

SUPPLEMENT to PERMIT No. 160-01
K&K Screw Products, Michigan Division
East China, Michigan
August 24, 2001

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. [R 336.1201(1)]
2. If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install. [R 336.1201(4)]
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. [R 336.1201(6)(b)]
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. [R 336.1201(8), Section 5510 of Act 451, PA 1994]
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. [R 336.1219]
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. [R 336.1901]
7. The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air

contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within ten days, with the information required in this rule. [R 336.1912]

8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, PA 1994, and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. [R 336.1301]
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this permit to install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). [R 336.1370]
13. Except as allowed by Rule 285 (a), (b), and (c), applicant shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. [R 336.1201(1)]
14. The Department may require the applicant to conduct acceptable performance tests, at the applicant's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. [R 336.2001]

SPECIAL CONDITIONS #160-01
 August 24, 2001
 (12 Special Conditions)

Emission Unit Identification

Emission Unit	Emission Unit Description	Stack Identification
EU-DEGREASER	Enclosed batch vapor/immersion degreaser equipped with three major control features; superheated vapor, reduced room draft, and a freeboard ratio of at least 1.0.	SV-DEGREASER

EU-DEGREASER

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Compliance Method	UAR(s)
1.	Methylene Chloride	EU-DEGREASER	8.9 tons	Per 12-month rolling time period	S.C. 4, 7-10.	R 336.1205(1(b)), R 336.1702(a)

Material Usage Limits

- The permittee shall not use more than 1618 gallons of methylene chloride per year based on a 12-month rolling time period as determined at the end of each calendar month. The amount of solvent used shall be determined on a "net usage" basis. "Net usage" is defined as the amount of solvent added to EU-DEGREASER to bring the solvent levels up to starting levels less any amount of solvent removed as waste. **[R 336.1225, R 336.1702(a), 40 CFR Part 63 Subpart T]**

Process/Operational Limits

- The permittee shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as specified in 40 CFR 63.463(a)-(f) for EU-DEGREASER. **[40 CFR 63.463(a)-(f)]**
- The permittee shall operate EU-DEGREASER in compliance with the required work and operational practices of 40 CFR 63.463(d)(1)-(12). The required work and operational practices include but are not limited to:
 - Reduced room draft.
 - The parts baskets or parts being cleaned shall not occupy more than 50 percent of the solvent/air interface area.
 - Any spraying operations shall be done within the vapor zone.
 - Parts shall be oriented so that the solvent drains from them freely. Parts having

cavities or blind holes shall be tipped or rotated before being moved from EU-DEGREASER.

- (5) Parts or parts baskets shall not be removed from the degreaser until condensation or dripping has stopped.
- (6) When solvent is added to or drained from EU-DEGREASER, the solvent shall be transferred using threaded or other leakproof couplings and closed plumbing directly to the sump or waste drum and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- (7) EU-DEGREASER shall be maintained as recommended by the manufacturer of the equipment.
- (8) Each operator of EU-DEGREASER shall complete and pass the degreaser operating procedures tests as given in Appendix B of the NESHAP if requested by the Air Quality Division.
- (9) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
- (10) Sponges, fabric, wood, and paper products shall not be cleaned in EU-DEGREASER.

[40 CFR 63.463(d)(1)-(12)]

5. The permittee shall not operate EU-DEGREASER unless it is properly enclosed. "Properly enclosed" means that a reduced room draft is accomplished by maintaining an air flow of a maximum of 50 feet per minute across the top of the freeboard area of EU-DEGREASER or its enclosure. **[40 CFR 63.463(e)(2)(ii)]**
6. The permittee shall not operate EU-DEGREASER unless the superheated vapor system is installed and operating properly. Proper operation of the superheated vapor system means that the temperature at the center of the superheated vapor zone be maintained at a temperature of at least 114°F. **[R 336.1224, R 336.1910]**

Equipment Limits

7. The permittee shall comply with reduced room draft requirements by ensuring that the airflow or movement within the solvent cleaning machine enclosure does not exceed 50 feet per minute as described in 40 CFR 63.466(d). The permittee shall demonstrate compliance by conducting monthly tests of the wind speed inside the enclosure. This may be accomplished by slowly rotating a velometer (portable or permanent) inside the entrance to the enclosure until the maximum speed is located and recorded. **[R 336.1910, 40 CFR 63.463(e)(2)(ii)(A) and 63.466(d)(2)]**
8. The permittee shall comply with the super heated vapor requirements by maintaining a superheated vapor zone temperature of a minimum of 10°F above the solvent boiling point as described in 40 CFR 63.363(e)(2)(vi)(A-C). The permittee shall demonstrate compliance by measuring and recording, weekly, the temperature of the center of the super heated vapor zone. A permanently mounted temperature indication device that digitally displays this temperature, used in conjunction with a appropriate weekly recordkeeping form, shall be acceptable. **[R 336.1910, 40 CFR 63.463(e)(2)(vi) and 63.466(a)]**

Monitoring

9. Monitoring and recording of emissions and operating information is required to comply with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR, Part 63, Subparts A and T. All source emissions data and operating data shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. Monitoring and recording requirements include, but are not limited to:
- a. Weekly monitoring and recording of the temperature at the center of the superheated solvent vapor zone while EU-DEGREASER is in the idling mode.
 - b. Monthly monitoring and recording of the windspeed within the enclosure.
 - c. Monthly inspection and recording of the enclosure for cracks, holes and other defects.
 - d. Monthly monitoring and recording of the hoist speeds, except as allowed by 40 CFR 63.466(c)(1)-(4).
 - e. An estimate of annual cleaning solvent total consumption for EU-DEGREASER.
- [40 CFR 63.466]**

Recordkeeping/Reporting/Notification

10. Applicant shall keep records of the following:
- a) Those records specified in paragraphs (a)(1) through (a)(5) of 40 CFR 63.467(a).
 - b) Results of control device monitoring requirements specified in Special Condition No. 9.
 - c) Dates and amounts of solvent added to EU-DEGREASER.
 - d) Solvent composition of wastes removed.
 - e) Calculation sheets showing how the monthly emissions were determined and the results of all calculations.

These records shall be kept on file for a period of at least five years and made available to the Department upon request. **[40 CFR 63.467(a) and (b)(1-3), R 336.1225, R 336.1702(a)]**

11. Applicant shall submit the following reports:
- a) An annual solvent emission report containing the following information:
 - a signed statement from the facility owner or his designee stating that the operators have received the appropriate training.
 - average monthly solvent consumption for the solvent cleaning machine.
 - b) A semiannual exceedance report if no exceedances occur, quarterly if exceedances do occur.

These reports shall be kept on file for a period of at least five years and made available to the Department upon request. **[40 CFR 63.468(f) and (h)]**

Stack/Vent Conditions

	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement(s)
12. SV- DEGREASER	14.0	33.0	R336.1201(3), 40 CFR 52.21 (c) and (d)
All exhaust gases shall be discharged vertically upwards to the ambient air unless otherwise noted.			