

**AIR EMISSION PERMIT NO. 12300707- 001
IS ISSUED TO**

Viking Drill & Tool Inc.
355 State Street
St. Paul, Ramsey County, MN 55165

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application:

Permit Type	Application Date
Total Facility Operating Permit	April 30, 1998

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal ; Part 70

Issue Date: June 4, 2001

Expiration: June 4, 2006

All Title I Conditions do not expire.

Richard J. Sandberg, Manager
Major Facilities Section
Metro District

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Appendix: Insignificant Activities

NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition.

Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Viking Drill & Tool is a manufacturer of twist drills. The primary source of emissions at the facility is the vapor degreaser. Because the vapor degreaser is subject 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning, the facility must receive a Part 70 permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item:**Total Facility**

What to do	Why to do it
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. "At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment, and the records kept to demonstrate plan implementation."	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

Subject Item: EU 002 Degreaser

What to do	Why to do it
EMISSION LIMITS or EMISSION CONTROL REQUIREMENTS	hdr
Operate the degreaser with a reduced room draft as described in Section 63.464(e)(2)(ii).	40 CFR Section 63.463(a)(1)(ii); Minn. R. 7011.7200
The degreaser must have a freeboard ratio of 0.75 or greater.	40 CFR Section 63.463(a)(2); Minn. R. 7011.7200
The degreaser must have an automated parts handling system capable of moving parts or parts baskets at a speed of 11 feet per minute or less from the initial loading of parts through removal of cleaned parts.	40 CFR Section 63.463(a)(3); Minn. R. 7011.7200
The degreaser must be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.	40 CFR Section 63.463(a)(4); Minn. R. 7011.7200
The degreaser must be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.	40 CFR Section 63.463(a)(5); Minn. R. 7011.7200
The degreaser must be equipped with a primary condenser.	40 CFR Section 63.463(a)(6); Minn. R. 7011.7200
Use the following control combination: Option 6: Freeboard refrigeration device, reduced room draft, and freeboard ratio of 1.0	40 CFR Section 63.463(b)(2)(i) [Also meets requirements of 40 CFR Section 63.463(a)(3)]; Minn. R. 7011.7200
Control air disturbances across the degreaser opening(s) by using a reduced room draft as described in Section 63.463(e)(2)(ii).	40 CFR Section 63.463(d)(1)(ii); Minn. R. 7011.7200
The parts basket or the parts being cleaned shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 3 feet per minute or less.	40 CFR Section 63.463(d)(2); Minn. R. 7011.7200
Any spraying operations shall be done within the vapor zone or within a section of the degreaser that is not directly exposed to the ambient air.	40 CFR Section 63.463(d)(3); Minn. R. 7011.7200
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 removed from the degreaser unless an equally effective approach has been approved by the Administrator.	40 CFR Section 63.463(d)(4); Minn. R. 7011.7200
Parts baskets or parts shall not be removed from the degreaser until dripping has stopped.	40 CFR Section 63.463(d)(5); Minn. R. 7011.7200
During startup of the degreaser, the primary condenser shall be turned on before the sump heater.	40 CFR Section 63.463(d)(6); Minn. R. 7011.7200
During shutdown of the degreaser, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.	40 CFR Section 63.463(d)(7); Minn. R. 7011.7200
When solvent is added or drained from the degreaser, 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.	40 CFR Section 63.463(d)(8); Minn. R. 7011.7200
The degreaser and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.	40 CFR Section 63.463(d)(9); Minn. R. 7011.7200
If requested during an inspection, each operator of the degreaser shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in Appendix B of 40 CFR Section 63, subpart T.	40 CFR Section 63.463(d)(10); Minn. R. 7011.7200
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.	40 CFR Section 63.463(d)(11); Minn. R. 7011.7200
Sponges, fabric, wood, and paper products shall not be cleaned in the degreaser.	40 CFR Section 63.463(d)(12); Minn. R. 7011.7200
OPERATING/MONITORING/TESTING REQUIREMENTS	hdr
FREEBOARD REFRIGERATION DEVICE -- OPERATION	40 CFR Section 63.463(e)(2)(i); 40 CFR Section 63.463(e)(3); Minn. R. 7011.7200
Ensure that the chilled air blanket temperature is no greater than 30 percent of the solvent's boiling point.	
If this requirement is not met, determine if an exceedance has occurred using the criteria of Section 63.463(e)(3).	
FREEBOARD REFRIGERATION DEVICE -- MONITORING	40 CFR Section 63.466(a)(1); Minn. R. 7011.7200
On a weekly basis, use a thermometer or a thermocouple to measure the temperature at the center of the air blanket during the idling mode.	

