

AIR EMISSION PERMIT NO. 11300014- 006
Major Amendment

IS ISSUED TO

Arctic Cat Inc

Arctic Cat Inc
601 Brooks Avenue South
Thief River Falls, Pennington County, MN 56701

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the Permit Applications Table.

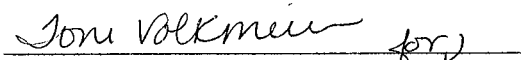
This permit amendment supersedes Air Emission Permit No. 11300014-005 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary 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.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: Federal; Part 70/Limits to Avoid NSR; Limits to avoid Part 63*
Operating Permit Issue Date: November 14, 2005
Major Amendment Issue Date: August 19, 2013
Expiration Date: November 14, 2010** – Title I Conditions do not expire.

* "Once In Always In" Applies to all applicable NESHAPs, except 40 CFR pt. 63, subp. PPPP

** The Permittee may continue to operate this facility after the expiration date of the permit, per the provision under Minn. R. 7007.0450, subp. 3. (Title V Reissuance Application was received 5/17/2010)


Don A. Smith, Manager
Air Quality Permits Section
Industrial Division

for John Linc Stine
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit - Reissuance	04/02/2003	004
Major Amendment	10/18/2007	005
Major Amendment	11/19/2012	006

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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. 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:

Arctic Cat, Inc. manufactures snowmobiles and all-terrain vehicles. The facility activities include vehicle and component design, and vehicle assembly. Assembly includes machining, welding, painting, component assembly and engine testing. Foam seat covers are also manufactured at the facility. The main sources of air emissions are from the electrodeposition coating, foam seat production, and engine testing.

AMENDMENT DESCRIPTION:

Permit Action 005:

Permit Action 005 authorized installation of a liquid spray paint process, including one oven (EU 025), four spray booths (guns) with panel filters (EUs 21-24, and CEs 11-14). Primary emissions from these operations are particulate matter (PM), volatile organic compounds (VOC), and hazardous air pollutants (HAP). All of these pollutants are limited by this permit action. The EPA's "Once In Always In" policy applies to this facility. However, Arctic Cat proposed Synthetic Minor HAP Limits to the Total Facility so that the "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products (subp. PPPP)" are not applicable to the proposed modification.

Permit Action 006:

Arctic Cat is proposing to allow for the use of diesel and aviation fuel in engine testing (GP002 – EU012, EU013, and EU014). The facility is currently permitted to use natural gas, propane and gasoline only for all combustion sources. Currently, diesel or aviation fuel is required for product testing in test stations. In addition to diesel, Arctic Cat would also like the ability to combust aviation fuel and indolene in the engine test cells. The emission factors for aviation fuel combustion are the same as for diesel fuel combustion. Indolene is a cleaner form of gasoline; therefore, the emission factors of indolene are the same as used to calculate emissions from gasoline combustion.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

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
SOURCE-SPECIFIC REQUIREMENTS - EMISSION LIMITS	hdr
<p>Total Particulate Matter: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM-emitting equipment, adds new PM-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>PM < 10 micron: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM10-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM10-emitting equipment, adds new PM10-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM10 calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>PM < 2.5 micron: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM2.5-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM2.5-emitting equipment, adds new PM2.5-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Carbon Monoxide: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All CO-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing CO-emitting equipment, adds new CO-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP002 or GP003, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete CO calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Nitrogen Oxides: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All NOX-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing NOX-emitting equipment, adds new NOX-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP002 or GP003, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete NOX calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Volatile Organic Compounds: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All VOC-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing VOC-emitting equipment, adds new VOC-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>HAPs - Total: less than or equal to 23.0 tons/year using 12-month Rolling Sum . All HAP-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing HAP-emitting equipment, adds new HAP-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete HAP calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum . All HAP-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing HAP-emitting equipment, adds new HAP-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete HAP calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.</p>	<p>Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>SOURCE-SPECIFIC REQUIREMENTS - OPERATING CONDITIONS ASSOCIATED WITH EMISSION LIMITS</p>	<p>hdr</p>
<p>Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>This permit establishes limits on the facility to keep it a minor source under New Source Review and Future NESHAPS (except 40 CFR pt. 63, Subpart PPPP). The Permittee cannot make any change at the source that would make the source a major source under New Source Review and NESHAPS until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>Labeling Requirements: The Permittee shall permanently display on each emission unit the Emission Unit (EU) number and on each item of air pollution control equipment, the Control Equipment (CE) number. The identifying number shall be legible from a safe distance.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>Equipment List Inventory: The Permittee shall maintain a written list of all emission units on site that are not insignificant activities. The list shall include the type of equipment; identifying number; dates of installation, modification and/or reconstruction; and reference to applicable Standards of Performance for New Stationary Sources (40 CFR pt. 60) and National Emission Standards for Hazardous Air Pollutants (40 CFR pt. 63).</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>Updating the Equipment List Inventory: The list shall be updated to include new, modified, or relocated equipment before making a change. New emission units may be installed if they are of a type already listed in this permit, and existing units may be modified or moved, without obtaining a permit amendment, provided total facility emissions remain within the limits specified in the permit.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>Fuels Allowed: The Permittee shall use only natural gas, propane, diesel fuel (includes aviation fuel), and gasoline (includes indolene) in combustion sources.</p>	<p>Minn. R. 7007.0800, subp. 2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Emission Factors: At the time of issuance of Permit 11300014-006, the Permittee shall use the emission factors as provided in the Appendices. In addition, the Permittee shall use these emission factors, or emission factors published in EPA's AP-42 if revised after the issuance date of Permit 11300014-006, or on-site generated emission factors based upon an EPA Certificate of Conformity (40 CFR 96.106), state certification processes, or voluntary industry testing standards. The Permittee shall submit to the Commissioner for approval on-site generated emission factors and voluntary industry testing standards within 60 days before use, and shall not use such factors until approved by the Commissioner.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2</p>
<p>Waste Credit: If the Permittee elects to obtain credit for HAPs, solids, and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC, solids, and/or total and individual HAP content for each credited shipment.</p> <p>1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, solids, total HAP, and each individual HAP, excluding water.</p> <p>2) The Permittee may use supplier data for raw materials to determine the VOC, solids, and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC, solids, and total and individual HAP content of any of the materials.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the following records:</p> <p>1) total quantity of each coating and other VOC-, solids-, and HAP-containing materials used at the facility (in pounds), and the VOC, solids, and HAP contents of each</p> <p>2) total quantity of propane combusted in all external combustion units including insignificant activities (in gallons)</p> <p>3) total quantity of diesel/aviation fuel combusted in all internal combustion units including insignificant activities (in gallons)</p> <p>(continued below)</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>4) total quantity of gasoline/indolene combusted in all internal combustion units including insignificant activities (in gallons)</p> <p>5) for each internal combustion engine combusting gasoline/indolene, the total hp-hr (engine horsepower multiplied by the number of hours combusting gasoline/indolene)</p> <p>6) the total hp-hr for the day, by summing the hp-hr values calculated for each individual unit</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the following:</p> <p>1) the total quantity of propane combusted in external combustion units during the previous month (Qprop, thousands of gallons)</p> <p>2) the total quantity of diesel/aviation fuel combusted in internal combustion units during the previous month (Qdiesel, thousands of gallons)</p> <p>3) the total quantity of gasoline/indolene combusted in internal combustion units during the previous month (Qgas, thousands of gallons)</p> <p>4) the total hp-hr of all engines combusting gasoline/indolene during the previous month, by summing the daily calculated totals (Qhp, hp-hr)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: The Permittee shall record natural gas meter readings to determine monthly natural gas usage for each calendar month (Qng, mmcf)</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Recordkeeping: The solids, VOC and HAP content of purchased materials shall be determined by the Material Safety Data Sheet (MSDS) or technical data sheet provided by the supplier for each material used. If a material content range is given on the MSDS or technical data sheet, the highest number in the range shall be used in all compliance calculations. Other methods approved by the MPCA may be used to determine the material content. The Commissioner reserves the right to require the Permittee to take samples of the materials, and to conduct analysis of material content using EPA reference methods. If an EPA reference method is used for material content determination, the data obtained shall supercede the MSDS and/or technical data sheet.</p>	<p>Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Recordkeeping for PM emissions: By the last day of each month, the Permittee shall calculate and record the PM emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM = [(X_n V_n \times (1-TE) \times (1-CE)) + (EF_{1pm} \times Q_{ng}) + (EF_{2pm} \times Q_{prop}) + (EF_{3pm} \times Q_{gas}) + (EF_{4pm} \times Q_{diesel} \times 137)] \times 0.0005$ <p>where:</p> <p>PM = PM emissions in tons/month</p> <p>X_n = Weight percent of solids in V_n as a weight fraction</p> <p>V_n = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>EF_{1pm} = Most current emission factor for PM emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF_{2pm} = Most current emission factor for PM emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF_{3pm} = Most current emission factor for PM emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF_{4pm} = Most current emission factor for PM emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Q_{ng}, Q_{prop}, Q_{gas}, and Q_{diesel}, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>For all equations used in this permit:</p> <p>Q_{ng} = Quantity of natural gas combusted in external combustion units during the previous calendar month, in mmcf</p> <p>Q_{prop} = Quantity of propane combusted in external combustion units during the previous calendar month, in thousands of gallons</p> <p>Q_{gas} = Quantity of gasoline and/or indolene combusted in internal combustion units during the previous calendar month, in thousands of gallons</p> <p>Q_{diesel} = Quantity of diesel and/or aviation fuel combusted in internal combustion units during the previous calendar month, in thousands of gallons</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Recordkeeping for PM10 emissions: By the last day of each month, the Permittee shall calculate and record the PM10 emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM10 = [(X_n V_n \times (1-TE) \times (1-CE)) + (EF_{1pm} \times Q_{ng}) + (EF_{2pm} \times Q_{prop}) + (EF_{3pm} \times Q_{gas}) + (EF_{4pm} \times Q_{diesel} \times 137)] \times 0.0005$ <p>where:</p> <p>PM10 = PM10 emissions in tons/month</p> <p>X_n = Weight percent of solids in V_n as a weight fraction</p> <p>V_n = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM10 capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>EF_{1pm} = Most current emission factor for PM10 emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF_{2pm} = Most current emission factor for PM10 emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF_{3pm} = Most current emission factor for PM10 emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF_{4pm} = Most current emission factor for PM10 emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Q_{ng}, Q_{prop}, Q_{gas}, and Q_{diesel}, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Recordkeeping for PM2.5 emissions: By the last day of each month, the Permittee shall calculate and record the PM2.5 emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM2.5 = [(X_n V_n \times (1-TE) \times (1-CE)) + (EF_{1pm} \times Q_{ng}) + (EF_{2pm} \times Q_{prop}) + (EF_{3pm} \times Q_{gas}) + (EF_{4pm} \times Q_{diesel} \times 137)] \times 0.0005$ <p>where:</p> <p>PM2.5 = PM2.5 emissions in tons/month</p> <p>X_n = Weight percent of solids in V_n as a weight fraction</p> <p>V_n = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM10 capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
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<p>continued from above:</p> <p>EF1pm = Most current emission factor for PM2.5 emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2pm = Most current emission factor for PM2.5 emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF3pm = Most current emission factor for PM2.5 emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4pm = Most current emission factor for PM2.5 emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Recordkeeping for VOC emissions: By the last day of each month, the Permittee shall calculate and record the VOC emissions from all fuel combustion units (including insignificant activities), coating applications, and all units using any VOC-containing material, using the following equation:</p> $\text{VOC} = [(X_n \times V_{n\text{voc}}) + (\text{EF1voc} \times Q_{\text{ng}}) + (\text{EF2voc} \times Q_{\text{prop}}) + (\text{EF3voc} \times Q_{\text{gas}}) + (\text{EF4voc} \times Q_{\text{diesel}} \times 137)] \times 0.0005$ <p>Where:</p> <p>VOC = VOC emissions in tons/month</p> <p>Xn = Weight percent of VOC in Vn as a weight fraction</p> <p>Vn = Amount of the VOC-containing material "n" used during the previous month, in pounds</p> <p>EF1voc = Most current emission factor for VOC from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2voc = Most current emission factor for VOC from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>EF3voc = Most current emission factor for VOC from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4voc = Most current emission factor for VOC from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Recordkeeping for Individual HAP emissions: By the last day of each month, the Permittee shall calculate and record the emissions of each Individual HAP from all combustion units (including insignificant activities), coating applications, and all units using any HAP-containing material, using the following equation:</p> $\text{HAP} = [(X_n \times V_{\text{nhap}}) + (\text{EF1}_{\text{hap}} \times (\text{Q}_{\text{ng}} + \{\text{Q}_{\text{prop}} \times 90.5/1020\})) + (\text{EF3}_{\text{hap}} \times \text{Q}_{\text{hp}}) + (\text{EF4}_{\text{hap}} \times \text{Q}_{\text{diesel}} \times 137)] \times 0.0005$ <p>Where:</p> <p>HAP = Individual HAP emissions in tons/month</p> <p>X_n = Weight percent of the individual HAP in V_n as a weight fraction</p> <p>V_n = Amount of the HAP-containing material "n" used during the previous month, in pounds</p> <p>EF1_{hap} = Most current emission factor for the individual HAP from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix F of this permit.</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>EF3_{hap} = Most current emission factor for the individual HAP from gasoline combustion, in lb/hp-hr, as listed in Appendix E of this permit.</p> <p>EF4_{hap} = Most current emission factor for the individual HAP from diesel combustion, in lb/MMBtu, as listed in Appendix E of this permit.</p> <p>Q_{hp} = Total horsepower-hour of engines combusting gasoline and/or indolene during the previous calendar month, in hp-hr</p> <p>For definition of Q_{ng}, Q_{prop}, and Q_{diesel}, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons of diesel fuel</p> <p>90.5 = conversion factor, MMBtu/1000 gallons of propane</p> <p>1020 = conversion factor, MMBtu/mmcf of natural gas</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Recordkeeping for NO_x emissions: By the last day of each month, the Permittee shall maintain records and calculate and record the NO_x emissions from all fuel combustion units, including insignificant activities. The emissions shall be calculated using the following equation:</p> $\text{NO}_x = [(\text{EF1}_{\text{nox}} \times \text{Q}_{\text{ng}}) + (\text{EF2}_{\text{nox}} \times \text{Q}_{\text{prop}}) + (\text{EF3}_{\text{nox}} \times \text{Q}_{\text{gas}}) + (\text{EF4}_{\text{nox}} \times \text{Q}_{\text{diesel}} \times 137)] \times 0.0005$ <p>where:</p> <p>NO_x = NO_x emissions in tons/month</p> <p>EF1_{nox} = Most current emission factor for NO_x emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2_{nox} = Most current emission factor for NO_x emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>continued from above:</p> <p>EF3nox = Most current emission factor for NOx emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4nox = Most current emission factor for NOx emissions from diesel fuel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Recordkeeping for CO emissions: By the last day of each month, the Permittee shall calculate and record the CO emissions from the combustion units, including insignificant activities, using the following equation:</p> $CO = [(EF1co \times Qng) + (EF2co \times Qprop) + (EF3co \times Qgas) + (EF4co \times Qdiesel \times 137)] \times 0.0005$ <p>where:</p> <p>CO = CO emissions in tons/month</p> <p>EF1co = Most current emission factor for CO emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2co = Most current emission factor for CO emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>continued from above:</p> <p>EF3co = Most current emission factor for CO emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4co = Most current emission factor for CO emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM emissions, by summing the monthly PM emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM10 emissions, by summing the monthly PM10 emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM2.5 emissions, by summing the monthly PM2.5 emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of CO emissions, by summing the monthly CO emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of NOx emissions, by summing the monthly NOx emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of VOC emissions, by summing the monthly VOC emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subps. 4 and 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of emissions of each Individual HAP, by summing the monthly Individual HAP emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subsps. 4 and 5</p>
<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of Total HAP emissions, by summing all of the monthly Individual HAP emissions calculated for the previous 12 months.</p>	<p>Minn. R. 7007.0800, subsps. 4 and 5</p>
<p>NESHAPS APPLICABLE - ONCE IN ALWAYS IN</p>	<p>hdr</p>
<p>This facility is subject to NESHAPS: "Subpart P P P P P - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands".</p> <p>Subpart 63.9285 Arctic Cat is subject to (a) and (b).</p> <p>Subpart 63.9290 (a) Arctic Cat is an affected source with existing engine test cell/stands. (b) Existing engine test cells/stands do not have to meet the requirements of this part</p> <p>Arctic Cat has not added new engine test cells/stands or any that meet the definition of reconstructed.</p>	<p>Applicability: 40 CFR Section 63.9280</p>
<p>This facility is also subject to: "Subpart III - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production".</p>	<p>40 CFR Section 63.1290</p>
<p>Arctic Cat meets 40 CFR Sections 63.1290(a)(1-3) (NESHAP Subpart III)</p> <p>63.1291 Compliance Schedule Arctic Cat meets 63.1291(a) existing affected sources shall be in compliance with all provisions of this subpart no later than October 8, 2001.</p> <p>63.1300 Standards for molded flexible polyurethane foam production Arctic Cat does not use any HAP based material or cleaning or release agents.</p> <p>63.1306 Reporting Requirements Arctic Cat provided initial notification.</p> <p>63.1307 Recordkeeping requirements 63.1307(g & h) Arctic Cat maintain MSDS for cleaning and release agents</p>	<p>Applicability: 40 CFR Section 63.1290 Continued</p>
<p>This facility is also subject to: "Subpart M M M M - National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products".</p>	<p>Applicability: 40 CFR Section 63.3881</p>
<p>Miscellaneous metal parts and products include metal components of recreational vehicles. Surface Coating is coating of a substrate using spray guns or dip tanks. Arctic Cat has booth E-coating and powder coating operations.</p> <p>40 CFR 63.3881 (b) Arctic Cat is below the applicability threshold of 250 gallons of HAP based coatings as defined by the rule and explained below.</p> <p>Powder coat at this facility does not have any HAPs according to the MSDS sheets and the e-coating is considered a non-HAP coating under the non-HAP coating definition.</p> <p>A non-HAP coating means a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200 (d)(4) and no more than 1.0 percent by mass for any other individual HAP.</p>	<p>Applicability: 40 CFR Section 63.3881 Continued</p>
<p>Arctic Cat e-coat formulation has 0.006 lbs of HAPS/lb of coating according to the chemical manufacturer information (Email dated January 26, 2004) There are three individual HAPS included in this total; therefore each individual HAP is less than the 1% mass requirement for a non-HAP coating.</p> <p>This MACT standard does not apply to paint processes at Arctic Cat.</p> <p>Arctic Cat changed paint composition for E-coat at this time. The E-coat is a non-HAP based material. Therefore 40 CFR Section 63.3881(c)(1) applies to Arctic Cat again saying that the standard does not apply to Arctic Cat Processes.</p>	<p>Applicability: 40 CFR Section 63.3881 Continued</p>
<p>OPERATIONAL REQUIREMENTS</p>	<p>hdr</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Environmental Assessment Worksheet (EAW): The Permittee shall not begin actual construction of any single project or projects that are connected or phased action which will cause a total increase in actual emissions of greater than 249 tons per year of any single criteria pollutant without first completing an EAW. "Connected actions" and "phased action" have the meanings given in Minn. R. 4410.0200, subps. 9b and 60.</p>	<p>Minn. Statute 116.04, subd. 2b and Minn. R. 4410.4300, subp. 15</p>
<p>Risk Management Plan: The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR 68 which was promulgated on June 20, 1996. The rule requires each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process to design and implement an accidental release prevention program. The RMP must be submitted to a centralized location as specified by US EPA. The Permittee shall obtain the RMP submittal information at http://www.epa.gov/swercepp or call 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.</p>	<p>40 CFR pt. 68</p>
<p>The Permittee shall not "construct or reconstruct" a major source of hazardous air pollutants as defined in 40 CFR pt. 63, subp. B without first obtaining a preconstruction permit.</p>	<p>40 CFR Section 63.5(b)(3)</p>
<p>The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.</p>	<p>Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080</p>
<p>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.</p>	<p>Minn. R. 7011.0020</p>
<p>Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
<p>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 control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices 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 practices, and the records kept to demonstrate plan implementation.</p>	<p>Minn. R. 7007.0800, subps. 14 and 16(J)</p>
<p>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.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>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.</p>	<p>Minn. R. 7011.0150</p>
<p>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.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>
<p>Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.</p>	<p>Minn. R. ch. 7017</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.</p>	<p>Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2</p>
<p>Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.</p>	<p>Minn. R. 7017.2025, subp. 3</p>
<p>Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, 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).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.</p>	<p>Minn. R. 7007.1200, subp. 4</p>
<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>	<p>Minn. R. 7019.1000, subp. 3</p>
<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>	<p>Minn. R. 7019.1000, subp. 2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

