options for Meeting **Continuous Lamination/Casting** Standards - Options for meeting the standards for continuous lamination/casting operations.	• **Continuous casting** – means a continuous process for fabricating composites in which composite materials are placed on an in-line conveyor belt to produce cast sheets that are cured in an oven. • **Continuous lamination** – means a continuous process for fabricating composites in which composite materials are typically sandwiched between plastic films, pulled through compaction rollers, and cured in an oven. • **Continuous lamination/casting** – means a grouping of processes that involves the use of continuous lamination and/or continuous casting.	no	LASCO does not include centrifugal casting or continuous casting/lamination operations.	na
§63.5830 Options for Meeting **Pultrusion** Standards - Options for meeting the standards for pultrusion operations.	**Pultrusion** – means a continuous process for manufacturing composites that have a uniform cross-sectional shape...	no	LASCO does not include any pultrusion operations.	na
§63.5835(a) General Compliance Requirements - Periods Subject to Limits	Must be in compliance at all times with the work practice standards in Table 4 as well as the organic HAP emission limits in Tables 3, or 5, or the organic HAP content limits in Table 7.	yes	LASCO is subject to subpart WWWW standards	6.2
§63.5835(b) General Compliance Requirements - Exceptions for Startup, Shutdown and Malfunction	Must be in compliance with all organic HAP emission limits in this subpart that are met using an add-on control device, except during periods of startup, shutdown, and malfunctions.	yes	LASCO is subject to subpart WWWW standards	6.2
§63.5835(c)	Must always operate and maintain affected source, including air pollution	yes	LASCO is subject to subpart WWWW standards and will	6.7

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
General Compliance Requirements - Good Air Pollution Control Practices for Minimizing Emissions	control and monitoring equipment, according to the provisions in §63.6(e)(1)(i): *At all times, including periods of startup, shutdown and malfunction, owners and operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.*		rely on a control device to maintain compliance.	
§63.5835(d) General Compliance Requirements - O&M Plan for Control Devices	Must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3) for any organic HAP emissions limits met using an add-on control.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.9
§63.5840 Testing and Initial Compliance Requirements - Due date for performance or initial compliance demonstration.	Must conduct performance tests, performance evaluations, design evaluations, capture efficiency testing and other initial compliance demonstrations by the compliance date specified in Table 2: **April 21, 2006 for an existing major source.**	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.3
§63.5845 Testing and Initial Compliance Requirements - Subsequent Testing	Every 5 years following the initial performance test for any standard met using an add-on control device.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.3
§63.5850 Testing and Initial Compliance Requirements - Conducting Performance Tests, Performance Evaluations and Design Evaluations	• §63.5850(a) - If using any add-on controls to meet a organic HAP emissions limit, must conduct each performance test, performance evaluation, and design evaluation in 40 CFR part 63, subpart SS, that applies. See Table 6 for an outline of the requirements. • §63.5850(b) - Each performance test must be conducted in accordance with §63.7(e)(1) • §63.5850(c) - Each performance test must be conducted in accordance with §63.8(e) • §63.5850(d) – May not conduct performance tests or evaluations during start-up, shutdown or malfunction as specified in §63.7(e)(1) • §63.5850(e) – Must conduct control device performance testing using emission measurement methods specified in (e)(1) through (5): o (1) Use Method 1 or 1A of appendix A to 40 CFR 60, as appropriate to select sampling sites. o (2) Use Method 2, 2A, 2C, 2D, 2F or 2G of Appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate. o (3) Use Method 18 of Appendix A to 40 CFR part 60 to measure total organic HAP emissions or use Method 25A to measure total gaseous organic emissions as a surrogate for total organic HAP emissions. **Note**: Do not use Method 18 to measure organic HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.3