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

<p>REDUCED ROOM DRAFT -- OPERATION</p> <p>Ensure that the flow or movement of air across the top of the freeboard area of the degreaser or within the degreaser enclosure does not exceed 50 feet per minute at any time.</p> <p>If any requirement is not met, determine if an exceedance has occurred using the criteria of Section 63.463(e)(3).</p>	<p>40 CFR Section 63.463(e)(2)(ii); 40 CFR Section 63.463(e)(3); Minn. R. 7011.7200</p>
<p>REDUCED ROOM DRAFT -- MONITORING</p> <p>Conduct monitoring and record results as specified in (1) or (2) below:</p> <p>(1) If reduced draft is maintained by controlling room parameters (redirecting fans, closing doors/window, etc.) conduct an initial monitoring test of the windspeed and room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters, as specified in Section 63.466(d)(1)(i) and (d)(1)(ii).</p> <p>(2) If reduced draft is maintained by a full or partial enclosure, conduct an initial monitoring test and monthly monitoring of the windspeed within the enclosure using the procedure specified in Section 63.466(d)(2)(i) and (d)(2)(ii), and monthly visual inspections of the enclosure to determine if it is free of cracks, holes, and other defects.</p>	<p>40 CFR Section 63.466(d); Minn R. 7011.7200</p>
<p>RECORDKEEPING REQUIREMENTS</p>	<p>hdr</p>
<p>Maintain the following records in written or electronic form, for the lifetime of the degreaser:</p> <p>(1) Owner's manuals, or if not available, written maintenance and operating procedures, for the degreaser and control equipment.</p> <p>(2) The date of installation for the degreaser and all of its control devices. If the exact date of installation is not known, a letter certifying that the cleaning machine and its control devices were installed on, prior to, or after November 29, 1993, may be substituted.</p> <p>(3) (not applicable)</p> <p>(4) (not applicable)</p> <p>(5) Records of the halogenated HAP solvent content for each solvent used in the machine.</p>	<p>40 CFR Section 63.467(a); Minn. R. 7011.7200</p>
<p>Maintain the following records, in written or electronic form, for a period of 5 years:</p> <p>(1) The results of any required control device monitoring.</p> <p>(2) Information on the actions taken to comply with the applicable requirements of Sections 63.463(e) or (f), including records or written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.</p> <p>(3) Estimates of annual solvent consumption for each degreaser.</p>	<p>40 CFR Section 63.467(b); Minn. R. 7011.7200</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

Subject Item: EU 003 Air make-up unit**Associated Items:** SV 001 Plant Air Makeup Stack

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input (Potential-to-Emit of the equipment is 0.007 lb/million Btu heat input.)	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

Subject Item: EU 004 Salt Bath

What to do	Why to do it
In order to be considered an insignificant activity, emissions from the equipment must be filtered through an air cleaning system and vented inside the building 100 percent of the time.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1300, subp. 3(D)(2)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)

TABLE B: SUBMITTALS

06/04/01

Facility Name: Viking Drill & Tool Inc
Permit Number: 12300707 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

06/04/01

Facility Name: Viking Drill & Tool Inc
Permit Number: 12300707 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility