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
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
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 - 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). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3100
Emission Fees: due 30 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-13 08/15/13

Facility Name: Arctic Cat Inc
Permit Number: 11300014 - 006

Subject Item: GP 001 Molding, Coating (each unit)

Associated Items: EU 007 Molded Foam Seat Station
EU 008 Electrodeposition Coating
EU 009 Solvent Flashoff
EU 010 Solvent Flashoff
EU 011 Solvent Flashoff

What to do	Why to do it
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); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20 percent opacity .	Minn. R. 7011.0715, subp. 1(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-14 08/15/13

Facility Name: Arctic Cat Inc

Permit Number: 11300014 - 006

Subject Item: GP 002 Engine Testing (each engine)**Associated Items:** EU 012 Assembly Engine Testing

EU 013 Engineering Testing

EU 014 Engineering Testing

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperature have ben 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

Facility Name: Arctic Cat Inc

Permit Number: 11300014 - 006

Subject Item: GP 003 Ovens (each oven)**Associated Items:** EU 016 Powder Coat Bake Oven

EU 017 E Coating Drying Oven

EU 018 Drying Oven (Washline Area)

What to do	Why to do it
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. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input .	Minn. R. 7011.0610, subp. 2(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: GP 007 Paint Booths and Control Equipment

- Associated Items:** CE 011 Mat or Panel Filter
 CE 012 Mat or Panel Filter
 CE 013 Mat or Panel Filter
 CE 014 Mat or Panel Filter
 EU 021 Paint Booth 1
 EU 022 Paint Booth 2
 EU 023 Paint Booth 3
 EU 024 Paint Booth 4
 SV 039 Paint Booth Exhaust
 SV 040 Paint Booth Exhaust
 SV 041 Paint Booth Exhaust
 SV 042 Paint Booth Exhaust

What to do	Why to do it
FOLLOWING REQUIREMENTS APPLY TO EACH EMISSION UNIT AND CONTROL EQUIPMENT INDIVIDUALLY	hdr
Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot based on Allowable Emission Limit.	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
CONTROL EQUIPMENT REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency, for Particulate Matter < 10 micron: greater than or equal to 92.0 percent	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency, for Total Particulate Matter: greater than or equal to 92.0 percent	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the panel filters any time that any process equipment controlled by the panel filters is (are) in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5, and 14; Also meets 40 CFR Part 64
Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14; Also meets 40 CFR Part 64
Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14; Also meets 40 CFR Part 64
Annual Total Enclosure Certification and Evaluation: The Permittee shall maintain a copy of the evaluation and certification on site. "Total enclosure" means an enclosure that completely surrounds emissions from an emissions unit such that all emissions are captured and discharged through ductwork to control equipment.	Minn. R. 7011.0060, subp. 5; Minn. R. 7007.0800, subp. 4, and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-17 08/15/13

Facility Name: Arctic Cat Inc
Permit Number: 11300014 - 006

Subject Item: EU 025 Cure Oven (Burners 1, 2, 3)

Associated Items: SV 043 Cure Oven Exhaust
SV 044 Cure Oven Exhaust
SV 045 Cure Oven Exhaust

What to do	Why to do it
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. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0610, subp. 1(A)(2)

TABLE B: SUBMITTALS

B-1 08/15/13

Facility Name: Arctic Cat Inc
Permit Number: 11300014 - 006

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

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

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

Chief Air Enforcement
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

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:

Fiscal Services
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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.

