

**AIR EMISSION PERMIT NO. 05300844- 001  
IS ISSUED TO**

**THE TORO COMPANY – LYNDAL**  
8111 Lyndale Avenue South  
Bloomington, Hennepin County, Minnesota 55420-1196

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

Permit Type	Application Date
Total Facility Operating Permit	Original Application October 1995; Application Revisions November 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 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:** September 18, 2000

**Expiration:** September 18, 2005

All Title I Conditions do not expire.

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Richard J. Sandberg, Manager  
Major Facilities Section  
Metro District

for Karen A. Studders  
Commissioner  
Minnesota Pollution Control Agency

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**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. 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. Certain requirements which have been determined not to apply are listed in Table A of this permit. 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:**

According to the company, the Bloomington facility is used as Toro's research and development facility. This facility does not manufacture or fabricate any products for market. The primary processes located at the Bloomington site include engine testing, spray painting and coating. During the site visit, MPCA staff witnessed a wide variety of testing activities including endurance and development testing as well as safety testing and stress testing.

The primary source of air emissions at this facility is engine testing. Test cells are used to conduct endurance testing, developmental testing and environmental testing on engines used in Toro's products. Testing can take place in any number of the installed test cells and different tests can be carried out within the same test cell at the same time. Testing can also take place at individual workstations within the experimental test area.

Other sources of air emissions are a paint booth used to paint prototype parts and a stress coat paint booth used to coat parts with a stress sensitive paint prior to stress testing. The paint booths each have a spray gun and spray cans are also used. The amount of paint used annually is very small and these units are considered insignificant activities required to be listed. The primary pollutants of concern are carbon monoxide (CO), volatile organic carbon (VOCs), nitrogen oxides (NOx), sulfur dioxide (SO<sub>2</sub>) and hazardous air pollutants (HAPs).

This permit was written as a Flex Cap permit for the test cells. For Toro, this means that they may change, add, or delete any of the test cells as long as they abide by the fuel usage limits and all other permit conditions.

The only pollution control equipment at this facility is a bank of mat or panel filters on the paint booth. The facility will use only gasoline or diesel fuel in its engines and the facility is proposing fuel usage limits to avoid New Source Review and to remain minor for HAPs. The facility will accept a total HAP limit of 9.5 tpy to avoid having to track individual HAPs.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/18/00

Facility Name: The Toro Co - Lyndale

Permit Number: 05300844 - 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**

<b>What to do</b>	<b>Why to do it</b>
<b>OPERATIONAL REQUIREMENTS</b>	hdr
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
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
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
<b>PERFORMANCE TEST REQUIREMENTS</b>	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A or B.	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
<b>MONITORING REQUIREMENTS</b>	hdr
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 or B, 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
<b>RECORDKEEPING</b>	hdr
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)
Recordkeeping: 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/18/00

Facility Name: The Toro Co - Lyndale

Permit Number: 05300844 - 001

REPORTING/SUBMITTALS	hdr
<p>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.</p> <p>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.</p>	Minn. R. 7019.1000, subp. 3
<p>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.</p> <p>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.</p>	Minn. R. 7019.1000, subp. 2
<p>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.</p>	Minn. R. 7019.1000, subp. 1
<p>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:</p> <ol style="list-style-type: none"> <li>1. the cause of the deviation;</li> <li>2. the exact dates of the period of the deviation, if the deviation has been corrected;</li> <li>3. whether or not the deviation has been corrected;</li> <li>4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and</li> <li>5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.</li> </ol>	Minn. R. 7019.1000, subp. 1
<p>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.</p>	Minn. R. 7007.1150 through Minn. R. 7007.1500
<p>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).</p>	Minn. R. 7007.1400, subp. 1(H)
<p>Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.</p>	Minn. R. 7007.0800, subp. 9(A)
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	Minn. R. 7002.0005 through Minn. R. 7002.0095