TABLE B: RECURRENT SUBMITTALS

06/04/01

Facility Name: Viking Drill & Tool Inc

Permit Number: 12300707 - 001

What to send	When to send	Portion of Facility Affected
Report	<p>due 30 days after end of each calendar half-year starting 12/02/1994 (Exceedance Report), unless a different frequency is required as described in 40 CFR Section 63.468(h) or (i). The exceedance report shall include:</p> <p>(1) Information on the actions taken to comply with 40 CFR Section 63.463(e) and (f), including records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.</p> <p>(2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.</p> <p>(3) If no exceedances have occurred, or if a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.</p>	EU002
Semiannual Deviations Report	<p>due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.</p>	Total Facility
Compliance Certification	<p>due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.</p>	Total Facility
Report	<p>due 31 days after end of each calendar year starting 12/02/1994. Report must include the following:</p> <p>(1) 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 and their control devices sufficient to pass the test required in 40 CFR Section 63.463(d)(10)."</p> <p>(2) An estimate of solvent consumption for each degreaser during the reporting period.</p>	EU002

Facility Name: Viking Drill & Tool Inc.
Permit Number: 12300707-001

Insignificant Activities and Applicable Requirements

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
3(D)	<p>Processing operations:</p> <p>2. Equipment venting particulate matter (PM) or particulate matter less than 10 microns (PM₁₀) inside a building, provided that emissions from the equipment are:</p> <p>a). filtered through an air cleaning system; and</p> <p>b). vented inside of the building 100% of the time.</p> <ul style="list-style-type: none"> <i>Salt Bath equipment is vented through a triple filter and exhausted back inside the building.</i> 	<ul style="list-style-type: none"> Minn. R. 7011.0715
3(H)	<p>Miscellaneous:</p> <p>4. brazing, soldering or welding equipment;</p> <ul style="list-style-type: none"> <i>Welding area</i> 	<ul style="list-style-type: none"> Minn. R. 7011.715
3(I)	<p>Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than:</p> <p>1. 4,000 lbs/year of carbon monoxide; and</p> <p>2. 2,000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone.</p> <ul style="list-style-type: none"> <i>Twelve individual parts washers, each of which has a PTE less than 2000 lb/year VOC</i> <i>Rust preventative operation uses less than 2000 lb/year VOC</i> <i>One process boiler, 0.6 MMBtu/hr, PTE less than above thresholds</i> <i>Fourteen individual heaters, each of which has PTE less than above thresholds</i> 	<ul style="list-style-type: none"> Minn. R. 7011.0715 Minn. R. 7011.0715 Minn. R. 7011.0610 Minn. R. 7011.0515

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300707-001

This technical support document is intended for all parties interested in the permit. The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 3545)
Viking Drill & Tool, Inc. 355 State Street St. Paul, MN 55107 Contact: Doug Rutford Safety & Environmental Director	Viking Drill & Tool, Inc. 355 State Street St. Paul, Ramsey County, MN

1.2. Description of the Permit Action

Viking Drill & Tool, Inc. is a manufacturer of twist drills. The primary source of emissions at the facility is the vapor degreaser, which is subject to 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning. Therefore, the facility must receive a Part 70 permit.

1.3 Description of any changes allowed with this permit issuance

The Permittee is modifying the exhaust system of the salt bath operation. The source has emitted to the atmosphere in the past. In March 2001, the Permittee will be installing a filter and routing the exhaust back inside the building, making this an insignificant activity. While this change does not require a permit, the permit contains a condition that henceforth, the salt bath operation shall be exhausted inside the building in order to be considered an insignificant activity.

1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

None.

1.5 Changes Made to the Draft Permit Following Public Notice.

None. No comments were received and no changes were made to the permit.