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
	carbon are organic HAP emissions. o (4) You may use ASTM D6420-99 in lieu of Method 18 under certain conditions as specified. o (5) Use the procedures in EPA Method 3B of appendix A to 40 CFR part 60 to determine an oxygen correction factor. • §63.5850(f) – Control device performance test must consist of 3 runs and each must last at least 1 hour. Also: o Production conditions during the test must represent normal operations. o The production conditions during the test must also represent maximum potential emissions. • §63.5850(g) – If a concentrator/oxidizer is used as the control device, must test the combined flow upstream of the concentrator to determine the overall control device efficiency. • §63.5850(h) – During the test, must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.			
§63.5855 Monitor installation and operation requirements.	Must monitor and operate all add-on control devices according to the procedures in 40 CFR part 63, subpart SS.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.3 6.5
§63.5860 (a) How to demonstrate initial compliance with the standards – General	Must demonstrate initial compliance with each organic HAP emissions standard in paragraphs (a) through (h) of §63.5805 that applies to you by using the procedures shown in Tables 8 and 9 to this subpart. For open molding operations, initial compliance is demonstrated by: • Demonstrating that appropriate organic **HAP emissions limits have been met** as calculated using the procedures in §63.5810 on a 12-month rolling average 1 year after the appropriate compliance date; or, • Demonstrating using the appropriate values in Tables 3 or 7 that all resins and gel coats considered individually meet the appropriate **organic HAP contents**; or, • Demonstration using the appropriate values in Table 7 that the **weighted average** of all resins and gel coats for each resin type and application method meet the appropriate organic HAP contents. • See Table 9 for applicable work practice standards	yes	LASCO is subject to subpart WWWW standards.	6.3
§63.5860 (b) How to demonstrate initial compliance with the standards – Control device operating limits per subpart SS	If using an add-on control device to demonstrate compliance, must also establish each control device operating limit in 40 CFR 63, subpart SS that applies.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.3
§63.5865 – 5890 Emission Factor, Percent Reduction and Capture Efficiency Calculation	See individual subsections.	no	LASCO does not include centrifugal casting or continuous casting/lamination operations.	na

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
Procedures for **Continuous Lamination/Casting Operations**				
§63.5895(a) Continuous Compliance Requirements – Monitoring and data collection requirements for demonstrating continuous compliance	During production, must collect and keep a record of data as indicated in subpart SS if using an add-on control device.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.11
§63.5895 (b) Continuous Compliance Requirements – Monitoring and data collection requirements for demonstrating continuous compliance	Must monitor and collect data as follows: (1) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, must conduct all monitoring in continuous operation at all times that the affected source is operating. (2) May not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes to this subpart. (3) At all times, must maintain necessary parts for routine repairs of the monitoring equipment. (4) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5895 (c) Continuous Compliance Requirements – Monitoring and data collection requirements for demonstrating continuous compliance	Must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP emissions limits based on an organic HAP emissions limit in Tables 3, 5 or 7. Resin use records may be based on purchase records if application method is verifiable. The organic HAP content records may be based on MSDS or on resin specifications from the resin supplier.	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5895 (d) Continuous Compliance Requirements – Monitoring and data collection requirements for demonstrating continuous compliance	If initially demonstrating that all resins and gel coats meet the applicable organic HAP content limits, then resin and gel coat use records are not required. However, must include a statement in each compliance report that all resins and gel coats still meet the organic HAP limits for compliance resins and gel coats shown in Tables 3 or 7.	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5895 (e) Continuous Compliance Requirements – Monitoring and data collection requirements for demonstrating continuous compliance	for each pultrusion machine, must....	no	LASCO does not include any pultrusion operations.	na