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/18/00

Facility Name: The Toro Co - Lyndale

Permit Number: 05300844 - 001

**Subject Item: GP 001 Engine Test Cells**

What to do	Why to do it																																	
Fuel Usage: less than or equal to 40,474 gallons/year using 12-month Rolling Sum for gasoline	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63																																	
Fuel Usage: less than or equal to 75,000 gallons/year using 12-month Rolling Sum for diesel fuel	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63.																																	
Toro will combust only gasoline or diesel fuel.	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63																																	
Recordkeeping: The permittee shall record the amount of gasoline and diesel fuel loaded into each tank as it is delivered by the supplier. The permittee shall keep a log of gasoline and diesel fuel use using fuel level indicators and a calibrated dip stick in each tank and fuel purchase records. The system calibration shall be checked once per year.	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63																																	
Recordkeeping: By the 30th day of each month, the permittee shall calculate the amount of gasoline and diesel fuel used during the previous calendar month.	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63																																	
Recordkeeping: By the 30th day of each month, the permittee shall calculate the amount of gasoline and diesel fuel used during the previous 12 months (12-month rolling sum). These records shall be retained on-site.	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63																																	
The following emission factors from AP-42 shall be used to calculate criteria pollutant emissions:  <table><tr><td>Fuel Units</td><td>Gasoline lb/MMBtu</td><td>Diesel lb/MMBtu</td></tr><tr><td>PM</td><td>0.10</td><td>0.31</td></tr><tr><td>PM-10</td><td>0.10</td><td>0.31</td></tr><tr><td>CO</td><td>62.7</td><td>0.95</td></tr><tr><td>VOC</td><td>1.16</td><td>0.36</td></tr><tr><td>NOx</td><td>1.63</td><td>4.41</td></tr><tr><td>SOx</td><td>0.084</td><td>0.29</td></tr></table>	Fuel Units	Gasoline lb/MMBtu	Diesel lb/MMBtu	PM	0.10	0.31	PM-10	0.10	0.31	CO	62.7	0.95	VOC	1.16	0.36	NOx	1.63	4.41	SOx	0.084	0.29	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63.2												
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The following emission factors from AP-42 shall be used to calculate Hazardous Air Pollutant emissions:  <table><tr><td>Fuel Units</td><td>Gasoline g/hp-hr</td><td>Diesel lb/MMBtu</td></tr><tr><td>Aldehydes</td><td>0.07</td><td>-</td></tr><tr><td>Benzene</td><td>-</td><td>9.33 E-4</td></tr><tr><td>Toluene</td><td>-</td><td>4.09 E-4</td></tr><tr><td>Xylenes</td><td>-</td><td>2.85 E-4</td></tr><tr><td>Propylene</td><td>-</td><td>2.58 E-3</td></tr><tr><td>1,3- Butadiene</td><td>-</td><td>3.91 E-5</td></tr><tr><td>Formaldehyde</td><td>-</td><td>1.18 E-3</td></tr><tr><td>Acetaldehyde</td><td>-</td><td>7.67 E-4</td></tr><tr><td>Acrolein</td><td>-</td><td>9.25 E-5</td></tr><tr><td>PAH</td><td>-</td><td>1.68 E-4</td></tr></table>	Fuel Units	Gasoline g/hp-hr	Diesel lb/MMBtu	Aldehydes	0.07	-	Benzene	-	9.33 E-4	Toluene	-	4.09 E-4	Xylenes	-	2.85 E-4	Propylene	-	2.58 E-3	1,3- Butadiene	-	3.91 E-5	Formaldehyde	-	1.18 E-3	Acetaldehyde	-	7.67 E-4	Acrolein	-	9.25 E-5	PAH	-	1.68 E-4	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63.2
Fuel Units	Gasoline g/hp-hr	Diesel lb/MMBtu																																
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Acetaldehyde	-	7.67 E-4																																
Acrolein	-	9.25 E-5																																
PAH	-	1.68 E-4																																
This permit authorizes Toro to add, delete, or modify test cells at any time prior to permit expiration. The stationary source as changed must meet all conditions of the permit at all times.	Title 1 Condition: Limit to avoid classification as a major source or modification under 40 CFR 52.21 and 40 CFR 63.2																																	
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, Subp. 1																																	
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, Subp. 2																																	

