



State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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April 13, 1995

DAQE-300-95

Dwayne Hirst
Olympia Sales Company
1537 South 700 West
Salt Lake City, Utah 84104

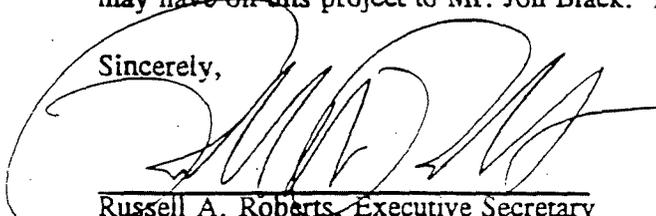
Re: Approval Order Revised To Meet The Ozone Maintenance Plan
Salt Lake County - CDS A1 NA - Toxic Major Title V Major

Dear Mr. Hirst:

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Jon Black. He may be reached at (801) 536-4047.

Sincerely,



Russell A. Roberts, Executive Secretary
Utah Air Quality Board

RAR:JB:aj

cc: Salt Lake City/County Health Department
EPA Region VIII, Mike Owens

4.2.5-2



STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER REVISED TO MEET THE OZONE MAINTENANCE PLAN

PREPARED BY: JON BLACK, ENGINEERING TECHNICIAN

REVIEWED BY: TIM BLANCHARD, ENGINEER

APPROVAL NUMBER
DAQE-300-95

Date: April 13, 1995

Source

OLYMPIA SALES COMPANY

Russell A. Roberts
Executive Secretary
Utah Air Quality Board

Abstract

Olympia Sales Company manufactures kitchen cabinets. They are located at 1537 South 700 West, Salt Lake City, Utah, which is a Nonattainment area for PM₁₀, SO₂, CO and Ozone. Olympia Sales possess a current Approval Order (AO) DAQE-0167-94 for its facility. The cabinet manufacturing facility is a major source of VOC emission, and will be required to meet Reasonable Available Control Technology (RACT). RACT will be imposed in order to comply with the requirements of the Ozone Maintenance Plan. RACT will require that all of the painting processes be equipped with High Volume Low Pressure (HVLP) paint guns. Olympia's conventional paint guns will all be replaced by the HVLP guns by November 15, 1995. Olympia will also be required to implement a maintenance and inspection plan which will record dates and times of inspections and repairs to the painting processes. The new employees will be required to go through a training period where an experienced painter is with the new painter at all times when spraying. The new employee shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks which are required of them. Olympia has recently experimented with low VOC water based paints, and has found that problems of excessive drying time and below standard finish quality exist from use of these products. Olympia is continuing to research the new low VOC products on the market, but will not be required to use these products at this time. The emissions of concern from this facility will remain at 129 tons/yr of VOC, 32.8 tons/yr of Particulate and 28.4 tons/yr of PM₁₀. These emission totals have been modeled for the previous permit mentioned above. Therefore, further modeling will not be required. Because Olympia Sales is a major toxic source, a Title V permit will be required.

This project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this AO reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This AO applies to the following company:

Olympia Cabinet Manufacturing and Sales Company
1537 South 700 West
Salt Lake City, Utah 84104
(801) 972-4050

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:

Olympia Cabinet Manufacturing and Sales Company
1537 South 700 West
Salt Lake City, Utah 84104

Universal Transverse Mercator (UTM) Coordinate System: 4,509,700 meters Northing,
422,900 meters Easting

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Olympia Cabinet Manufacturing and Sales Company shall operate the cabinet manufacturing facility according to the information submitted in the Notice of Intent dated January 5, 1995, and additional information submitted to the Executive Secretary dated February 24, 1995.
4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction, per condition #16 of this AO, as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
5. The approved installations shall consist of the following equipment:
 - A. Five (5) Binks spray booths equipped with Andrae filters
 - B. Three (3) cyclone dust collectors
 - #1 - Mill Area operating at approximately 12,000 cfm
 - #2 - Door Area operating at approximately 14,000 cfm
 - #3 - Sanding Area operating at approximately 25,000 cfm

Limitations and Tests Procedures

6. Visible emissions from the #3 cyclone dust collector shall not exceed 10% opacity. Visible Emissions from any other point or fugitive emission source associated with the installation or control facilities shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.
7. The following operation limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:
 - A. 16 hours per day
 - B. 4160 hours per 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous 12 months.

Records of operation shall be kept for all periods when the plant is in operation. Records of operation shall be made available to the Executive Secretary or his representative upon request, and shall include a period of two years ending with the date of the request. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Volatile Organic Compounds (VOC) Limitations

8. Each paint spray booth shall be equipped with a set of paint arrestor particulate filters to control particulate emissions or equivalent. All air exiting the booth shall pass through a control system before being vented to the atmosphere. Equivalency shall be determined by the Executive Secretary.
9. Full paint and solvent barrels shall be kept in a proper storage room. The barrels shall have sealed lids until they are ready to be used in the painting operation. Once a paint barrel becomes empty it shall be removed from the painting process and re-sealed with a lid. The empty barrels shall be placed in a storage area to await pickup.
10. The plantwide emissions of VOC and HAPS from the lacquer spray booths, solvent cleaning and associated surface coating operations shall not exceed:

129.0 tons per rolling 12-month period for VOC
104.6 tons per rolling 12-month period for HAPS

This value shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. Compliance with the limitation shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months.

The plant-wide emissions of VOCs and HAPS shall be determined by maintaining a record of VOC and HAPS potential contained in materials used each month. The record shall include the following data for each item used:

- A. List name of the VOC and HAPS emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- B. List the weight and use location of the VOC and HAPS potential (name of paint booth or plant facility) in the material in pounds per gallon.
- C. List the percent by weight of all potential VOCs and HAPS each individual material listed in A. The recommended source of the information is from the manufacturer's MSDS¹. The owner/operator shall obtain MSDS data from manufacturer and retain information on-site.