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.5900 (a) Demonstrating continuous compliance with the standards	Must demonstrate continuous compliance with each standard in §63.5805 that applies according to the methods specified in paragraphs (a)(1) through (3) of this section: (1) Compliance with organic HAP emissions limits for sources using add-on control devices is demonstrated following the procedures in 40 in subpart SS. May also use continuous emissions monitors to demonstrate continuous compliance as an alternative to control parameter monitoring. (2) Compliance with organic HAP emissions limits is demonstrated by maintaining a organic HAP emissions limit listed in Tables 3, or 5, or on a 12-month rolling average, or by including in each compliance report a statement that all resins and gel coats meet the appropriate organic HAP emissions limits as provided in §63.5895(d). (3) Compliance with organic HAP content limits in Table 7 is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7, on a rolling 12-month average, or by including in each compliance report a statement that all resins and gel coats individually meet the appropriate organic HAP content limits, as discussed in §63.5805(d).	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5900 (b) Demonstrating continuous compliance with the standards	Must report each deviation from each standard in §63.5805 that applies.	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5900 (c) Demonstrating continuous compliance with the standards	Must meet the organic HAP emissions limits and work practice standards that apply even during startup, shutdown or malfunction, except as provided in §63.5900(d)	yes	LASCO is subject to subpart WWWW standards.	6.11
§63.5900 (d) Demonstrating continuous compliance with the standards	An exemption from the standards in §63.5805 is provided during periods of startup, shutdown or malfunction when using an add-on control device to meet standards, provided that the affected source is operated in accordance with a startup, shutdown and malfunction plan.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.11
§63.5900 (e) Demonstrating continuous compliance with the standards	Consistent with §63.6(e) and §63.7(e)(1), deviations that occur during a period of malfunction are not violations if demonstration, satisfactory to the Administrator, is provided that the source was operating in accordance with the startup, shutdown and malfunction plan.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.11
§63.5905 (a) Notifications, Reports, and Records – What notifications must be submitted and by when?	Must submit all of the notifications in Table 13 that apply.	yes	LASCO is subject to subpart WWWW standards and will rely on a control device to maintain compliance.	6.12
§63.5905 (b) Notifications, Reports, and Records – What notifications must be submitted and by when? –	If changes are made to any information submitted in any notification, must submit the changes in writing to the Administrator within 15 calendar days after the change.	yes	LASCO is subject to subpart WWWW standards.	6.12

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
Changes				
§63.5910 (a) Reports	Must submit each report in Table 14 that applies.	yes	LASCO is subject to subpart WWWW standards.	6.13
§63.5910 (b) Reports	Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), must submit each report by the date specified in Table 14 and as follows: • (1) The first compliance report must cover the period beginning on the compliance date according to §63.5800 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half and after the compliance date that is specified by §63.5800. • The first compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified by §63.5800. • Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. • Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever is the first date following the end of the semiannual reporting period. • May submit the initial and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4).	yes	LASCO is subject to subpart WWWW standards.	6.13
§63.5910 (c) Reports	The compliance report must contain the following information: • (1) Company name and address • (2) Truth, accuracy and completeness certification by the RO • (3) Date of the report and beginning and ending dates of the reporting period • (4) Information required by §63.10(d)(5)(i) regarding startup, shutdown and malfunction events. • (5) If there were no deviations from any organic HAP emissions limits or work practice standards, a statement that confirms this outcome. • (6) If there were no periods when CMS or CEMS were out of control, a statement confirming this outcome.	yes	LASCO is subject to subpart WWWW standards.	6.13
§63.5910 (d) Reports	For each deviation from an organic HAP emissions limitation or work practice standard that occurs at an affected source where a **CMS is not used**, the compliance report must also contain the following: • (1) The total operating time of each affected source during the reporting period • (2) Information on the number, duration, and cause of deviations, as applicable, and the corrective action taken.	no	LASCO will be using a control device and CMS to maintain compliance.	na
§63.5910 (e) Reports	For each deviation from an organic HAP emissions limitation occurring at an affected source using a CMS to comply, the compliance report must also contain: • (1) The date and time that each malfunction started and stopped. • (2) The date and time that each CMS was inoperative, except for zero (low-level) and high level checks • (3) The date, time and duration that each CMS was our of control,	yes	LASCO is subject to subpart WWWW standards and will be using a control device and CMS to maintain compliance.	6.13