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

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

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

B-2 08/15/13

Facility Name: Arctic Cat Inc

Permit Number: 11300014 - 006

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

B-3 08/15/13

Facility Name: Arctic Cat Inc

Permit Number: 11300014 - 006

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. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility
Equipment List	due 30 days after end of each calendar year starting 10/07/1998 to be submitted with the Compliance Certification. This report shall describe changes made to the stationary source without applying for an amendment. Such changes may include installation of new emission units of the same type described in this permit, and modification or relocation of emission units.	Total Facility

APPENDIX B: Insignificant Activities**Facility Name: Arctic Cat Inc****Permit Number: 11300014-006**

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
3(E)	<p>1. gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons;</p> <p>Arctic Cat operates gasoline storage tanks with a combined total tank capacity of 2,380 gallons that qualify under this subpart.</p>	Minn. R. 7011.0715, Minn. R. 7011.1505
3(H)	<p>3. brazing, soldering or welding equipment;</p> <p>Arctic Cat operates miscellaneous welding machines that qualify under this subpart.</p>	Minn. R. 7011.0715
	<p>7. cleaning operations: alkaline/phosphate cleaners and associated cleaners and associated burners.</p> <p>Arctic Act operates pre-weld spray wash systems and a 5-stage iron phosphate system that qualify under this subpart.</p>	Minn. R. 7011.0715
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> <ol style="list-style-type: none"> 1. 4,000 lbs/year of carbon monoxide; 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; and 3. 1,000 tons/year of CO₂e <p>Arctic Cat currently has several small natural gas/propane fired air makeup units or heating units with heat inputs less than 2.27 MMBtu per hour that qualify under this subpart.</p>	Minn. R. 7011.0515
3(J)	<p>Fugitive Emissions from roads and parking lots.</p> <p>The Arctic Cat facility includes an unpaved entrance, yard area and parking lot that qualify under this subpart</p>	Minn. R. 7011.0150
3(K)	<p>Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment.</p> <p>Arctic Cat conducts maintenance spray painting of building</p>	Minn. R. 7011.0715

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
	components that qualifies under this subpart.	
4	<p>Individual emissions units at a stationary source, each of which has:</p> <p>A. Potential emissions of 5.7 pounds per hour or actual emissions of two tons per year of carbon monoxide;</p> <p>B. Potential emissions of 2.28 pounds per hour or actual emissions of one ton per year for particulate matter, particulate matter less than ten microns, nitrogen oxide, sulfur dioxide, and VOCs;</p> <p>C. For hazardous air pollutants, emissions units with:</p> <p>(1) potential emissions of 25 percent or less of the hazardous air pollutant thresholds listed in subp. 5; or</p> <p>(2) combined HAP actual emissions of one ton per year unless the emissions unit emits one or more of the HAPs listed in this subpart; AND</p> <p>D. Potential emissions up to 10,000 tons per year or actual emissions up to 1,000 tons per year of CO₂e.</p> <p>Arctic Cat operates a natural gas/propane 0.78 MMBtu per hour paint burn-off oven that qualifies under this subpart.</p>	Minn. R. 7011.0515

Conditionally Insignificant Activities

	Rule Description of the Activity	Applicable Requirement
Minn. R. 7008.4110	<p>Emissions from 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> <p>Arctic Cat operates a Research and Development operation that are controlled and vent internally.</p>	Minn. R. 7011.0715

APPENDIX C: Criteria Emission Factors for Internal Combustion Sources
Facility Name: Arctic Cat Inc
Permit Number: 11300014-006

Pollutant Emission Factors for Internal Combustion Engines: The Permittee shall use the following emission factors to calculate emissions from internal combustion engines. The Permittee may use emission test data supplied by the manufacturer, if approved by the Agency.

<u>Pollutant</u>	<u>Gasoline/Indolene (lb/1000 gals)</u>	<u>Diesel/Aviation Fuel (lb/MMBtu)</u>
PM	6.47	0.31
PM ₁₀	6.2	0.31
PM _{2.5}	6.2	0.31
NO _x	102	4.41
VOC	148	0.35
CO	3940	0.95

Emission Factor References:

Gasoline/Indolene: Determination for the 1996 Base Year National Toxics Inventory for Nonroad Vehicle and Equipment Mobile Sources.

Diesel/Aviation Fuel: EPA AP-42, Section 3.3 Gasoline and Diesel Industrial Engines Table 3.3-1 Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines.

APPENDIX D: Criteria Emission Factors for External Combustion Sources
Facility Name: Arctic Cat Inc
Permit Number: 11300014-006

Pollutant Emission Factors for External Combustion Sources: The Permittee shall use the following emission factors to calculate emissions from external combustion sources. The Permittee may use emission test data supplied by the manufacturer, if approved by the Agency.

<u>Pollutant</u>	<u>Natural Gas (lb/mmcf)</u>	<u>Propane (lb/1000 gals)</u>
PM	7.6	0.70
PM ₁₀	7.6	0.70
PM _{2.5}	7.6	0.70
NO _x	100	13.0
VOC	5.5	1.0
CO	84	7.5

Emission Factor References:

Natural Gas: EPA AP-42, Section 1.4 Natural Gas Combustion Table 1.4-1 and 1.4-2 Emission Factors from Natural Gas Combustion.

Propane: EP AP-42, Section 1.5 Liquefied Petroleum Gas Combustion Table 1.5-1 Emission Factors for LPG Combustion.

APPENDIX E: HAP Emission Factors for Internal Combustion Sources
Facility Name: Arctic Cat Inc
Permit Number: 11300014-006

HAP Emission Factors for Internal Combustion Engines: The Permittee shall use the following emission factors to calculate emissions from internal combustion engines. The Permittee may use emission test data supplied by the manufacturer, if approved by the Agency.

<u>Pollutant</u>	<u>Gasoline/Indolene (lb/hp-hr)</u>	<u>Diesel/Aviation Fuel (lb/MMBtu)</u>
1,3- Butadiene	2.47E-04	3.91E-05
Acetaldehyde	9.66E-05	7.67E-04
Formaldehyde	2.76E-04	1.18E-03
Acrolein	1.65E-05	9.25E-05
Benzene	1.24E-03	9.33E-04
Ethyl Benzene	4.67E-04	ND*
n-Hexane	2.34E-04	ND
MTBE	4.35E-03	ND
Propionaldehyde	4.43E-05	ND
Styrene	1.79E-05	ND
Toluene	1.69E-03	4.09E-04
Xylenes	1.60E-03	2.85E-04
Naphthalene	ND	8.48E-05
PAH	3.91E-07	1.68E-04
Chromium Comp.	4.33E-08	ND
Manganese Comp.	8.65E-08	ND
Mercury Comp.	7.21E-09	ND
Nickel Comp.	5.05E-08	ND
Total HAPs	1.03E-02	3.87E-03

Emission Factor References:

Gasoline/Indolene: Determination for the 1996 Base Year National Toxics Inventory for Nonroad Vehicle and Equipment Mobile Sources.

Diesel/Aviation Fuel: EPA AP-42, Section 3.3 Gasoline and Diesel Industrial Engines Table 3.3-2 Speciated Organic Compound Emission Factors for Uncontrolled Diesel Engines.

* ND = No Data

APPENDIX F: HAP Emission Factors for External Combustion Sources**Facility Name: Arctic Cat Inc****Permit Number: 11300014-006**

HAP Emission Factors for External Combustion Sources The Permittee shall use the following emission factors to calculate emissions from external combustion sources. The Permittee may use emission test data supplied by the manufacturer, if approved by the Agency.

<u>Pollutant</u>	<u>Natural Gas/Propane (lb/mmcf)</u>
2-Methylnaphthalene	2.4E-05
3-Methylchloranthrene	1.8E-06
7,12-Dimethylbenz(a)anthracene	1.6E-05
Acenaphthene	1.8E-06
Acenaphthylene	1.8E-06
Anthracene	2.4E-06
Benz(a)anthracene	1.8E-06
Benzene	2.1E-03
Benzo(a)pyrene	1.2E-06
Benzo(b)fluoranthene	1.8E-06
Benzo(g,h,i)perylene	1.2E-06
Benzo(k)fluoranthene	1.8E-06
Chrysene	1.8E-06
Dibenzo(a,h)anthracene	1.2E-06
Dichlorobenzene	1.2E-03
Fluoranthene	3.0E-06
Fluorene	2.8E-06
Formaldehyde	7.5E-02
Hexane	1.8E+00
Indeno(1,2,3-cd)pyrene	1.8E-06
Naphthalene	6.1E-04
Phenanathrene	1.7E-05
Pyrene	5.0E-06
Toluene	3.4E-03
Arsenic	2.0E-04
Beryllium	1.2E-05
Cadmium	1.1E-03
Chromium	1.4E-03
Cobalt	8.4E-05
Manganese	3.8E-04
Mercury	2.6E-04
Nickel	2.1E-03
Selenium	2.4E-05

Emission Factor Reference:

Natural Gas: EPA AP-42, Section 1.4 Natural Gas Combustion Table 1.4-3 Emission Factors for Speciated Organic Compounds from Natural Gas Combustion. It is assumed Propane combustion HAPs emission factors are equal to Natural Gas.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 11300014-006

This technical support document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 3799)
Arctic Cat, Inc. 601 Brooks Avenue South Thief River Falls Pennington County	Arctic Cat, Inc. 601 Brooks Avenue South Thief River Falls Pennington County
Contact: Ms. Carmen Holmes Phone: (218) 681-9799, ext. 3169	

1.2 Facility Description

Arctic Cat, Inc. manufactures snowmobiles and all-terrain vehicles. The facility activities include vehicle and component design, and vehicle assembly. Assembly includes machining, welding, painting, component assembly and engine testing. Foam seat covers are also manufactured at the facility. The main sources of air emissions are from the electrodeposition coating, foam seat production, and engine testing.

1.3 Description of the Activities Allowed by this Permit Action

This permit action is a major amendment to allow for the use of diesel, aviation, and Indolene (a standardized form of gasoline containing no additives) as fuels in engine testing (EU012, EU013, and EU014). These emission units are currently permitted to use natural gas, propane and gasoline as fuel sources. Addition of these fuels results in no changes to the facility potential emissions.

1.4 Additional Changes to the Permit

In addition to the change requested, the permit limits were changed from the "flex-cap" format to the "pre-cap" format. The pre-cap format more clearly lays out the intent, which is to allow the Permittee to apply the existing emission limits to any proposed modifications, for the purpose of determining whether the change would be a Title I modification.

A facility wide emission limit of less than 240 tons of PM_{2.5} per year was added to the permit as an enforceable condition.

The permit was also modified to clarify and enhance the monitoring and recordkeeping associated with the emission limits on PM, PM₁₀, PM_{2.5}, VOC, NO_x, CO, and individual and total HAP. The monitoring and recordkeeping previously listed in the permit for the emission limits did not provide a complete demonstration of compliance. Daily recordkeeping requirements were clarified to include fuels other than natural gas (the daily recordkeeping requirement always included fuels; this permit simply makes the requirement more explicit). Equations to calculate emissions have been added for each pollutant limited at the total facility level. Each equation includes references to current emission factors as provided in Appendices of the permit. Requirements to calculate facility-wide 12-month rolling sum emissions by the last day of each month have been added for each regulated pollutant. Insignificant activities have been added to the emission total requirements.

Emission factors for internal and external combustion have been added to the permit as Appendix B through Appendix E. A transfer efficiency of 33% has been added to the permit for the spray coating operations to account for current spray techniques.

1.5 Facility Emissions:

Table 2. Title I Emissions Increase Summary

Pollutant	Unlimited Potential Emissions from the Modification (tpy)	Limited Potential Emissions from the Modification (tpy)	NSR/112(g) Threshold for New Major Source (tpy)	NSR Review Required?
PM	25.5	25.53	250	No
PM ₁₀	25.5	25.53	250	No
PM _{2.5}	25.5	25.53	250	No
NO _x	359.8	240	250	No
SO ₂	23.8	23.8	250	No
CO	77.5	77.5	250	No
Ozone (VOC)	29.2	29.2	250	No
CO ₂ e*	13,292	13,292	100,000	No

*Carbon dioxide equivalent as defined in Minn. R. 7007.0100.