¹MSDS = Material Safety Data Sheets.

- D. List the amount and location of materials listed in A that are used on a daily basis and summed for every location and for the entire plant each month.
- E. To calculate the amount of VOCs and HAPs potential contained in the material listed in D use the following procedure:

$$\text{VOC or HAPs} = \frac{(\% \text{ Volatile by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times \frac{(\text{Gal Consumed})}{(2,000 \text{ lb})} \times (1 \text{ ton})$$

- F. The amount of VOCs and HAPs potential contained in materials disposed of as solid or hazardous waste for the month shall be quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAPs emissions put into the air. (It is assumed that all VOC and HAPs potential in material that are applied to a product evaporate and are considered emissions.
 - G. Records of consumption and emissions shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request.
11. The owner/operator of this installation shall use best working practices to reduce coating and solvent emissions. This includes the following control measures:
- A. Conversion of lacquers and other surface coatings to water-based compounds as practicable - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.
 - B. Minimizing solvent usage - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.
 - C. Storing volatile raw materials in tightly sealed containers.
12. All HAPs are subject to the annual Operating Permit Program if one of the following conditions is met:
- A. The emissions of any one of the 189 HAPs listed in the 1990 Clean Air Act is over ten tons/yr.
 - B. The emissions of any combination of these HAPs are over 25 tons/yr.
13. This source is required to pay an annual emission fee upon start-up [or if an existing facility, upon issuance of this AO. The fee will be based on calculated annual emissions listed at the end of this AO. This fee is valid until inventory data for one year are available for the source.

The owner or operator of this source will be billed upon start-up for all emissions that are considered "chargeable" as of that date.

14. Olympia Cabinet Manufacturing and Sales Company shall use HVLP spray guns for all of their painting processes. These guns shall all be installed and be used by November 15, 1995.

Records & Miscellaneous

15. An Inspection and Maintenance Plan shall be used in the painting operation. This plan shall require that one time each month all pumps, piping, hoses and spray guns of each painting process shall be visually inspected for leakage. A chart shall be posted on the pump room wall of Olympia Cabinet Manufacturing and Sales Company which shall note the inspectors name, the date of the inspection, and the result of the inspection. The chart shall also record all maintenance of the pumps, piping, hoses and spray guns which takes place and the associated date. The plan shall be made available to the Executive Secretary or his representative upon request.
16. New employees shall be required to go through a training period where an experienced painter is present with the new painter at all times when spraying. The new employee shall be instructed in spraying techniques to give the best possible finish without wasting paint. They shall also be properly trained in inspection techniques which are addressed in the Inspection and Maintenance Plan. New employees shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks required of them.
17. Records referenced in condition #7, condition #10 and condition #15 of this AO shall be made available to the Executive Secretary or his representative upon request. The records referenced shall consist of the following:

Condition #7 : (Operating hours)

- A. Operating hours per day

Condition #10 : (Plantwide emissions of VOC)

- A. Name and type of VOC emitting material
- B. Weight of the material in pounds per gallon
- C. Percent by weight of all VOCs for each material used
- D. Amount of VOCs emitted on a monthly basis

Condition #15 : (Inspection and Maintenance Plan Chart)

- A. Note the inspectors name
- B. The date of the inspection
- C. Result of the inspection

D. Maintenance that occurred and date

18. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMs, etc., shall be installed and operated properly and easily accessible to compliance inspectors.
19. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.
20. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.
21. The owner/operator shall submit to the Executive Secretary an emergency plan within 60 days of the date of this AO. The plan shall identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality. Specific emission reduction measures shall be outlined for all three levels (Alert, Warning, Emergency). The values for the various levels are listed in R307-1-5, UAC. The emergency plan shall be approved by the Executive Secretary. The Alert Level actions to be taken should be curtailment of all unnecessary activities causing air pollution. The other two levels of actions should be a progressive curtailment of production and activities causing pollution, to the point of complete shutdown of operations.
22. The owner/operator shall comply with all the applicable requirements implemented in conjunction with the Ozone State Implementation Plan (SIP).

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

Annual emissions for this source (the entire plant) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	Particulate	32.8
B.	PM ₁₀	28.4
C.	SO ₂	0.0

D.	NO _x	0.6
E.	CO	0.3
F.	VOC	129.0

The following HAPs are included in the VOC emission rate listed above:

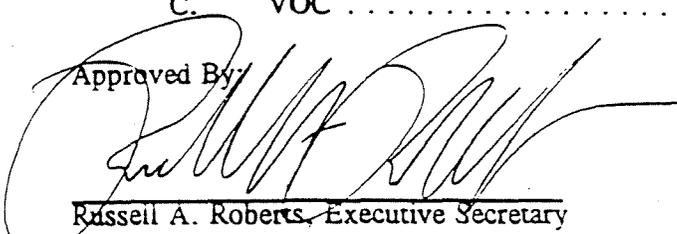
A.	Toluene	50.2
B.	Xylene	19.5
C.	Ethylbenzene	0.1
D.	Methylethylketone	0.01
E.	Methylisobutylketone	29.3
F.	Formaldehyde	0.3
G.	Ethylene glycol monopropylether	5.2

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration and Nonattainment area major source requirements of the UACR. Except for VOC they are not to be used for purposes of determining compliance.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by state, the federal agencies, or both.

	<u>Pollutant</u>	<u>Tons/vr</u>
A.	PM ₁₀	28.4
B.	NO _x	0.6
C.	VOC	129.0

Approved By:



Russell A. Roberts, Executive Secretary
Utah Air Quality Board