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
	including the information in §63.8(c)(8) • (4) The date and time each deviation started and stopped, and whether it occurred during a period of startup, shutdown, or malfunction, or during any other period. • (5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time. • (6) Breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. • (7) A summary of the total duration of CMS downtime and the total duration as a percent of the total source operating time. • (8) An identification of each organic HAP that was monitored at the affected source. • (9) A brief description of the process units. • (10) A brief description of the CMS • (11) The date of the latest CMS certification or audit • (12) A description of any changes in CMS, processes, or controls since the last reporting period.			
§63.5910 (f) Reports	Must report that the 100 tpy organic HAP threshold was exceeded if that exceedance would make the facility subject to §63.5805(b) or (d). Include with the report any request for an exemption under §63.5805(e). If already having received an exemption under §63.5805(e) and subsequently exceeding the 100 tpy threshold, must report this exceedance as required in §63.5805(f).	no	LASCO is already classified as a major sources.	na
§63.5910 (g) Reports	Integration of MACT and Title V reporting – see subsection.	yes	LASCO is subject to both Title V and the FRP MACT.	6.13
§63.5910 (h) Reports	Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in Table 14 to this subpart, and not based on the requirements in §63.999.	yes	LASCO is subject to subpart WWWW standards.	6.13
§63.5915 (a) Records	The following records must be kept: • (1) A copy of each notification and report that was submitted to comply with the subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, in accordance with § 63.10(b)(2)(xiv). • (2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown and malfunction. • (3) Records of performance tests, design, and performance evaluations as required in § 63.10(b)(2).	yes	LASCO is subject to subpart WWWW standards and will be using a control device and CMS to maintain compliance.	6.14
§63.5915 (b) Records	If an add-on control device is used, must keep all the records required in subpart SS to show continuous compliance with this subpart.	yes	LASCO is subject to subpart WWWW standards and will be using a control device and CMS to maintain compliance.	6.14
§63.5915 (c) Records	Must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3, 5, and 7.	yes	LASCO is subject to subpart WWWW standards.	6.14
§63.5915 (d) Records	Must keep a certified statement of compliance with the work practice requirements in Table 4.	yes	LASCO is subject to subpart WWWW standards.	6.14

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.5915 (e) Records	For new or existing continuous lamination/casting operations....	no	LASCO does not include centrifugal casting or continuous casting/lamination operations.	na
§63.5920 (a) Records Retention	Must maintain all applicable records in a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1).	yes	LASCO is subject to subpart WWWW standards.	6.14
§63.5920 (b) Records Retention	As specified in § 63.10(b)(1), must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.	yes	LASCO is subject to subpart WWWW standards.	6.14
§63.5920 (c) Records Retention	Must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). For the remaining 3 years records may be kept off-site.	yes	LASCO is subject to subpart WWWW standards.	6.14
§63.5920 (d) Records Retention	Records may be kept in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape, or microfiche.	yes	LASCO is subject to subpart WWWW standards.	6.14
§63.5925 What parts of the General Provisions apply?	Table 15 shows which parts of the General Provisions in §63.1 through 63.15 that apply.	no	LASCO is subject to subpart WWWW standards. However Table 15 simply refers to applicable sections in subpart A.	na
§635930 Who implements and enforces this subpart?	This subpart can be administered by the EPA or a delegated authority. The following authorities may not be delegated: • (c)(1) Approval of alternatives to the organic HAP emissions standards in § 63.5805 under § 63.6(g) • (c)(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in § 63.90 • (c)(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90. • (c)(4) Approval of major changes to record keeping under §63.10(f) and as defined in § 63.90.	no	This is not an applicable requirement.	na
§63.1(a)	Applicability, General	no	This section clarifies applicability and administration of part 63 standards, but does not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63. Clarifications provided in this section, such as clarifying postmarked deadlines when a deadline is not specified in a standard, are incorporated into permit conditions as necessary.	na
§63.1(b)(1)	Initial Applicability Determination for this part.	yes	Beyond initial applicability determinations, this section contains specific and ongoing requirements for keeping records with respect to “relevant standards” in the subpart.	8.12
§63.1(c)	Applicability of this part after a relevant standard has been set under this part.	no	This section addresses general applicability and duty to comply once a relevant standard has been set, but does not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63.	na
§63.1(d)	Reserved	no	inapplicable per Table 15 in subpart WWWW	na
§63.1(e)	Option to request of the Administrator revision of a Title V permit to integrate 11(d) or (h) standards into permit.	no	This section is an administrative provision that becomes applicable when triggered.	na