Table 3. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	CO ₂ e tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	240	240	240	23.8	240	240	13290 ^[1]	240	9	23
Actual Emissions (2011)	0.05	0.05	NR ^[2]	0.05	3.2	29.4	3215	1.6	NR ^[2]	NR ^[2]

^[1] CO₂e emissions from engine testing only ^[2] NR = Not Reported in annual emission inventory

Table 4. Facility Classification

Classification	Major/Affected Source	Synthetic Minor/Area	Minor/Area
PSD		X	
Part 70 Permit Program	X		
Part 63 NESHAP		X*	

* While the facility has accepted limits on HAP emissions below the major source thresholds, the facility is still treated as a major source under the "once-in, always-in" policy.

2. Regulatory and/or Statutory Basis

2.1 New Source Review

The facility is an existing non-major source under New Source Review regulations. The changes authorized in this permit action are not subject to NSR, due to the federally enforceable emission limits in place.

2.2 Part 70 Permit Program

The facility is a major source under the Part 70 permit program.

2.3 New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility.

2.4 National Emission Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants (NESHAP) – United States Environmental Protection Agency’s (EPA) “Once In Always In” policy is applicable to this facility. Therefore, even though the facility has accepted limits such that it is an area source of HAPs, the following three major-source standards apply:

1. NESHAP for Flexible Polyurethane Foam Production (Subpart III);
2. Surface Coating of Miscellaneous Metal Parts and Products (Subpart M MMMM);
3. Engine Test Cells/Stands (Subpart P P P P P).

2.5 Compliance Assurance Monitoring (CAM)

CAM does not apply to the change allowed in this permit amendment, since the affected emission units do not use control equipment to comply with an emission limit or standard.

2.6 Environmental Review & AERA

Since there is no emission increase associated with this change, the project is not subject to environmental review, i.e. an Environmental Assessment Worksheet (EAW,) and the Permittee is not required to perform an Air Emissions Risk Analysis (AERA).

2.7 Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 5. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Level*	Applicable Regulations	Comments:
GP 002 (EU012, EU013, EU014)	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines.
TF (total facility)	Title I conditions to avoid NSR and NESHAP major source status	The permit contains limits on PM/PM ₁₀ /PM _{2.5} , CO, NO _x , VOC, and individual and total HAPs, such that the facility is permitted as a non-major source.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains a summary of the PTE of the Facility, and detailed spreadsheets and supporting information prepared by the MPCA and the Permittee for the engine testing emissions on the newly permitted fuels.

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.

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

- The likelihood of the facility violating the applicable requirements;

- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

The table below summarizes the periodic monitoring requirements for those emission units affected by the change for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 6. Periodic Monitoring

Level*	Requirement (rule basis)	Additional Monitoring	Discussion
TF	PM/PM ₁₀ /PM _{2.5} / VOC/NO _x /CO: ≤ 240 tpy on a 12- month rolling sum basis Individual HAP: ≤ 9.0 tpy on a 12- month rolling sum basis Total HAP: ≤ 23.0 tpy on a 12- month rolling sum basis (Title I conditions)	Recordkeeping of types of fuel; daily recordkeeping of quantities of fuel; daily recordkeeping of total hp-hr of engines; monthly calculation of monthly emissions and 12-month rolling sums	Existing permit conditions were inadequate for demonstrating compliance with the emission limits. Recordkeeping and calculation requirements were made more explicit and complete through this permit action.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.3 Insignificant Activities

Arctic Cat has several operations which are classified as insignificant activities under the MPCA’s permitting rules. These are listed in Appendix B to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities.

Table 7. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons	There are no standards of performance for storage vessels with storage capacity ≤ 2,000 gallons.	Based on the capacity of the tanks and total throughput, it is highly unlikely that they could violate the applicable requirement or that testing would be feasible.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	For the soldering process, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are operated and vented inside a building, so testing for PM or opacity is not feasible.

Insignificant Activity	General Applicable Emission limit	Discussion
Cleaning operations: Spray wash system and phosphate wash	PM, variable depending on airflow Opacity \leq 20% (Minn. R. 7011.0715)	Based on general knowledge of how the wash systems operate, it is highly unlikely that they could violate the applicable requirement or that testing would be feasible.
Individual units with potential emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity \leq 20% (with exceptions) (Minn. R. 7011.0715 and Minn. R. 7011.0610) or SO ₂ \leq 0.50 lb/MMBtu Opacity \leq 20% (Minn. R. 7011.2300)	For the natural gas and propane units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, all of these units are operated and vented inside a building, so testing for PM or opacity is not feasible.
Fugitive Emissions from unpaved roads and parking lots	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)	The Facility includes minimal transport across unpaved roads; the facility takes reasonable measures to reduce fugitive emissions.
Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source	PM, variable depending on airflow or process weight rate Opacity \leq 20% (Minn. R. 7011.0715)	While spray equipment will have the potential to emit particulate matter, these particular activities are those not associated with production, so they would be infrequent and usually occur outdoors. Testing or monitoring is not feasible.
Equipment venting PM/PM ₁₀ inside a building, provided that emissions from the equipment are: a). filtered through an air cleaning system; and b). vented inside of the building 100% of the time	PM, variable depending on airflow Opacity \leq 20% (Minn. R. 7011.0715)	For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible.

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be electronically tracked (e.g., limits, submittals, etc.), should be in Table A or B of the permit. The main reason is that the appendices are word processing sections and are not part of the electronic tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

3.5 Comments Received

Public Notice Period: 6/27/2013 – 7/26/2013

EPA 45-day Review Period: 6/27/2013 – 8/12/2013

Comments were not received from the public during the public notice period. Comments were not received from EPA during their review period. No changes were made to the permit after the start of the public comment period

4. Permit Fee Assessment

The application was submitted with payment for a major modification. No additional points have been assigned to this permit action. Attachment 3 to this TSD contains the MPCA's assessment of Application and Additional Points used to determine the permit application fee for this permit action as required by Minn. R. 7002.0019.

5. Conclusion

Based on the information provided by Arctic Cat, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 11300014-006 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Kevin Miller, U.S. Compliance Corp (contracted permit writer)
Toni Volkmeier (permit engineer/project manager)
Rachel Studanski (enforcement)
Amrill Okonkwo (peer reviewer)

AQ File No. 890A; DQ 4168

Attachments: 1. PTE Summary Calculation Spreadsheets
2. Facility Description and CD-01 Forms
3. Points Calculator

Attachment 1

Calculations and PTE Summary

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Acetaldehyde							
	EU 012	PER 006		8.210E-02	3.600E-01	3.600E-01	
	EU 013	PER 006		6.570E-02	2.880E-01	2.880E-01	
	EU 014	PER 006		1.080E-01	4.740E-01	4.740E-01	
Totals					1.122E+00	1.122E+00	0.000E+00
Acrolein							
	EU 012	PER 006		1.400E-02	6.140E-02	6.140E-02	
	EU 013	PER 006		1.120E-02	4.910E-02	4.910E-02	
	EU 014	PER 006		1.850E-02	8.090E-02	8.090E-02	
Totals					1.914E-01	1.914E-01	0.000E+00
Benzene							
	EU 012	PER 006		1.050E+00	4.620E+00		
	EU 013	PER 006		8.430E-01	3.690E+00		
	EU 014	PER 006		1.390E+00	6.080E+00		
	FC 000	PER 006				9.000E+00	
Totals					1.439E+01	9.000E+00	0.000E+00
1,3-Butadiene							
	EU 012	PER 006		2.100E-01	9.200E-01	9.200E-01	
	EU 013	PER 006		1.680E-01	7.630E-01	7.630E-01	
	EU 014	PER 006		2.770E-01	1.210E+00	1.210E+00	
Totals					2.893E+00	2.893E+00	0.000E+00
Carbon Dioxide Equivalent							
	EU 012	PER 006			4.264E+03	4.264E+03	
	EU 013	PER 006			3.411E+03	3.411E+03	
	EU 014	PER 006			5.618E+03	5.618E+03	
Totals					1.329E+04	1.329E+04	0.000E+00
Methane							
	EU 012	PER 006		4.000E-02	1.700E-01	1.700E-01	
	EU 013	PER 006		3.000E-02	1.400E-01	1.400E-01	
	EU 014	PER 006		5.000E-02	2.300E-01	2.300E-01	
Totals					5.400E-01	5.400E-01	0.000E+00
Carbon Monoxide							
	EU 012	PER 006		1.803E+02	7.899E+02		
	EU 013	PER 006		1.443E+02	6.319E+02		
	EU 014	PER 006		2.376E+02	1.041E+03		
	EU 025	PER 005		9.600E-02	4.200E-01	0.000E+00	1.000E-01
	FC 000	PER 005				2.400E+02	

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AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Carbon Monoxide							
	GP 002	PER 005		1.956E+01	8.567E+01	0.000E+00	
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 005		9.000E-02	3.900E-01	0.000E+00	
Totals					2.463E+03	2.400E+02	1.000E-01
Carbon Dioxide							
	EU 012	PER 006		9.700E+02	4.249E+03	4.249E+03	
	EU 013	PER 006		7.760E+02	3.399E+03	3.399E+03	
	EU 014	PER 006		1.278E+03	5.599E+03	5.599E+03	
Totals					1.325E+04	1.325E+04	0.000E+00
Chromium compounds							
	EU 012	PER 006		3.680E-05	1.610E-04	1.610E-04	
	EU 013	PER 006		2.940E-05	1.290E-04	1.290E-04	
	EU 014	PER 006		4.850E-05	2.120E-04	2.120E-04	
Totals					5.020E-04	5.020E-04	0.000E+00
Ethylbenzene							
	EU 012	PER 006		3.970E-01	1.740E+00	1.740E+00	
	EU 013	PER 006		3.180E-01	1.390E+00	1.390E+00	
	EU 014	PER 006		5.230E-01	2.290E+00	2.290E+00	
Totals					5.420E+00	5.420E+00	0.000E+00
Formaldehyde							
	EU 008	PER 001		1.000E-02	4.400E-02	4.400E-02	
	EU 012	PER 006		2.350E-01	1.030E+00	1.030E+00	
	EU 013	PER 006		1.880E-01	8.220E-01	8.220E-01	
	EU 014	PER 006		3.090E-01	1.350E+00	1.350E+00	
Totals					3.246E+00	3.246E+00	0.000E+00
Hexane							
	EU 012	PER 006		1.990E-01	8.710E-01	8.710E-01	
	EU 013	PER 006		1.590E-01	6.970E-01	6.970E-01	
	EU 014	PER 006		2.620E-01	1.150E+00	1.150E+00	
Totals					2.718E+00	2.718E+00	0.000E+00
Methyl ethyl ketone (MEK)							
	GP 001	PER 001		1.200E+00	5.250E+00	5.250E+00	
Totals					5.250E+00	5.250E+00	0.000E+00
Methyl isobutyl ketone							
	EU 005	PER 005		1.000E+00	4.380E+00	0.000E+00	
	EU 005	PER 006		0.000E+00	0.000E+00	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Methyl isobutyl ketone							
	EU 006	PER 005		2.800E+00	1.230E+01	0.000E+00	
	EU 006	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methyl methacrylate							
	EU 001	PER 005		5.500E+00	2.430E+01	0.000E+00	
	EU 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Glycol ethers							
	EU 008	PER 001		7.000E+00	3.070E+01	3.070E+01	
	EU 009	PER 001		8.000E-01	3.500E+00	3.500E+00	
	EU 010	PER 001		7.000E-01	3.070E+00	3.070E+00	
	EU 011	PER 001		4.000E-01	1.750E+00	1.750E+00	
Totals					3.902E+01	3.902E+01	0.000E+00
Naphthalene							
	EU 012	PER 006		5.050E-04	2.210E-03	2.210E-03	
	EU 013	PER 006		4.040E-04	1.770E-03	1.770E-03	
	EU 014	PER 006		6.650E-04	2.910E-03	2.910E-03	
Totals					6.890E-03	6.890E-03	0.000E+00
HAPs - Total							
	EU 012	PER 006		8.740E+00	3.830E+01		
	EU 013	PER 006		6.990E+00	3.060E+01		
	EU 014	PER 006		1.150E+01	5.040E+01		
	EU 021	PER 005		1.990E+02	8.690E+02		
	EU 022	PER 005		1.990E+02	8.690E+02		
	EU 023	PER 005		1.990E+02	8.690E+02		
	EU 024	PER 005		1.990E+02	8.690E+02		
	FC 000	PER 005				2.300E+01	
	GP 001	PER 005		4.454E+01	1.951E+02	0.000E+00	
Totals					3.790E+03	2.300E+01	0.000E+00
Mercury Compounds							
	EU 012	PER 006		6.130E-06	2.680E-05	2.680E-05	
	EU 013	PER 006		4.900E-06	2.150E-05	2.150E-05	
	EU 014	PER 006		8.080E-06	3.540E-05	3.540E-05	
Totals					8.370E-05	8.370E-05	0.000E+00
Styrene							
	EU 012	PER 006		1.520E-02	6.660E-02	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Styrene							
	EU 013	PER 006		1.220E-02	5.330E-02	0.000E+00	
	EU 014	PER 006		2.000E-02	8.780E-02	0.000E+00	
	FC 000	PER 006				9.000E+00	
	GP 001	PER 001		1.861E+01	8.150E+01	8.150E+01	
	GP 001	PER 006		1.861E+01	8.150E+01	0.000E+00	
Totals					8.171E+01	9.000E+00	0.000E+00
Toluene							
	EU 012	PER 006		1.440E+00	6.290E+00		
	EU 013	PER 006		1.150E+00	5.030E+00		
	EU 014	PER 006		1.890E+00	8.290E+00		
	FC 000	PER 006				9.000E+00	
Totals					1.961E+01	9.000E+00	0.000E+00
Xylenes (mixed isomers)							
	EU 012	PER 006		1.360E+00	5.960E+00		
	EU 013	PER 006		1.090E+00	4.770E+00		
	EU 014	PER 006		1.790E+00	7.850E+00		
	FC 000	PER 006				9.000E+00	
Totals					1.858E+01	9.000E+00	0.000E+00
Manganese compounds							
	EU 012	PER 006		7.350E-05	3.220E-04	3.220E-04	
	EU 013	PER 006		5.880E-05	2.580E-04	2.580E-04	
	EU 014	PER 006		9.690E-05	4.240E-04	4.240E-04	
Totals					1.004E-03	1.004E-03	0.000E+00
Nitrous Oxide							
	EU 012	PER 006		1.000E-02	3.000E-02	3.000E-02	
	EU 013	PER 006		1.000E-02	3.000E-02	3.000E-02	
	EU 014	PER 006		1.000E-02	5.000E-02	5.000E-02	
Totals					1.100E-01	1.100E-01	0.000E+00
Methyl tert butyl ether							
	EU 012	PER 006		3.700E+00	1.620E+01		
	EU 013	PER 006		2.960E+00	1.300E+01		
	EU 014	PER 006		4.870E+00	2.130E+01		
	FC 000	PER 006				9.000E+00	
Totals					5.050E+01	9.000E+00	0.000E+00
Methylene chloride (dichlorome							
	EU 001	PER 005		3.150E+01	1.380E+02	0.000E+00	

