

13 February 2004

Mr. Erik J. Finger
Vice President
Tiyoda-Serec Corporation
33 Dexter Road
East Providence, RI 02914

Dear Mr. Finger:

The Department of Environmental Management, Office of Air Resources, has reviewed and approved your application for the installation of degreasing equipment at your 33 Dexter Road, East Providence facility.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 1788).

I can be reached at 222-2808, extension 7011 if there are any questions.

Sincerely,

Douglas L. McVay
Associate Supervising Engineer
Office of Air Resources

cc: East Providence Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

TIYODA-SEREC CORPORATION

APPROVAL NO. 1788

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Tiyoda-Serec Corporation

For the following:

The installation of a Tiyoda-Serec vapor degreaser that will utilize perchloroethylene.

trichloroethylene, and normal propylbromide as cleaning solvents.

Located at: *33 Dexter Road, East Providence*

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Tiyoda-Serec Corporation* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Stephen Majkut, Chief
Office of Air Resources

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

TIYODA-SEREC CORPORATION

APPROVAL NO. 1788

A. Emission Limitations

1. The total quantity of perchloroethylene used in the solvent cleaning machine shall not exceed 45 lbs per month (3-month rolling average).
2. The total quantity of trichloroethylene used in the solvent cleaning machine shall not exceed 275 lbs per month (3-month rolling average).
3. The total quantity of n-propyl bromide used in the solvent cleaning machine shall not exceed 60 lbs per month (3-month rolling average).

B. Operating Requirements

1. Equipment covers and dipping or rotating baskets must be constructed of nonporous or nonabsorbent material. Covers must form a tight seal with the sides of the solvent cleaning machine and have no gaps or holes.
2. Leaks must be repaired immediately or the solvent cleaning unit shut down.
3. Equipment used in solvent cleaning must display a conspicuous summary of proper operating procedures consistent with minimizing emissions of organic solvents.
4. Spills shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the specifications in Condition B.9.
5. No porous or absorbent materials, such as sponges, fabrics, wood, or paper products, shall be cleaned in the solvent cleaning machine.
6. Parts baskets or parts shall be drained under the cover and shall not be removed from the cleaning machine for at least 15 seconds or until dripping ceases and the pieces are visually dry, whichever is longer.
7. Parts shall be oriented for best drainage.

8. When solvent is added to or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
9. Solvent, waste solvent, still bottoms, and sump bottoms must be stored in covered containers and waste solvent transferal or disposal must allow less than 20 percent of the waste solvent (by weight) to evaporate into the atmosphere.
10. The solvent cleaning machine shall be maintained as recommended by the manufacturer of the equipment.
11. Operators must receive training in proper solvent cleaning procedures and, if requested by representatives of the Office of Air Resources or the EPA during an inspection, must complete and pass the applicable sections of the test on those procedures in Appendix A of Air Pollution Control Regulation No. 36.
12. The owner or operator shall ensure that the solvent level does not exceed the fill line.

C. Monitoring/Testing

1. The owner/operator shall, on the first operating day of every month, determine compliance with Conditions A.1, A.2 and A.3 using the following procedures:
 - a. A fill-line must be marked on the first month the measurements are taken. Solvent shall be added to bring the level to the same fill line on the first operating day of each month thereafter; and
 - b. Confirm that only clean liquid solvent is in the solvent cleaning machine; and
 - c. Using the records of solvent additions and deletions for the previous month required in Condition D.2 determine the monthly solvent usage as follows:

$$E = SA - LSR - SSR \qquad \text{Equation 1}$$

Where:

E = the total solvent usage for the previous month (pounds)

SA = the total amount of solvent added to the cleaning machine during the previous month (pounds)

LSR = the total amount of liquid solvent removed from the cleaning machine during the previous month (pounds)

SSR = the total amount of solvent removed from the cleaning machine in solid waste during the previous month (pounds)

The SSR should be determined using either engineering calculations or EPA Reference Method 25d.

- d. The 3-month rolling average of perchloroethylene and trichloroethylene use for the previous three-month period shall be calculated as follows:

$$E_{3\text{-month}} = \frac{E_1 + E_2 + E_3}{3} \quad \text{Equation 2}$$

Where:

$E_{3\text{-month}}$ = average monthly solvent usage during the previous three month period.

E_1, E_2, E_3 = solvent usage for each of the three most recent months, calculated using Equation 1.