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.2	Definitions	no	This section includes definitions that will be incorporated into the permit as needed, but does not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63. Definitions used in the specific subpart that applies to the facility will be incorporated into Attachment 1 of the permit.	Attachment 1
§63.3	Units and abbreviations	no	This section defines units and abbreviations used in part 63, but does not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63. Units and abbreviations used in the specific subpart that applies to the facility will be incorporated into Attachment 2 of the Title V permit.	Attachment 2
§63.4	Prohibited activities and circumvention	yes	This section specifies 40 CFR part 63 compliance requirements.	6.6
§63.5	Preconstruction review and notification requirements.	yes	This section contains the preconstruction review and notification requirements for new sources subject to 40 CFR part 63 standards. Since ORCAA's NSR program is approved in the Washington State Implementation plan (SIP), the specific subsection under §63.5 that applies is §63.5(f). Subsection §63.5(f) contains the requirements for approval of construction or reconstruction based on prior State preconstruction review.	6.15
§63.6(a)&(b)	Compliance with standards and maintenance requirements: • Applicability • Compliance dates for new and reconstructed sources.	no	These sections establish compliance dates for new and reconstructed sources, but do not contain any ongoing applicable requirements for existing affected sources.	na
§63.6(c)(1)	Compliance dates for existing sources subject to standards pursuant to 112(d) or 112(h).	yes	This section specifies that the compliance date for an existing affected sources is the date established in the applicable subpart.	6.1
§63.6(c)(2)	Compliance dates for existing sources subject to standards pursuant to 112(f).	no	This section applies to standards promulgated pursuant to 112(f).	na
§63.6(c)(3)&(4)	Reserved sections.	no	Inapplicable per Table 15 in subpart WWWW	na
§63.6(c)(5)	Addresses applicability of standards to area sources that increase emissions such that the source becomes a major source.	no	The subject source is already classified as a major source.	na
§63.6(d)	Reserved section	no	Inapplicable per Table 15 in subpart WWWW	na
§63.6(e)(1)	Operation and maintenance requirements	yes	This section contains operation and maintenance requirements for affected sources.	6.7
§63.6(e)(2)	Reserved	no	Inapplicable per Table 15 in subpart WWWW	na
§63.6(e)(3)	Startup, shutdown and malfunction plans.	yes	This section requires owners or operators of affected sources to develop and implement a written startup, shutdown and malfunction plan.	6.8 6.9 6.10
§63.6(f)(1)	Compliance with non-opacity standards – exception during startup, shutdown and malfunction.	no	Inapplicable per Table 15 in subpart WWWW	na
§63.6(f)(2)	Methods for determining compliance with non-opacity emissions standards	no	This section specifies the general means for determining compliance with part 63 standards, but does not contain any specific ongoing applicable	na

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
			requirements for an affected source under 40 CFR 63. The methods for determining compliance with subpart WWWW standards are established in the subpart itself and will be incorporated into each specific condition containing an applicable emission, monitoring or work practice standard.	
§63.6(f)(3)	Finding of compliance.	no	This section clarifies that the Administrator will make a finding concerning an affected source's compliance with a non-opacity emissions standard, but does not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63.	na
§63.6(g)	Use of an alternative non-opacity emission standard	no	This section establishes procedures for securing approval of an alternative non-opacity emissions standard, but do not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63. The procedures becomes applicable when such a request is made.	na
§63.6(h)	Compliance with opacity and visible emission standards	no	Inapplicable per Table 15 in subpart WWWW	na
§63.6(i)	Extension of compliance with emission standards	no	This section establishes procedures for securing an extension of compliance with emissions standards, but do not contain any specific ongoing applicable requirements for an affected source under 40 CFR 63. The procedures becomes applicable when such a request is made.	na
63.6(j)	Exemption from compliance with emission standards	no	This section establishes procedures for the President to exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years, but does not contain any specific applicable requirements for an affected source under 40 CFR 63.	na
§63.7(a)(1)	Applicability	no	This subsection is an intermediate provision that states that the general applicability of the section is set out in §63.1(a)(4).	na
§63.7(a)(2)	General schedule for performance testing	no	Inapplicable per Table 15 in subpart WWWW	na
§63.7(a)(3)	Testing for cause	yes	This section provides that the permitting authority may require testing authorized by section 114 of the Act.	6.3
§63.7(b)(1)	Notification of performance testing	yes	This section contains general applicable requirements for testing.	6.3
§63.7(b)(2)	Delay in testing notification	yes	This section contains general applicable requirements for testing.	6.3
§63.7(c)(1)	Approval of a QA plan	no	This section clarifies the utility of the permittee's quality assurance program, but does not contain any applicable requirements.	na
§63.7(c)(2)(i)&(iv)	Submission of site-specific test plan	yes	This section contains general applicable requirements for testing.	6.3
§63.7(c)(2)(ii)	Internal QA program	yes	This section specifies the content for internal QA	6.3