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Methylene chloride (dichlorome							
	EU 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Propionaldehyde							
	EU 012	PER 006		3.770E-02	1.650E-01	1.650E-01	
	EU 013	PER 006		3.010E-02	1.320E-01	1.320E-01	
	EU 014	PER 006		4.960E-02	2.170E-01	2.170E-01	
Totals					5.140E-01	5.140E-01	0.000E+00
Total Polycyclic aromatic hydr							
	EU 012	PER 006		3.320E-04	1.460E-03	1.460E-03	
	EU 013	PER 006		2.660E-04	1.160E-03	1.160E-03	
	EU 014	PER 006		4.380E-04	1.920E-03	1.920E-03	
Totals					4.540E-03	4.540E-03	0.000E+00
Nickel compounds							
	EU 012	PER 006		4.290E-05	1.880E-04	1.880E-04	
	EU 013	PER 006		3.430E-05	1.500E-04	1.500E-04	
	EU 014	PER 006		5.660E-05	2.480E-04	2.480E-04	
Totals					5.860E-04	5.860E-04	0.000E+00
Nitrogen Oxides							
	EU 012	PER 006		2.635E+01	1.154E+02		
	EU 013	PER 006		2.108E+01	9.233E+01		
	EU 014	PER 006		3.472E+01	1.521E+02		
	EU 025	PER 005		1.140E-01	5.010E-01	0.000E+00	1.200E-01
	FC 000	PER 005				2.400E+02	
	GP 002	PER 005		5.100E-01	2.230E+00	0.000E+00	2.230E+00
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	GP 003	PER 005		4.500E-01	1.980E+00	0.000E+00	1.980E+00
Totals					3.623E+02	2.400E+02	2.100E+00
PM < 2.5 micron							
	EU 012	PER 006		1.870E+00	8.190E+00		
	EU 013	PER 006		1.500E+00	6.550E+00		
	EU 014	PER 006		2.460E+00	1.079E+01		
	FC 000	PER 006				2.400E+02	
Totals					2.553E+01	2.400E+02	0.000E+00
PM < 10 micron							
	EU 012	PER 006		1.870E+00	8.190E+00		
	EU 013	PER 006		1.500E+00	6.550E+00		

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PM < 10 micron							
	EU 014	PER 006		2.460E+00	1.079E+01		
	EU 021	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 022	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 023	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 024	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 025	PER 005		9.000E-03	3.800E-02	0.000E+00	9.000E-03
	FC 000	PER 005				2.400E+02	
	GP 001	PER 005		5.210E+00	2.282E+01	0.000E+00	2.280E+01
	GP 002	PER 005		3.000E-02	1.300E-01	0.000E+00	1.300E-01
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	GP 003	PER 005		0.000E+00	6.000E-02	0.000E+00	6.000E-02
Totals					3.474E+03	2.400E+02	2.327E+01
Total Particulate Matter							
	EU 012	PER 006		1.870E+00	8.190E+00		
	EU 013	PER 006		1.500E+00	6.550E+00		
	EU 014	PER 006		2.460E+00	1.079E+01		
	EU 021	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 022	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 023	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 024	PER 005		1.955E+02	8.565E+02	0.000E+00	1.000E-01
	EU 025	PER 005		9.000E-03	3.800E-02	0.000E+00	9.000E-03
	FC 000	PER 005				2.400E+02	
	GP 001	PER 005		5.210E+00	2.282E+01	0.000E+00	
	GP 002	PER 005		3.000E-02	1.300E-01	0.000E+00	
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 005		0.000E+00	6.000E-02	0.000E+00	
Totals					3.474E+03	2.400E+02	4.090E-01
HAP-Single							
	EU 021	PER 005		1.090E+02	4.750E+02		
	EU 022	PER 005		1.090E+02	4.750E+02		
	EU 023	PER 005		1.090E+02	4.750E+02		
	EU 024	PER 005		1.090E+02	4.750E+02		
	FC 000	PER 005				9.000E+00	
Totals					1.900E+03	9.000E+00	0.000E+00

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AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Sulfur Dioxide							
	EU 012	PER 006		1.740E+00	7.630E+00	7.630E+00	
	EU 013	PER 006		1.390E+00	6.110E+00	6.110E+00	
	EU 014	PER 006		2.300E+00	1.006E+01	1.006E+01	
	EU 025	PER 005		1.000E-03	4.000E-03	4.000E-03	1.000E-03
	GP 002	PER 001		3.000E-02	1.300E-01	1.300E-01	1.300E-01
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					2.380E+01	2.380E+01	1.000E-03
Volatile Organic Compounds							
	EU 012	PER 006		6.770E+00	2.967E+01		
	EU 013	PER 006		5.420E+00	2.374E+01		
	EU 014	PER 006		8.930E+00	3.909E+01		
	EU 021	PER 005		2.340E+02	1.025E+03		5.000E+00
	EU 022	PER 005		2.340E+02	1.025E+03		5.000E+00
	EU 023	PER 005		2.340E+02	1.025E+03		5.000E+00
	EU 024	PER 005		2.340E+02	1.025E+03		5.000E+00
	EU 025	PER 005		6.000E-03	2.800E-02	0.000E+00	7.000E-03
	FC 000	PER 005				2.400E+02	
	GP 001	PER 005		4.247E+01	1.860E+02	0.000E+00	
	GP 002	PER 005		7.300E-01	3.200E+00	0.000E+00	
	GP 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 003	PER 005		1.307E+01	5.724E+01	0.000E+00	
Totals					4.436E+03	2.400E+02	2.001E+01

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU012 - Engine Testing

EU012	12A Assembly Engine Testing - Line 1	SV 015
	12B Assembly Engine Testing - ATV	SV 024
	12C Assembly Engine Testing - Line 3	SV 025
	12D North Audit Room	SV 026
	12E South Audit Room	SV 027

Heat Input = 5.95 MMBtu/hr

Rated Mechanical Output = 850 HP

Primary Fuel = Gasoline

Secondary Fuel = Diesel

Gasoline Fuel Consumption Rate = 45.77 gallons per hour

Fuel consumption rate converted from HP based on 7000 Btu/hp-hr (AP-42 Section 3.3), and gasoline heat value of 130,000 Btu/gal (AP-42 Apdx A)

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 012)							
Pollutant	Emission Factor (lb/gal)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ¹ (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	6.47E-03	Permit No. 11300014-005	2.96E-01	1.30	0%	1.30	1.30
PM ₁₀	6.20E-03	Permit No. 11300014-005	2.84E-01	1.24	0%	1.24	1.24
PM _{2.5}	6.20E-03	Assume equal to PM10	2.84E-01	1.24	0%	1.24	1.24
SO ₂	5.30E-03	Permit No. 11300014-005	2.43E-01	1.06	0%	1.06	1.06
NO _x	1.02E-01	Permit No. 11300014-005	4.67E+00	20.45	0%	20.45	20.45
VOC	1.48E-01	Permit No. 11300014-005	6.77E+00	29.67	0%	29.67	29.67
CO	3.94	Permit No. 11300014-005	1.80E+02	789.85	0%	789.85	789.85
Lead	N/A	--	--	--	--	--	--

¹ - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all five rooms covered under EU 012.

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 012)							
Pollutant	Emission Factor ¹ (lb/hp-hr)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ² (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	2.20E-03	Assume equal to PM10	1.87	8.19	0%	8.19	8.19
PM ₁₀	2.20E-03	AP-42 Section 3.3 Table 3.3.1	1.87	8.19	0%	8.19	8.19
PM _{2.5}	2.20E-03	Assume equal to PM10	1.87	8.19	0%	8.19	8.19
SO ₂	2.05E-03	AP-42 Section 3.3 Table 3.3.1	1.74	7.63	0%	7.63	7.63
NO _x	0.031	AP-42 Section 3.3 Table 3.3.1	26.35	115.41	0%	115.41	115.41
VOC	0.003	AP-42 Section 3.3 Table 3.3.1	2.14	9.36	0%	9.36	9.36
CO	0.007	AP-42 Section 3.3 Table 3.3.1	5.68	24.87	0%	24.87	24.87
Lead	N/A	--	--	--	--	--	--

¹ - Emission factors from AP-42, Section 3.3 Gasoline and Diesel Industrial Engines (small, <660 HP), 10/96 (and 3/24/09 correction for CO). All particulate is assumed to be ≤10 microns in size.

² - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all five rooms covered under EU 012.