D. Recordkeeping Requirements

1. The owner/operator shall maintain the following records for the lifetime of the cleaning unit:
 - a. Owner's manuals or written maintenance and operating procedures for the cleaning machine; and
 - b. Date of installation of the cleaning machine; and
 - c. Records of the content of the solvent used in the cleaning machine; and
 - d. Records of training provided to solvent cleaning machine operators.
2. The owner/operator shall maintain the following records for a period of five years:
 - a. A log of solvent additions and deletions made to the cleaning machine.
 - b. The monthly solvent usage, the average monthly usage for each 3-month period and the calculations of those values according to the procedure specified in Condition C.1; and

- c. The amount of solvent in the solid waste removed from the cleaning machine, calculated using either engineering calculations or EPA Reference Method 25d.
3. All records to be maintained as a condition of this approval must be made available to the Office of Air Resources or its representatives upon request.

E. Reporting Requirements

1. The owner/operator shall submit a Compliance Notification Report for the solvent cleaning machine to the Office of Air Resources no more than 60 days after the issuance of this permit. Compliance Notification Reports shall contain the following information:
 - a. The name and address of the owner or operator; and
 - b. The address of the solvent cleaning machine; and
 - c. A statement, signed by the owner or operator, stating that the cleaning machine is in compliance with this permit; and
 - d. A description of the method used to determine the cleaning capacity of the machine and the results of the monthly solvent usage calculation for the month beginning with the issuance of this permit.
2. The owner/operator shall submit an Exceedance Report to the Office of Air Resources semiannually except when, the Office of Air Resources determines on a case-by-case basis that more frequent reporting is necessary.
 - a. The following occurrence is considered an exceedance and must be reported on the Exceedance Report:
 - (1) If the 3-month average monthly usage limits in Conditions A.1, A.2 or A.3 are not met in any month.
 - b. If an exceedance occurs, Exceedance Reports must be submitted quarterly until a request to reduce the reporting frequency as specified in Condition E.2.e has been approved.
 - c. The Exceedance Report shall be received by the thirtieth day following the end of each exceedance reporting period. Initial reporting periods are January 1 – June 30 and July 1 – December 31.

- d. Exceedance Reports shall include the following information:
 - (1) Records of written or verbal orders for replacement parts, a description of the repairs made, additional monitoring to demonstrate that monitored parameters have returned to acceptable levels; and
 - (2) If an exceedance has occurred, the reason for the exceedance and description of the actions taken to correct the exceedance; and
 - (3) If an exceedance has occurred, the dates the cleaning machine was repaired, retested, and returned to service; and
 - (4) If an exceedance has not occurred or the cleaning equipment has not been inoperative, repaired, or adjusted, this information must be stated in the report.
 - e. If the owner/operator is required to submit Exceedance Reports on a quarterly (or more frequent) basis, the submittal frequency may be reduced to semiannual with the Director's approval, if the following requirements are achieved:
 - (1) The owner/operator has demonstrated a full year of compliance without an exceedance; and
 - (2) The owner/operator continues to comply with the recordkeeping and monitoring requirements specified in this permit.
3. The owner/operator shall submit an annual report to the Office of Air Resources by February 1 of each year for the previous calendar year. This report shall include the following:
- a. A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines sufficient to pass the test required in Appendix A of Air Pollution Control Regulation No. 36"
 - b. An estimate of solvent consumption for the solvent cleaning machine during the reporting period.
 - c. The average monthly solvent consumption for each consecutive three-month period, calculated using Equation 2.
4. The owner/operator shall notify the Office of Air Resources, in writing, of the date installation of the vapor degreaser is complete.

5. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this approval or any other applicable air pollution control rules and regulations.
6. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;
 - b. The subject source(s) that caused the noncompliance with the permit term;
 - c. The time and date of first observation of the incident of noncompliance;
 - d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate;
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
7. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
 - a. Change the representation of the facility in the permit application.
 - b. Alter the applicability of any state or federal air pollution rules or regulations.
 - c. Result in the violation of any terms or conditions of the permit.
 - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any change, which may result in an increased emission rate of any air contaminant, shall be subject to the approval of the Director.

F. Other permit conditions

1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, this degreaser shall be designed, constructed and operated in accordance with the representation of the facility in the permit application dated 18 November 2003.
2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained.
3. The vapor degreaser is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subparts A (General Provisions) and T (National Emission Standards for Halogenated Solvent Cleaning). Compliance with all applicable provisions therein is required, unless otherwise stated in this permit
4. The vapor degreaser is subject to the requirements of Air Pollution Control Regulation No. 36 "Control of Emissions from Organic Solvent Cleaning". Compliance with all applicable provisions therein is required, unless otherwise stated in this permit
5. Terms not otherwise defined in this permit shall have the meaning given to such terms in Air Pollution Control Regulation No. 36.
6. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the vapor degreaser in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, review of operating and maintenance procedures and inspection of the source