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
			programs.	
§63.7(c)(2)(iii)	External QA program	yes	This section specifies the content for external QA programs.	6.3
§63.7(c)(2)(v)	Authority to request additional test plan information	no	This section clarifies the Administrator's authority to request additional relevant information, but does not contain any specific applicable requirements for an affected source.	na
§63.7(c)(3)	Approval of site-specific test plan	yes	This section clarifies approval procedures and criteria for site-specific test plans.	6.3
§63.7(c)(4)	Performance test method audit program	yes	This section specifies the performance test method audit program for source testing pursuant to 40 CFR 63.	6.3
§63.7(d)	Performance testing facilities	yes	This section specifies requirements for performance testing facilities	6.3
§63.7(e)(1)	Conduct of performance tests	yes	Specifies general procedures for conduction source tests.	6.3
§63.7(e)(2)	Test methods and procedures	yes	Specifies general procedures for conduction source tests.	6.3
§63.7(e)(3)	Duration of testing	yes	Specifies general procedures for conduction source tests.	6.3
§63.7(e)(4)	Administrator's authority to require testing under section 114 of the Act.	no	Clarifies the Administrator's authority, but does not contain any specific applicable requirements.	na
§63.7(f)	Use of alternative methods or procedures	yes	Specifies procedures for securing approval of alternative test methods of procedures.	6.3
§63.7(g)	Data analysis, recordkeeping, and reporting	yes	Clarifies data analysis, recordkeeping and reporting requirements under 40 CFR 63	6.3
§63.7(h)	Waiver of performance testing requirements	yes	Procedures for requesting a waiver	6.3
§63.8(a)(1)	Applicability	no	This subsection is an intermediate provision that states that the general applicability of the section is set out in §63.1(a)(4).	na
§63.8(a)(2)	CMS required under a relevant standard shall be subject to the provisions in §63.8 **upon promulgation of performance specifications for CMS** as specified in the relevant standard.	no	This subsection clarifies when CMS monitoring provisions become applicable.	na
§63.8(a)(3)	reserved	no	This is an administrative placeholder	na
§63.8(a)(4)	Additional monitoring requirements	no	This section simply points to §63.11 for additional monitoring requirements. There are no additional monitoring requirements that apply in this case (see 63.11).	na
§63.8(b)	Conduct of monitoring: Requires that monitoring shall be conducted as set forth in §63.8 and the applicable subpart. Also, provides process for approval of changes to required monitoring.	yes	This section applies since Lasco will be using a control device to meet Subpart WWWW standards.	6.11
§63.8(c)(1)	Operation and Maintenance of CMS. Requires that CMS be operated in a manner consistent with good air pollution control practices: • Must maintain and operate each CMS as specified in §63.6(e)(1) • Must keep the necessary parts for routine repairs • Develop and implement a written startup, shutdown, and malfunction plan as specified in §63.6(e)(3)	yes	This section contains general O&M requirements for CMSs	6.11