Worst Case Emissions (Emissions are combined total emissions for ALL rooms listed under EU 012)				
Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
PM	1.87	Diesel	8.19	See Total Facility Emissions Cap
PM ₁₀	1.87	Diesel	8.19	See Total Facility Emissions Cap
PM _{2.5}	1.87	Diesel	8.19	See Total Facility Emissions Cap
SO ₂	1.74	Diesel	7.63	7.63
NO _x	26.35	Diesel	115.41	See Total Facility Emissions Cap
VOC	6.77	Gasoline	29.67	See Total Facility Emissions Cap
CO	180.33	Gasoline	789.85	See Total Facility Emissions Cap
Lead	NA	NA	0.00	See Total Facility Emissions Cap

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU012 - Engine Testing HAP Emissions

EU012	12A Assembly Engine Testing - Line 1	SV 015
	12B Assembly Engine Testing - ATV	SV 024
	12C Assembly Engine Testing - Line 3	SV 025
	12D North Audit Room	SV 026
	12E South Audit Room	SV 027

Heat Input = 5.95 MMBtu/hr
 Rated Mechanical Output = 850 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	45.77	gal/hr
Diesel	--	--	137,000	Btu/gal ²	43.43	gal/hr

¹ - From Appendix Material of Permit 11300014-005

² - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 012)						
HAP Name	Emission Factor ¹ (lbs/hp-hr)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
1,3- Butadiene	2.47E-04	2.10E-01	9.20E-01	0.00%	9.20E-01	9.20E-01
Acetaldehyde	9.66E-05	8.21E-02	3.60E-01	0.00%	3.60E-01	3.60E-01
Formaldehyde	2.76E-04	2.35E-01	1.03E+00	0.00%	1.03E+00	1.03E+00
Acrolien	1.65E-05	1.40E-02	6.14E-02	0.00%	6.14E-02	6.14E-02
Benzene	1.24E-03	1.05E+00	4.62E+00	0.00%	4.62E+00	4.62E+00
Ethylbenzene	4.67E-04	3.97E-01	1.74E+00	0.00%	1.74E+00	1.74E+00
n-Hexane	2.34E-04	1.99E-01	8.71E-01	0.00%	8.71E-01	8.71E-01
MTBE	4.35E-03	3.70E+00	1.62E+01	0.00%	1.62E+01	1.62E+01
Propionaldehyde	4.43E-05	3.77E-02	1.65E-01	0.00%	1.65E-01	1.65E-01
Styrene	1.79E-05	1.52E-02	6.66E-02	0.00%	6.66E-02	6.66E-02
Toluene	1.69E-03	1.44E+00	6.29E+00	0.00%	6.29E+00	6.29E+00
Xylene	1.60E-03	1.36E+00	5.96E+00	0.00%	5.96E+00	5.96E+00
PAH	3.91E-07	3.32E-04	1.46E-03	0.00%	1.46E-03	1.46E-03
Chromium Comp.	4.33E-08	3.68E-05	1.61E-04	0.00%	1.61E-04	1.61E-04
Manganese Comp.	8.65E-08	7.35E-05	3.22E-04	0.00%	3.22E-04	3.22E-04
Mercury Comp.	7.21E-09	6.13E-06	2.68E-05	0.00%	2.68E-05	2.68E-05
Nickel Comp.	5.05E-08	4.29E-05	1.88E-04	0.00%	1.88E-04	1.88E-04
Totals		8.74E+00	3.83E+01		3.83E+01	3.83E+01

¹ From Appendix of Permit 11300014-005

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU012 - Engine Testing HAP Emissions

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 012)						
HAP Name	Emission Factor ¹ (lbs/MM Btu)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
Acetaldehyde	7.67E-04	4.56E-03	2.00E-02	0.00%	2.00E-02	2.00E-02
Acrolien	9.25E-05	5.50E-04	2.41E-03	0.00%	2.41E-03	2.41E-03
Benzene	9.33E-04	5.55E-03	2.43E-02	0.00%	2.43E-02	2.43E-02
1,3-Butadiene	3.91E-05	2.33E-04	1.02E-03	0.00%	1.02E-03	1.02E-03
Formaldehyde	1.18E-03	7.02E-03	3.08E-02	0.00%	3.08E-02	3.08E-02
Naphthalene	8.48E-05	5.05E-04	2.21E-03	0.00%	2.21E-03	2.21E-03
Toluene	4.09E-04	2.43E-03	1.07E-02	0.00%	1.07E-02	1.07E-02
Xylene	2.85E-04	1.70E-03	7.43E-03	0.00%	7.43E-03	7.43E-03
Totals		2.26E-02	9.88E-02		9.88E-02	9.88E-02

¹Emission factors from AP-42 Table 3.3-2

Worst Case Emissions				
HAP Name	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
1,3- Butadiene	2.10E-01	Gasoline	9.20E-01	9.20E-01
Acetaldehyde	8.21E-02	Gasoline	3.60E-01	3.60E-01
Acrolien	1.40E-02	Gasoline	6.14E-02	6.14E-02
Benzene	1.05E+00	Gasoline	4.62E+00	4.62E+00
Ethylbenzene	3.97E-01	Gasoline	1.74E+00	1.74E+00
Formaldehyde	2.35E-01	Gasoline	1.03E+00	1.03E+00
n-Hexane	1.99E-01	Gasoline	8.71E-01	8.71E-01
MTBE	3.70E+00	Gasoline	1.62E+01	See Note Below
Naphthalene	5.05E-04	Diesel	2.21E-03	2.21E-03
Propionaldehyde	3.77E-02	Gasoline	1.65E-01	1.65E-01
Styrene	1.52E-02	Gasoline	6.66E-02	6.66E-02
Toluene	1.44E+00	Gasoline	6.29E+00	6.29E+00
Xylene	1.36E+00	Gasoline	5.96E+00	5.96E+00
PAH	3.32E-04	Gasoline	1.46E-03	1.46E-03
Chromium Comp.	3.68E-05	Gasoline	1.61E-04	1.61E-04
Manganese Comp.	7.35E-05	Gasoline	3.22E-04	3.22E-04
Mercury Comp.	6.13E-06	Gasoline	2.68E-05	2.68E-05
Nickel Comp.	4.29E-05	Gasoline	1.88E-04	1.88E-04
Totals	8.74E+00		3.83E+01	See Note Below

Note: Total HAPs Limited to less than 23 ton/yr and individual HAP limited to less than 9 tpy

Arctic Cat, Inc.
 AQ Facility ID No. 11300014
 AQ File No.: 890

EU012 - Engine Testing GHG Emissions

EU012	12A Assembly Engine Testing - Line 1	SV 015
	12B Assembly Engine Testing - ATV	SV 024
	12C Assembly Engine Testing - Line 3	SV 025
	12D North Audit Room	SV 026
	12E South Audit Room	SV 027

Heat Input = 5.95 MMBtu/hr
 Rated Mechanical Output = 850 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	45.77	gal/hr
Diesel	--	--	137,000	Btu/gal ²	43.43	gal/hr

¹ - From Appendix Material of Permit 11300014-005
² - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline		Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
GHG Pollutant	GWP		(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	154.81	921	4,034	4,034	0.0%	921	4,034	4,034	921	4,034	4,034
CH ₄	21	6.61E-03	0.04	0.17	3.62	0.00	0.04	0.17	3.62	0.04	0.17	3.62
N ₂ O	310	1.32E-03	0.01	0.03	10.69	0.00	0.01	0.03	10.69	0.01	0.03	10.69
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					4,049				4,049			4,049

¹ - Emissions factors from 40 CFR 98, subp. C.

Secondary Fuel: Diesel		Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
GHG Pollutant	GWP		(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	163.05	970	4,249	4,249	0.0%	970	4,249	4,249	970	4,249	4,249
CH ₄	21	6.61E-03	0.04	0.17	3.62	0.00	0.04	0.17	3.62	0.04	0.17	3.62
N ₂ O	310	1.32E-03	0.01	0.03	10.69	0.00	0.01	0.03	10.69	0.01	0.03	10.69
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					4,264				4,264			4,264

¹ - Emissions factors from 40 CFR 98, subp. C.

Worst Case Emissions				
GHG Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
CO ₂	970	Diesel	4,249	4,249
CH ₄	0.04	Diesel/Gasoline	0.17	0.17
N ₂ O	0.01	Diesel/Gasoline	0.03	0.03
HFCs	--	--	--	--
PFCs	--	--	--	--
SF ₆	--	--	--	--
Total GHG (CO₂e)			4,263.61	4,263.61

Arctic Cat, Inc.
 AQ Facility ID No. 11300014
 AQ File No.: 890

EU013 - Engine Testing

EU 013	13A Engineering Testing	SV 016
	13B Engineering Testing	SV 028
	13C Engineering Testing	SV 029
	13D Engineering Testing	SV 030

Heat Input = 4.76 MMBtu/hr
 Rated Mechanical Output = 680 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel
 Gasoline Fuel Consumption Rate = 36.62 gallons per hour

Fuel consumption rate converted from HP based on 7000 Btu/hp-hr (AP-42 Section 3.3), and gasoline heat value of 130,000 Btu/gal (AP-42 Apdx A).

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 013)							
Pollutant	Emission Factor (lb/gal)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ¹ (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	6.47E-03	Permit No. 11300014-005	2.37E-01	1.04	0%	1.04	1.04
PM ₁₀	6.20E-03	Permit No. 11300014-005	2.27E-01	0.99	0%	0.99	0.99
PM _{2.5}	6.20E-03	Assume equal to PM10	2.27E-01	0.99	0%	0.99	0.99
SO ₂	5.30E-03	Permit No. 11300014-005	1.94E-01	0.85	0%	0.85	0.85
NO _x	1.02E-01	Permit No. 11300014-005	3.73E+00	16.36	0%	16.36	16.36
VOC	1.48E-01	Permit No. 11300014-005	5.42E+00	23.74	0%	23.74	23.74
CO	3.94	Permit No. 11300014-005	1.44E+02	631.88	0%	631.88	631.88
Lead	N/A	--	--	--	--	--	--

¹ - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all four rooms covered under EU 013.

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 013)							
Pollutant	Emission Factor ¹ (lb/hp-hr)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ² (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	2.20E-03	Assume equal to PM10	1.50	6.55	0%	6.55	6.55
PM ₁₀	2.20E-03	AP-42 Section 3.3 Table 3.3.1	1.50	6.55	0%	6.55	6.55
PM _{2.5}	2.20E-03	Assume equal to PM10	1.50	6.55	0%	6.55	6.55
SO ₂	2.05E-03	AP-42 Section 3.3 Table 3.3.1	1.39	6.11	0%	6.11	6.11
NO _x	0.031	AP-42 Section 3.3 Table 3.3.1	21.08	92.33	0%	92.33	92.33
VOC	0.003	AP-42 Section 3.3 Table 3.3.1	1.71	7.49	0%	7.49	7.49
CO	0.007	AP-42 Section 3.3 Table 3.3.1	4.54	19.90	0%	19.90	19.90
Lead	N/A	--	--	--	--	--	--

¹ - Emission factors from AP-42, Section 3.3 Gasoline and Diesel Industrial Engines (small, <660 HP), 10/96 (and 3/24/09 correction for CO). All particulate is assumed to be ≤10 microns in size.

² - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all four rooms covered under EU 013.

Worst Case Emissions (Emissions are combined total emissions for ALL rooms listed under EU 013)				
Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
PM	1.50	Diesel	6.55	See Total Facility Emissions Cap
PM ₁₀	1.50	Diesel	6.55	See Total Facility Emissions Cap
PM _{2.5}	1.50	Diesel	6.55	See Total Facility Emissions Cap
SO ₂	1.39	Diesel	6.11	6.11
NO _x	21.08	Diesel	92.33	See Total Facility Emissions Cap
VOC	5.42	Gasoline	23.74	See Total Facility Emissions Cap
CO	144.26	Gasoline	631.88	See Total Facility Emissions Cap
Lead	NA	NA	0.00	See Total Facility Emissions Cap

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU013 - Engine Testing HAP Emissions

EU 013	13A Engineering Testing	SV 016
	13B Engineering Testing	SV 028
	13C Engineering Testing	SV 029
	13D Engineering Testing	SV 030

Heat Input = 4.76 MMBtu/hr
 Rated Mechanical Output = 680 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	36.62	gal/hr
Diesel	--	--	137,000	Btu/gal ²	34.74	gal/hr