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/18/00

Facility Name: The Toro Co - Lyndale

Permit Number: 05300844 - 001

**Subject Item:** EU 044 Emergency Generator**Associated Items:** SV 019 aka 203

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Fuel Restriction: restricted to using diesel fuel	Minn. R. 7007.0800, Subp. 2
Sulfur Content of Fuel: less than 0.4% by weight.	Minn. R. 7007.0800, Subp. 2
Fuel Supplier Certification: obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.4% by weight.	Minn. R. 7007.0800, Subps. 4 and 5
Recordkeeping: The Permittee shall maintain documentation on-site that the unit is an emergency generator by design that qualifies under the EPA memorandum limiting operation to 500 hours per year.	Minn. R. 7007.0800, Subp. 5



## TABLE B: SUBMITTALS

09/18/00

Facility Name: The Toro Co - Lyndale  
Permit Number: 05300844 - 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**

09/18/00

Facility Name:       The Toro Co - Lyndale  
Permit Number:     05300844 - 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**

09/18/00

Facility Name: The Toro Co - Lyndale

Permit Number: 05300844 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	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.	Total Facility
Annual Report	due 30 days after end of each calendar year following Permit Issuance that documents all equipment and/or stacks added under Group 001 during the last calendar year using the latest MPCA forms. Toro shall attach a fuel usage report documenting compliance with the 12-month gasoline and diesel fuel rolling sum	GP001
Compliance Certification	due 31 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. < The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604>	Total Facility
Emissions 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.	Total Facility

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**DRAFT AIR EMISSION PERMIT NO. 05300844-001**

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

**1. General Information**

1.1. Applicant and Stationary Source Location:

Owner and Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 3524 )
The Toro Company - Lyndale  8111 Lyndale Avenue South  Bloomington, MN 55420-1196	8111 Lyndale Avenue South  Bloomington, Minnesota  Hennepin County

1.2. Description of the Facility

According to the company, the Bloomington facility is used as Toro's research and development facility. This facility does not manufacture or fabricate any products for market. The primary processes located at the Bloomington site include engine testing, spray painting and coating. During a site visit, Minnesota Pollution Control Agency (MPCA) staff witnessed a wide variety of testing activities including endurance and development testing, as well as safety testing and stress testing. The primary pollutants of concern at the facility are carbon monoxide (CO), volatile organic carbons (VOCs), nitrogen oxides (NOx), sulfur dioxide (SO2) and hazardous air pollutants (HAPs).

Toro submitted its Part 70 permit application in June 1995. Prior to this time the Lyndale facility did not have an air permit. As part of the air permit application, Toro committed to a compliance schedule to complete a Prevention of Significant Detroration Program applicability analysis for the installation of test cells that occurred in 1987 and 1993. The applicability analysis was completed and submitted in October of 1995. In 1997 an emergency generator and twelve test cells were added prior to any MPCA action on the applicability analysis. In 1998 Toro submitted revisions to the original 1995 Part 70 application to incorporate changes made to the facility since submittal of the original Part 70 permit application. The facility is located in an area that was designated nonattainment for CO until November 1999 when the area was redesignated as attainment.

The primary source of air emissions at this facility is engine testing conducted in test cells. The test cells are rooms used to conduct endurance testing, developmental testing and environmental testing on engines used in Toro's products. Testing can take place in any number of the installed test cells and different tests can be carried out within the same test cell at the same time. Testing can also take place at individual workstations within the experimental test area.

Other sources of air emissions are a paint booth used to paint prototype parts and a stress coat paint booth used to coat parts with a stress sensitive paint prior to stress testing. The paint booths each have a spray gun and spray cans are also used. The original application and the 1998 revisions listed the paint booth and the stress coat booth as emission units. At a May 2000 meeting, Toro requested that we consider whether these units would qualify as insignificant activities. Due to a recent rule change, a source with total usage of less than 200 gallons per year of VOCs (including HAPs-containing VOCs), are now considered insignificant activities required to be listed.