1.6 Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

EU	Emission Unit Description	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO Tpy	VOC tpy	Single HAP tpy	All HAPs tpy
002	Degreaser	0	0	0	0	0	27.07	27.07	27.07
003	Air Makeup Unit	0.08	0.08	0	1.03	0.87	0.06	0	0
Na	Insignificant Activities (combined)	0.09	0.09	0	1.18	0.99	3.06	0	0

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO Tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	0.17	0.17	0.0	2.21	1.86	30.2	27.07	27.07
Total Facility Actual Emissions*	0.01	0.01	0.0	0.16	0.12	6.28	NR**	NR**

*1999 Emission Inventory

** NR – Not Reported (HAPs are not reported on the annual emission inventory.)

Table 2. Facility and Permit Classification

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD			All
NAAR			
Part 70 Permit Program	HAP		All others

* Refers to potential emissions that are less than those specified as major by 40 CFR 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory and/or Statutory Basis

Part 70 Permit Program – The facility is a major source under Part 70, due to the potential emissions of total and individual HAPs, and due to the applicability of 40 CFR 63, Subpart T.

National Emission Standards for Hazardous Air Pollutants (NESHAP) – The facility's degreaser is subject to the work practice standards of 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning. The permit includes the requirements of the compliance

options that the Permittee has selected under this standard. No other promulgated NESHAPs apply, and no modifications are authorized, therefore 112(g) is not triggered.

New Source Review – The facility is a non major source under 40 CFR 52.21, Prevention of Significant Deterioration.

New Source Performance Standards (NSPS) – The facility is not subject to any of the federal NSPS.

Minnesota Standards of Performance – Portions of the facility are subject to Minn. R. ch. 7011, as follows:

- Process boiler – Minn. R. 7011.0515
- Air Makeup Units – Minn. R. 7011.0610
- Salt Bath – Minn. R. 7011.0715

Table 3. Summary of Applicable Requirements

EU	Applicable Regulations	Comments:
EU002	40 CFR 63, Subpart T	National Emission Standards for Halogenated Solvent Cleaning
EU003	Minn. R. 7007.0610	Standards of Performance for Direct Heating Equipment
EU001 (IA)	Minn. R. 7007.0515	Standards of Performance for New Indirect Heating Equipment

3. Technical Information

3.1 Calculations

Calculations of emissions from the degreaser were done as described in 40 CFR 63.465(e)(1):

$$PTE = H \times W \times SAI$$

Where:

H = hours of operation = 8760 hr/yr

W = working mode uncontrolled emission rate = 1.95 (kg/m²)/hr = 0.399 (lb/ft²)/hr

SAI = solvent/air interface = 15.5 ft²

$$PTE = 54135.3 \text{ lb/yr} = 27.07 \text{ ton/year} = 6.18 \text{ lb/hr}$$

Calculations of the process boiler (EU001, insignificant activity), the plant air makeup unit (EU003) and the remaining air makeup units (insignificant activities) were all calculated using AP-42 emission factors and the maximum capacity of the equipment.

3.2 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements. To achieve this objective, the U.S. EPA requires periodic monitoring for permitted sources.

In evaluating the monitoring included in the permit, the MPCA considered the following:

- The likelihood of violating the applicable requirement;
- Whether add-on controls are necessary to meet an emission limit;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 4. Emission Units Subject to Periodic Monitoring

EU/GP/CE	Emission Limit (basis)	Additional Monitoring	Discussion
EU002	No limit – subject to work practice standards outlined in 40 CFR 63, Subpart T	None	Work practices must be consistent with the rule
EU003	PM \leq 0.4 lb/MMBtu heat input (Minn. R. 7011.0515)	None	Potential to emit of the equipment at maximum capacity is approximately 0.007 lb PM/MMBtu heat input – noncompliance is unlikely.

3.3 Insignificant Activities

The facility has several combustion sources and parts washers that individually are insignificant activities. The total combined emissions from these sources are minimal, as is shown in Table 1.

The facility operates a salt bath operation that is a source of particulate matter emissions. The facility is in the process of installing a filter and re-routing the exhaust back inside the building, making this an insignificant activity.

4. Conclusion

Based on the information provided by Viking Drill & Tool, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300707-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Attachments: 1. Calculations 2. Facility Description and CD-01 Forms

Attachment 1

Calculations

Attachment 2
Facility Description and CD-01 Forms