¹ - From Appendix Material of Permit 11300014-005

² - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 013)						
HAP Name	Emission Factor ¹ (lbs/hp-hr)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
1,3- Butadiene	2.47E-04	1.68E-01	7.36E-01	0.00%	7.36E-01	7.36E-01
Acetaldehyde	9.66E-05	6.57E-02	2.88E-01	0.00%	2.88E-01	2.88E-01
Formaldehyde	2.76E-04	1.88E-01	8.22E-01	0.00%	8.22E-01	8.22E-01
Acrolien	1.65E-05	1.12E-02	4.91E-02	0.00%	4.91E-02	4.91E-02
Benzene	1.24E-03	8.43E-01	3.69E+00	0.00%	3.69E+00	3.69E+00
Ethylbenzene	4.67E-04	3.18E-01	1.39E+00	0.00%	1.39E+00	1.39E+00
n-Hexane	2.34E-04	1.59E-01	6.97E-01	0.00%	6.97E-01	6.97E-01
MTBE	4.35E-03	2.96E+00	1.30E+01	0.00%	1.30E+01	1.30E+01
Propionaldehyde	4.43E-05	3.01E-02	1.32E-01	0.00%	1.32E-01	1.32E-01
Styrene	1.79E-05	1.22E-02	5.33E-02	0.00%	5.33E-02	5.33E-02
Toluene	1.69E-03	1.15E+00	5.03E+00	0.00%	5.03E+00	5.03E+00
Xylene	1.60E-03	1.09E+00	4.77E+00	0.00%	4.77E+00	4.77E+00
PAH	3.91E-07	2.66E-04	1.16E-03	0.00%	1.16E-03	1.16E-03
Chromium Comp.	4.33E-08	2.94E-05	1.29E-04	0.00%	1.29E-04	1.29E-04
Manganese Comp.	8.65E-08	5.88E-05	2.58E-04	0.00%	2.58E-04	2.58E-04
Mercury Comp.	7.21E-09	4.90E-06	2.15E-05	0.00%	2.15E-05	2.15E-05
Nickel Comp.	5.05E-08	3.43E-05	1.50E-04	0.00%	1.50E-04	1.50E-04
Totals		6.99E+00	3.06E+01		3.06E+01	3.06E+01

¹ From Appendix of Permit 11300014-005

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU013 - Engine Testing HAP Emissions

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 013)						
HAP Name (CAS)	Emission Factor ¹ (lbs/MM Btu)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
Acetaldehyde	7.67E-04	3.65E-03	1.60E-02	0.00%	1.60E-02	1.60E-02
Acrolien	9.25E-05	4.40E-04	1.93E-03	0.00%	1.93E-03	1.93E-03
Benzene	9.33E-04	4.44E-03	1.95E-02	0.00%	1.95E-02	1.95E-02
1,3-Butadiene	3.91E-05	1.86E-04	8.15E-04	0.00%	8.15E-04	8.15E-04
Formaldehyde	1.18E-03	5.62E-03	2.46E-02	0.00%	2.46E-02	2.46E-02
Naphthalene	8.48E-05	4.04E-04	1.77E-03	0.00%	1.77E-03	1.77E-03
Toluene	4.09E-04	1.95E-03	8.53E-03	0.00%	8.53E-03	8.53E-03
Xylene	2.85E-04	1.36E-03	5.94E-03	0.00%	5.94E-03	5.94E-03
Totals		1.80E-02	7.90E-02		7.90E-02	7.90E-02

¹Emission factors from AP-42 Table 3.3-2

Worst Case Emissions				
HAP Name	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
1,3- Butadiene	1.68E-01	Gasoline	7.36E-01	7.36E-01
Acetaldehyde	6.57E-02	Gasoline	2.88E-01	2.88E-01
Acrolien	1.12E-02	Gasoline	4.91E-02	4.91E-02
Benzene	8.43E-01	Gasoline	3.69E+00	3.69E+00
Ethylbenzene	3.18E-01	Gasoline	1.39E+00	1.39E+00
Formaldehyde	1.88E-01	Gasoline	8.22E-01	8.22E-01
n-Hexane	1.59E-01	Gasoline	6.97E-01	6.97E-01
MTBE	2.96E+00	Gasoline	1.30E+01	See Note Below
Naphthalene	4.04E-04	Diesel	1.77E-03	1.77E-03
Propionaldehyde	3.01E-02	Gasoline	1.32E-01	1.32E-01
Styrene	1.22E-02	Gasoline	5.33E-02	5.33E-02
Toluene	1.15E+00	Gasoline	5.03E+00	5.03E+00
Xylene	1.09E+00	Gasoline	4.77E+00	4.77E+00
PAH	2.66E-04	Gasoline	1.16E-03	1.16E-03
Chromium Comp.	2.94E-05	Gasoline	1.29E-04	1.29E-04
Manganese Comp.	5.88E-05	Gasoline	2.58E-04	2.58E-04
Mercury Comp.	4.90E-06	Gasoline	2.15E-05	2.15E-05
Nickel Comp.	3.43E-05	Gasoline	1.50E-04	1.50E-04
Totals	6.99E+00		3.06E+01	See Note Below

Note: Total HAPs Limited to less than 23 ton/yr and individual HAP limited to less than 9 tpy

Arctic Cat, Inc.
 AQ Facility ID No. 11300014
 AQ File No.: 890

EU013 - Engine Testing GHG Emissions

EU 013	13A Engineering Testing	SV 016
	13B Engineering Testing	SV 028
	13C Engineering Testing	SV 029
	13D Engineering Testing	SV 030

Heat Input = 4.76 MMBtu/hr
 Rated Mechanical Output = 680 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	36.62	gal/hr
Diesel	--	--	137,000	Btu/gal ²	34.74	gal/hr

1 - From Appendix Material of Permit 11300014-005
 2 - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline		Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
GHG Pollutant	GWP		(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	154.81	737	3,228	3,228	0.0%	737	3,228	3,228	737	3,228	3,228
CH ₄	21	6.61E-03	0.03	0.14	2.9	0.0%	0.03	0.14	2.9	0.03	0.14	2.9
N ₂ O	310	1.32E-03	0.01	0.03	8.5	0.0%	0.01	0.03	8.5	0.01	0.03	8.5
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					3,239				3,239			3,239

¹ - Emissions factors from 40 CFR 98, subp. C.

Secondary Fuel: Diesel		Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
GHG Pollutant	GWP		(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	163.05	776	3,399	3,399	0.0%	776	3,399	3,399	776	3,399	3,399
CH ₄	21	6.61E-03	0.03	0.14	2.9	0.0%	0.03	0.14	2.9	0.03	0.14	2.9
N ₂ O	310	1.32E-03	0.01	0.03	8.5	0.0%	0.01	0.03	8.5	0.01	0.03	8.5
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					3,411				3,411			3,411

¹ - Emissions factors from 40 CFR 98, subp. C.

Worst Case Emissions				
GHG Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits
CO ₂	776	Diesel	3,399	3,399
CH ₄	0.03	Diesel/Gasoline	0.14	0.14
N ₂ O	0.01	Diesel/Gasoline	0.03	0.03
HFCs	--	--	--	--
PFCs	--	--	--	--
SF ₆	--	--	--	--
Total GHG (CO₂e)			3,410.89	3,410.89

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU014 - Engine Testing

EU 014	14A Engineering Testing - (Emissions)	SV 017
	14B Engineering Testing - (Emissions)	SV 031
	14C Engineering Testing - (Emissions)	SV 032
	14D Engineering Testing - (Emissions)	SV 033
	14G Engineering Testing - (ATV dura)	SV 034
	14H Engine Testing (Jag)	SV 035
	14I Chassis Dynamometer (100 hp maximum)	

Heat Input = 7.84 MMBtu/hr
 Rated Mechanical Output = 1120 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel
 Gasoline Fuel Consumption Rate = 60.31 gallons per hour

Fuel consumption rate converted from HP based on 7000 Btu/hp-hr (AP-42 Section 3.3), and gasoline heat value of 130,000 Btu/gal (AP-42 Apdx A)

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 014)							
Pollutant	Emission Factor (lb/gal)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ¹ (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	6.47E-03	Permit No. 11300014-005	0.39	1.71	0%	1.71	1.71
PM ₁₀	6.20E-03	Permit No. 11300014-005	0.37	1.64	0%	1.64	1.64
PM _{2.5}	6.20E-03	Assume equal to PM10	0.37	1.64	0%	1.64	1.64
SO ₂	5.30E-03	Permit No. 11300014-005	0.32	1.40	0%	1.40	1.40
NO _x	1.02E-01	Permit No. 11300014-005	6.15	26.94	0%	26.94	26.94
VOC	1.48E-01	Permit No. 11300014-005	8.93	39.09	0%	39.09	39.09
CO	3.94	Permit No. 11300014-005	237.61	1040.74	0%	1040.74	1040.74
Lead	N/A	--	--	--	--	--	--

¹ - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all six rooms and the chassis dynamometer covered under EU 014.

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 014)							
Pollutant	Emission Factor ¹ (lb/hp-hr)	Emission factor units and source	Emission Rate (lbs/hr)	Maximum uncontrolled emissions ² (tons/yr)	Pollution control efficiency (%)	Maximum controlled emissions (tons/yr)	Limited controlled emissions (tons/yr)
PM	2.20E-03	Assume equal to PM10	2.46	10.79	0%	10.79	10.79
PM ₁₀	2.20E-03	AP-42 Section 3.3 Table 3.3.1	2.46	10.79	0%	10.79	10.79
PM _{2.5}	2.20E-03	Assume equal to PM10	2.46	10.79	0%	10.79	10.79
SO ₂	2.05E-03	AP-42 Section 3.3 Table 3.3.1	2.30	10.06	0%	10.06	10.06
NO _x	0.031	AP-42 Section 3.3 Table 3.3.1	34.72	152.07	0%	152.07	152.07
VOC	0.003	AP-42 Section 3.3 Table 3.3.1	2.82	12.33	0%	12.33	12.33
CO	0.007	AP-42 Section 3.3 Table 3.3.1	7.48	32.77	0%	32.77	32.77
Lead	N/A	--	--	--	--	--	--

¹ - Emission factors from AP-42, Section 3.3 Gasoline and Diesel Industrial Engines (small, <660 HP), 10/96 (and 3/24/09 correction for CO). All particulate is assumed to be ≤10 microns in size.

² - Engines are based on a maximum engine size of 170 HP per room, with a maximum capacity of one engine per room. Emissions are a sum total of all six rooms and the chassis dynamometer covered under EU 014.

Worst Case Emissions (Emissions are combined total emissions for ALL rooms listed under EU 014)				
Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
PM	2.46	Diesel	10.79	See Total Facility Emissions Cap
PM ₁₀	2.46	Diesel	10.79	See Total Facility Emissions Cap
PM _{2.5}	2.46	Diesel	10.79	See Total Facility Emissions Cap
SO ₂	2.30	Diesel	10.06	10.06
NO _x	34.72	Diesel	152.07	See Total Facility Emissions Cap
VOC	8.93	Gasoline	39.09	See Total Facility Emissions Cap
CO	237.61	Gasoline	1040.74	See Total Facility Emissions Cap
Lead	NA	NA	0	See Total Facility Emissions Cap

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU014 - Engine Testing HAP Emissions

EU 014	14A Engineering Testing - (Emissions)	SV 017
	14B Engineering Testing - (Emissions)	SV 031
	14C Engineering Testing - (Emissions)	SV 032
	14D Engineering Testing - (Emissions)	SV 033
	14G Engineering Testing - (ATV dura)	SV 034
	14H Engine Testing (Jag)	SV 035
	14I Chassis Dynamometer (100 hp maximum)	

Heat Input = 7.84 MMBtu/hr
 Rated Mechanical Output = 1120 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	60.31	gal/hr
Diesel	--	--	137,000	Btu/gal ²	57.23	gal/hr

¹ - From Appendix Material of Permit 11300014-005

² - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline (Emissions are combined total emissions for ALL rooms listed under EU 014)						
HAP Name	Emission Factor ¹ (lbs/hp-hr)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
1,3- Butadiene	2.47E-04	2.77E-01	1.21E+00	0.00%	1.21E+00	1.21E+00
Acetaldehyde	9.66E-05	1.08E-01	4.74E-01	0.00%	4.74E-01	4.74E-01
Formaldehyde	2.76E-04	3.09E-01	1.35E+00	0.00%	1.35E+00	1.35E+00
Acrolien	1.65E-05	1.85E-02	8.09E-02	0.00%	8.09E-02	8.09E-02
Benzene	1.24E-03	1.39E+00	6.08E+00	0.00%	6.08E+00	6.08E+00
Ethylbenzene	4.67E-04	5.23E-01	2.29E+00	0.00%	2.29E+00	2.29E+00
n-Hexane	2.34E-04	2.62E-01	1.15E+00	0.00%	1.15E+00	1.15E+00
MTBE	4.35E-03	4.87E+00	2.13E+01	0.00%	2.13E+01	2.13E+01
Propionaldehyde	4.43E-05	4.96E-02	2.17E-01	0.00%	2.17E-01	2.17E-01
Styrene	1.79E-05	2.00E-02	8.78E-02	0.00%	8.78E-02	8.78E-02
Toluene	1.69E-03	1.89E+00	8.29E+00	0.00%	8.29E+00	8.29E+00
Xylene	1.60E-03	1.79E+00	7.85E+00	0.00%	7.85E+00	7.85E+00
PAH	3.91E-07	4.38E-04	1.92E-03	0.00%	1.92E-03	1.92E-03
Chromium Comp.	4.33E-08	4.85E-05	2.12E-04	0.00%	2.12E-04	2.12E-04
Manganese Comp.	8.65E-08	9.69E-05	4.24E-04	0.00%	4.24E-04	4.24E-04
Mercury Comp.	7.21E-09	8.08E-06	3.54E-05	0.00%	3.54E-05	3.54E-05
Nickel Comp.	5.05E-08	5.66E-05	2.48E-04	0.00%	2.48E-04	2.48E-04
Totals		1.15E+01	5.04E+01		5.04E+01	5.04E+01