Under 40 CFR 90.103, Toro is required to conduct extensive environmental testing of its gasoline-powered engines. Because Toro develops and manufactures its own two-cycle engines, it has performed the environmental testing for these engines. Under this rule, Toro has tested for CO, hydrocarbons and nitrogen oxides. This testing has been done in accordance with the U.S. Environmental Protection Agency procedures and has generated emission factors used in emission calculations. These emission factors produce emissions of CO which are less than from AP-42 emission factors. For the purposes of this permit and calculating emissions from the fuel usage limits, AP-42 emission factors listed in the permit shall be used.

The only pollution control equipment at this facility is a bank of mat or panel filters on the paint booth. Toro will use only gasoline or diesel fuel in its engines. They are also taking fuel usage limits to avoid New Source Review and to remain minor for HAPs.

### 1.3. Description of any changes allowed with this permit issuance.

This is the first permit issued for this facility. This permit was written as a Flex Cap permit for the test cells. For Toro, this means that they may change, add, or delete any of the test cells as long as they abide by the fuel usage limits and all other permit conditions.

- 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.

Permit Number and Issuance Date	Action Authorized
	This is the first permit issued for this facility. A Retroactive New Source Review Applicability Analysis for the installation of 21 new test cells in 1987, and additional test cells in 1993, was submitted in 1995. Twelve more test cells were added in 1997 after the applicability analysis was submitted. This permit was written as a Flex Cap permit for the test cells so that Toro will be allowed to configure their test cells as required at any time prior to permit expiration.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

EU #	SV #	Emission Unit Description	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC Tpy	Pb tpy	Single HAP tpy	All HAPs tpy
GP001		Engine Test Cells	13.86	13.86	12.9	194	2844	1525	-	3.05	6.13
EU044	19	Emergency Generator	0.3	0.3	0.3	4.2	0.9	0.3	-	-	-

	PM Tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Pb tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	2.22	2.22	2.06	31.6	170	102	-	9.5	9.5
Total Facility Actual Emissions	0.52	0.52	0.5	7.6	98.5	53	-	0.10	0.25

Table 2. Facility (TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)		CO, VOCs	PM10, SO2
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	CO, VOCs	HAPs, NOx	PM10, SO2

\* 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

Summary Regulatory and/or Statutory Basis of the Emission or Operational Limit

### Regulatory Overview of Facility

*EU, GRP, or SV #	Applicable Regulations	Comments:
GP001	40 CFR 52.21 and 40 CFR 63.2	Title 1 Condition: Limit to avoid classification as a major source or modification. Gasoline and diesel fuel usage restricted on a 12-month rolling sum basis. Periodic monitoring: The permittee will calculate and record the total fuel usage monthly, and calculate the 12-month rolling sum for fuel usage monthly. Emission factors were placed in the permit for CO, VOC and HAP emissions. Using the emission factors to calculate CO and VOC emissions based on 40,474 gallons of gasoline and 75,000 gallons of diesel we see that Toro is still well under the limits. CO limited potential from gasoline = $62.7 \text{ lb/MMBtu} \times 130,000 \text{ Btu/gallon} \times 40,474 \text{ gallons per year} \times \text{ton}/2000\text{lbs} = 165 \text{ tons/year}$ . CO limited potential from diesel = $0.95 \text{ lb/MMBtu} \times 140,000 \text{ Btu/gallon} \times 75,000 \text{ gallons per year} \times \text{ton}/2000 \text{ lb} = 5 \text{ tons/ year}$ . Total limited potential for CO is 170 tons/yr.
EU001to EU030 & EU033 to EU044	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines (Test Cells). Since this facility is considered a stationary source for permitting purposes, and since the primary emissions are due to testing of internal combustion engines, this rule was determined to be the most appropriate.

### **3. Conclusion**

Based on the information provided by The Toro Company, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in Air Emission Permit No. 05300844-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota rules.

Staff Members on Permit Team: Greg Kvaal, Bob Berg

Attachment: CD-01 Forms