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.8(c)(2)	All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. The readout from any CMS is readily accessible on site for operational control or inspection.	yes		6.11
§63.8(c)(3)	All CMS shall be installed, operational and the data verified prior to or in conjunction with performance testing	yes		6.11
§63.8(c)(4)	Frequency of operation requirements	yes		6.11
§63.8(c)(5)	Minimum procedures for COMS	no	Lasco does not use a COMS	na
§63.8(c)(6)	Requirements for CMS that are not CPMS	yes	**May** be required if Lasco employs a CEM	6.11
§63.8(c)(7)	Defines when a CEM is out-of-control	yes		6.11
§63.8(c)(8)	Records and reporting requirements when a CEM is out-of-control	yes		6.11
§63.8(d)	Requirement for a Quality Control Program.	yes		6.11
§63.8(e)	Performance evaluations of CMS	yes		6.11
§63.8(f)	Use of an alternative monitoring method	no		na
§63.9(a)	Applicability	no		na
§63.9(b)	Initial notifications	yes	Not an ongoing requirement	na
§63.9(c)	Requests for extensions	no		na
§63.9(d)	Notification that source is subject to special compliance requirements	no		na
§63.9(e)	Notification of performance test	yes		6.3
§63.9(f)	Notification of opacity and visible emissions observations	no		na
§63.9(g)	Additional notification requirements for sources with continuous monitoring systems	yes		6.12
§63.9(h)	Notification of compliance status	yes		6.12
§63.9(i)	Adjustments to time periods or postmark deadlines	no		na
§63.9(j)	Change in information already provided	yes		6.14
§63.10	Recordkeeping and reporting	yes		6.14
§63.11	Control Device Requirements	no		na
§63.980	Applicability	no	Defines applicability of the section in general and does not contain any specific applicable requirements.	na
§63.981	Definitions	no	This section contains definitions of terms used in Subpart SS, but does not contain any specific applicable requirements. Definitions that are pertinent to the affected source will be included in the attachment to the permit containing definitions.	pertinent definitions included in Attachment 1 to the permit.
§63.982	General compliance requirements for storage vessels, process vents, transfer racks and equipment leaks.	no	These sections point to the applicable requirements for specific capture and control systems.	na
§63.983	Requirements for closed vent systems	yes	This section exempts closed vent systems from the operating requirements provided they are maintained under negative pressure. If the system is not operated under negative pressure, then the requirements of §63.983 apply.	6.5

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
§63.984	Fuel gas systems and processes to which storage vessel, transfer rack, or equipment leak regulated material emissions are routed.	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.985	Non-flare control devices used to control emissions from storage vessels and low throughput transfer racks.	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.986	Non-flare control devices used for equipment leaks only	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.987	Flare requirements	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.988(a)	Equipment and operating requirements (Incinerators, boilers, and process heaters)	no	This sub-section applies to incinerators, boilers and process heaters used to comply with a weight-percent emission reduction or parts per million by volume outlet concentration requirement specified in a referencing subpart. Though Lasco uses the RTO control device as a means to comply with an emissions standard, this sub-section does not apply since the emissions standard is not a weight percent emissions reduction of parts per million by volume standard.	na
§63.988(b)	Performance test requirements (Incinerators, boilers, and process heaters)	no	Though subpart WWWW requires initial and subsequent performance testing, this sub-section is a pointer to the general testing provisions and does not contain any specific applicable requirements.	na
§63.988(c)	Incinerator, boiler and process heater monitoring requirements	yes	This sub-section applies since applicability depends only on whether or not an incinerator, boiler or process heater is used.	6.5
§63.990	Absorbers, condensers, and carbon adsorbers used as control devices.	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.992	Implementation and enforcement	no	This is an administrative requirement addressing implementation and enforcement of the subpart and does not contain any applicable requirements for the affected source.	na
§63.993	Absorbers, condensers, carbon adsorbers and other recovery devices used as final recovery devices.	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.994	Halogen scrubbers and other halogen reduction devices.	no	Lasco Yelm does not include control devices that are subject to these requirements.	na
§63.995	Other control devices.	no	Lasco Yelm does not include “other” control devices.	na
§63.996	General monitoring requirements applicability	yes	Lasco Yelm is subject to subpart WWWW and includes a control device. Therefore, this section from subpart SS applies.	6.3
§63.997	Performance test and compliance assessment requirements for control devices.	yes	Lasco Yelm is subject to subpart WWWW and includes a control device. Therefore, this section from subpart SS applies.	6.3
§63.998	Recordkeeping requirements	yes	Lasco Yelm is subject to subpart WWWW and includes a control device. Therefore, this section from subpart SS applies.	6.3
§63.999	Notifications and reports	yes	Lasco Yelm is subject to subpart WWWW and includes a control device. Therefore, this section from subpart SS	6.3

Citation	Brief Description	Applicable Requirement or Provision?	Justification	Location in the permit
			applies.	