

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. 10385

Date **DRAFT**

Two laser cutting lines used for cutting rolled carbon steel plate. Each line consists of one Amada 3015FOM2 4 kW CO2 lasers controlled by one Donaldson Torit Powercore TG-4 MERV 13 cartridge dust collectors rated at 3,800 cfm equipped with Donaldson Torit HEPA secondary filters.

APPLICANT

Capital Industries Inc
PO Box 80983
Seattle, WA 98108-0983

OWNER

Capital Industries Inc
PO Box 80983
Seattle, WA 98108-0983

INSTALLATION ADDRESS

Capital Industries Inc, 5801 3rd Ave S, Seattle, WA 98108

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND CONDITIONS

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the INSTALLATION ADDRESS in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.
2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.
3. The owner or operator shall limit facility-wide emissions of hazardous air pollutants (HAPs) as established by U.S.C. 7412(b)(1) and amended in 40 CFR 63 Subpart C to less than 9.9 tons of any single listed HAP and less than 24 tons of any combination of HAPs during any 12 consecutive months after the date of this order.
4. The owner or operator shall limit facility-wide emissions of methyl isobutyl ketone to 8.7 tons, xylene to 7.2 tons and toluene to 5.2 tons during any 12 consecutive months after the date of this Order.
5. The owner or operator shall limit facility-wide emissions of volatile organic compounds (VOCs) to less than or equal to 90.0 tons during any 12 consecutive months after the date of the Order.
6. Within 30 days of the end of each month, the owner or operator shall calculate and record emissions of each individual HAP, including methyl isobutyl ketone, xylene and toluene, total HAP and total VOCs emitted during the previous month and during the previous consecutive 12-month period using a material balance approach. Calculations may use the HAP content (% composition) and the VOC content (lb/gallon) of each coating and the total amount (gallons) of each HAP- and VOC-containing material applied during the previous month and during any consecutive 12-month period. Purchase records may be used as a surrogate for usage.

Laser Cutting Operational Requirements:

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7. Laser cutting activities on the two Amada laser cutting lines and the Mazak laser cutting line shall not be conducted for greater than 4,380 hours per 12-month rolling period per laser cutting line. Compliance with this condition shall, at minimum, be demonstrated by maintaining operating logs for each laser cutting line.
8. The two Amada laser cutting lines and the Mazak laser cutting line shall not cut steel containing greater than 30% chromium. Compliance with this condition shall, at minimum, be demonstrated through Material Safety Data Sheets (MSDS) for any steel thermally cut at the facility. For recycled steel, the MSDS for all constituent steel may be supplied.
9. All emissions from laser cutting conducted on the two Amada laser cutting lines and the Mazak laser cutting line shall be continuously captured and vented to a dust collector and secondary HEPA filtration system during all times that laser cutting activities are conducted.
 - a. The exhaust from each of the Amada laser cutting lines shall be routed through a dust collector with MERV 13 filter technology followed by a secondary HEPA filter system that meets a minimum efficiency of 99.97% for 0.3 micron sized particles.
 - b. The exhaust from the Mazak laser cutting line shall be routed through a dust collector with MERV 16 filter technology followed by a secondary HEPA filter system that meets a minimum efficiency of 99.97% for 0.3 micron sized particles.
10. No visible or fugitive emissions shall be allowed from the dust collectors and material handling. Each laser cutter shall be fully enclosed under negative pressure and vent to the dust collector during operation and cleaning. The dust collector holding bins shall be fully enclosed.
11. The two Donaldson Torit dust collectors and associated HEPA filters and the Robovent dust collector and associated HEPA filters shall each be equipped with an operable gauge to monitor the pressure drop across the filter bank and/or media bed for the cartridge filters and an operable gauge to monitor the pressure drop across each of the HEPA secondary filtration systems. The pressure drop minimum and maximum values must be clearly marked on or nearby the gauge and documented in the facility Operation and Maintenance (O&M) plan based on manufacturer's recommendations, specifications or instruction, or good air pollution control practices to minimize emissions. Upon determination of no remaining filter capacity, the laser processing shall be temporarily ceased until the filters are replaced.
12. The dust collectors including secondary HEPA filters permitted under this Order shall always be operated within the acceptable pressure drop range across the filter bank.
13. At least once per calendar month when laser processing occurs, the owner/operator shall:
 - a. Inspect each of the garage or bay doors, windows or building openings for the presence or absence of visible emissions. Monthly inspections for the presence of visible emissions must be conducted by an observer standing outside of the building and facing building openings for at least 5 minutes when laser cutting is being conducted.
 - b. Specify whether the dust collector pressure drop gauge is operating and the pressure drop is within the acceptable range. The observed pressure drop value must be recorded for each inspection.
 - c. Specify whether the HEPA filtration system pressure drop gauge is within the acceptable range. The observed pressure drop value must be recorded for each inspection.
14. Laser cutting operations shall cease and corrective action shall be taken prior to resuming laser cutting operations if any of the following are observed during the inspections required by Condition #13 or during

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any operating period:

- a. Visible emissions from the associated dust collector or building.
- b. The pressure drop gauge on the associated dust collector or secondary HEPA filter is not operating.
- c. The pressure drop across the associated dust collector or secondary HEPA filter is not within the acceptable range.

Recordkeeping Requirements:

15. All records required by this Order of Approval must be maintained for at least two years.
16. The following facility-wide records shall be kept onsite and up-to-date, and made readily available to Agency personnel upon request:
 - a. Monthly records of all products used at the facility that contribute to methyl isobutyl ketone, xylene, toluene and other HAP emissions and the quantity of each product applied.
 - b. Monthly records of all products used at the facility that contribute to VOC emissions and the quantity of each product applied.
 - c. Monthly and twelve-month rolling total emissions as calculated in accordance with Condition #6 of this Order to demonstrate compliance with each individual HAP, including methyl isobutyl ketone, xylene, toluene, and total HAP limits of Conditions #3, #4.
 - d. Monthly and twelve-month rolling total emissions as calculated in accordance with Condition #6 of this Order to demonstrate compliance with the total VOC limit of Conditions #5.
17. The following laser cutting records shall be kept onsite and up-to-date, and made readily available to Agency personnel upon request:
 - a. Documentation to demonstrate compliance with the filter specifications required by Condition #9.
 - b. The Operation and Maintenance (O&M) plan. The O&M plan shall be developed and implemented per Agency's Regulation I. The following shall be included in the O&M plan:
 - i. Pressure drop minimum and maximum values for each dust collector;
 - ii. HEPA filter maintenance procedures; and
 - iii. Corrective action procedures to be taken if the pressures drop across the filter bank deviates from the established range or is non-operational.
18. The following records shall be kept onsite and updated within 30 days of the end of each month, and be readily available for Agency personnel upon request:
 - a. Documentation to demonstrate compliance with Condition #7 total operating hour limits;
 - b. A written log documenting the visible emission inspection results as required by Condition #13;
 - c. A written log documenting the monthly pressure drop readings of each dust collector as required by Condition #13; and
 - d. Documentation verifying any corrective action taken to maintain compliance with this Order of Approval, if any, and the date and time it was conducted.

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APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

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Madeline Camp
Reviewing Engineer

Carole Cenci
Compliance Manager