¹ From Appendix of Permit 11300014-005

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU014 - Engine Testing HAP Emissions

Secondary Fuel: Diesel (Emissions are combined total emissions for ALL rooms listed under EU 014)						
HAP Name (CAS)	Emission Factor ¹ (lbs/MM Btu)	Emission Rate (lbs/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency (%)	Maximum Controlled Emissions (tons/yr)	Limited Controlled Emissions (tons/yr)
Acetaldehyde	7.67E-04	6.01E-03	2.63E-02	0.00%	2.63E-02	2.63E-02
Acrolien	9.25E-05	7.25E-04	3.18E-03	0.00%	3.18E-03	3.18E-03
Benzene	9.33E-04	7.31E-03	3.20E-02	0.00%	3.20E-02	3.20E-02
1,3-Butadiene	3.91E-05	3.07E-04	1.34E-03	0.00%	1.34E-03	1.34E-03
Formaldehyde	1.18E-03	9.25E-03	4.05E-02	0.00%	4.05E-02	4.05E-02
Naphthalene	8.48E-05	6.65E-04	2.91E-03	0.00%	2.91E-03	2.91E-03
Toluene	4.09E-04	3.21E-03	1.40E-02	0.00%	1.40E-02	1.40E-02
Xylene	2.85E-04	2.23E-03	9.79E-03	0.00%	9.79E-03	9.79E-03
Totals		2.97E-02	1.30E-01		1.30E-01	1.30E-01

¹Emission factors from AP-42 Table 3.3-2

Worst Case Emissions				
HAP Name	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits (tons/yr)
1,3- Butadiene	2.77E-01	Gasoline	1.21E+00	1.21E+00
Acetaldehyde	1.08E-01	Gasoline	4.74E-01	4.74E-01
Acrolien	1.85E-02	Gasoline	8.09E-02	8.09E-02
Benzene	1.39E+00	Gasoline	6.08E+00	6.08E+00
Ethylbenzene	5.23E-01	Gasoline	2.29E+00	2.29E+00
Formaldehyde	3.09E-01	Gasoline	1.35E+00	1.35E+00
n-Hexane	2.62E-01	Gasoline	1.15E+00	1.15E+00
MTBE	4.87E+00	Gasoline	2.13E+01	See Note Below
Naphthalene	6.65E-04	Diesel	2.91E-03	2.91E-03
Propionaldehyde	4.96E-02	Gasoline	2.17E-01	2.17E-01
Styrene	2.00E-02	Gasoline	8.78E-02	8.78E-02
Toluene	1.89E+00	Gasoline	8.29E+00	8.29E+00
Xylene	1.79E+00	Gasoline	7.85E+00	7.85E+00
PAH	4.38E-04	Gasoline	1.92E-03	1.92E-03
Chromium Comp.	4.85E-05	Gasoline	2.12E-04	2.12E-04
Manganese Comp.	9.69E-05	Gasoline	4.24E-04	4.24E-04
Mercury Comp.	8.08E-06	Gasoline	3.54E-05	3.54E-05
Nickel Comp.	5.66E-05	Gasoline	2.48E-04	2.48E-04
Totals	1.15E+01		5.04E+01	See Note Below

Note: Total HAPs Limited to less than 23 ton/yr and individual HAP limited to less than 9 tpy

Arctic Cat, Inc.

AQ Facility ID No. 11300014

AQ File No.: 890

EU014 - Engine Testing GHG Emissions

EU 014	14A Engineering Testing - (Emissions)	SV 017
	14B Engineering Testing - (Emissions)	SV 031
	14C Engineering Testing - (Emissions)	SV 032
	14D Engineering Testing - (Emissions)	SV 033
	14G Engineering Testing - (ATV dura)	SV 034
	14H Engine Testing (Jag)	SV 035
	14I Chassis Dynamometer (100 hp maximum)	

Heat Input = 7.84 MMBtu/hr
 Rated Mechanical Output = 1120 HP
 Primary Fuel = Gasoline
 Secondary Fuel = Diesel

Fuel Type	% Sulfur	% Ash	Heat Value	Units	Fuel Consumption Rate	Units
Gasoline	--	--	130,000	Btu/gal ¹	60.31	gal/hr
Diesel	--	--	137,000	Btu/gal ²	57.23	gal/hr

1 - From Appendix Material of Permit 11300014-005

2 - Diesel heat value from AP-42 Appendix A.

Primary Fuel: Gasoline												
GHG Pollutant	GWP	Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
			(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	154.81	1,214	5,316	5,316	0.0%	1,214	5,316	5,316	1,214	5,316	5,316
CH ₄	21	6.61E-03	0.05	0.23	4.8	0.0%	0.05	0.23	4.8	0.05	0.23	4.8
N ₂ O	310	1.32E-03	0.01	0.05	14.1	0.0%	0.01	0.05	14.1	0.01	0.05	14.1
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					5,335				5,335			5,335

¹ - Emissions factors from 40 CFR 98, subp. C.

Secondary Fuel: Diesel												
GHG Pollutant	GWP	Emission Factor (lb/MMBtu) ¹	Uncontrolled Emission Rate			Pollution Control Efficiency (%)	Controlled Emission Rate			Limited and Controlled Emission Rate		
			(lb/hr)	(tpy)	CO ₂ e (tpy)		(lb/hr)	(tpy)	CO ₂ e (tpy)	(lb/hr)	(tpy)	CO ₂ e (tpy)
CO ₂	1	163.05	1,278	5,599	5,599	0.0%	1,278	5,599	5,599	1,278	5,599	5,599
CH ₄	21	6.61E-03	0.05	0.23	4.8	0.0%	0.05	0.23	4.8	0.05	0.23	4.8
N ₂ O	310	1.32E-03	0.01	0.05	14.1	0.0%	0.01	0.05	14.1	0.01	0.05	14.1
HFCs		N/A	--	--	--	--	--	--	--	--	--	--
PFCs		N/A	--	--	--	--	--	--	--	--	--	--
SF ₆	23,900	N/A	--	--	--	--	--	--	--	--	--	--
Total GHG (CO₂e)					5,618				5,618			5,618

¹ - Emissions factors from 40 CFR 98, subp. C.

Worst Case Emissions				
GHG Pollutant	Emission Rate (lbs/hr)	Worst-Case Fuel	Before Operating Limits (tons/yr)	After Operating Limits
CO ₂	1,278	Diesel	5,599	5,599
CH ₄	0.05	Diesel/Gasoline	0.23	0.23
N ₂ O	0.01	Diesel/Gasoline	0.05	0.05
HFCs	--	--	--	--
PFCs	--	--	--	--
SF ₆	--	--	--	--
Total GHG (CO₂e)			5,617.93	5,617.93

Attachment 2

Facility Description & CD-01 Forms



FACILITY DESCRIPTION: GROUPS (GP)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

	ID No.	Group Status	Added By (Action)	Retired By (Action)	Include in EI	Operator ID for Item	Group Description	Group Items
1	GP 001	Active	PER 005		<input type="checkbox"/>		Molding, Coating (each unit)	EU 007, EU 008, EU 009, EU 010, EU 011, EU 015, EU 019, EU 020
2	GP 002	Active	PER 001		<input type="checkbox"/>		Engine Testing (each engine)	EU 012, EU 013, EU 014
3	GP 003	Active	PER 001		<input type="checkbox"/>		Ovens (each oven)	EU 016, EU 017, EU 018
4	GP 004	Removed	PER 004		<input type="checkbox"/>		Panel Filters (each unit)	EU 001
5	GP 005	Removed	PER 004		<input type="checkbox"/>		Panel Filters (each unit)	EU 002
6	GP 006	Removed	PER 004		<input type="checkbox"/>		Panel Filtes (each unit)	EU 020
7	GP 007	Active	PER 005		<input type="checkbox"/>		Paint Booths and Control Equipment	CE 011, CE 012, CE 013, CE 014, EU 021, EU 022, EU 023, EU 024, SV 039, SV 040, SV 041, SV 042



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
							Diameter or Length (feet)	Width (feet)				
1	SV 001	Removec	PER 004			29	3		30000	77	Manufacturer	Up, No Cap
2	SV 002	Removec	PER 004			29	3		30000	77	Manufacturer	Up, No Cap
3	SV 003	Removec	PER 004			29	3		10250	77	Manufacturer	Up, No Cap
4	SV 004	Removec	PER 004			29	3		10250	77	Manufacturer	Up, No Cap
5	SV 005	Removec	PER 004			29	3		30000	77	Manufacturer	Up, No Cap
6	SV 006	Removec	PER 004			29	3		30000	77	Manufacturer	Up, No Cap
7	SV 007	Removec	PER 004			29	3		13250	77	Manufacturer	Up, No Cap
8	SV 008	Removec	PER 004			29	3		30000	77	Manufacturer	Up, No Cap
9	SV 009	Removec	PER 004			27	1.3		7915	77	Manufacturer	Horizontal
10	SV 010	Active	PER 004		Molded Foat Seat Station	29	3		30000	77	Manufacturer	Horizontal
11	SV 011	Active	PER 004		E-Coat	26	3		15255	90	Manufacturer	Up, No Cap
12	SV 012	Active	PER 004		Solvent Flashoff	26	3		15255	200	Manufacturer	Up, No Cap
13	SV 013	Active	PER 004		Solvent Flashoff	26	2.4		7915	130	Manufacturer	Up, No Cap
14	SV 014	Active	PER 004		Solvent Flashoff	26	2		7915	130	Manufacturer	Up, No Cap
15	SV 015	Active	PER 005		Assembly Engine Testing	27	1.3		2310	77	Manufacturer	Horizontal
16	SV 016	Active	PER 005		Engineering Test	22	1		2310	77	Manufacturer	Up, With Cap
17	SV 017	Active	PER 005		Engineering Test	26	1		2310	77	Manufacturer	Up, With Cap
18	SV 018	Removec	PER 004			29	3		10250	77	Manufacturer	Up, No Cap
19	SV 019	Active	PER 004		Powder Coat Bake Oven Top Coat	29	1.5		650	130	Manufacturer	Up, No Cap
20	SV 020	Active	PER 004		E-Coat Dry Oven	26	1.5		650	250	Manufacturer	Up, No Cap
21	SV 021	Active	PER 004		Dry Oven (Wash Line)	26	1.5		650	250	Manufacturer	Up, No Cap
22	SV 022	Removec	PER 004			15	3		31000	77	Manufacturer	Up, No Cap
23	SV 023	Removec	PER 004			29	3		13500	77	Manufacturer	Up, No Cap
24	SV 024	Active	PER 004		EU 12 Assembly Engine Testing ATV line	31	1.00		2310	77	Manufacturer	*Error
25	SV 025	Active	PER 004		EU 12 Assembly Engine Testing Line 3	31	1.30		2310	77	Manufacturer	*Error
26	SV 026	Active	PER 004		EU 12 Assembly Engine Testing Audit N.	31	1.00		2310	77	Manufacturer	*Error
27	SV 027	Active	PER 004		EU 12 Assembly Engine Testing Audit S.	28	1.00		1300	77	Manufacturer	Up, With Cap



FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
							Diameter or Length (feet)	Width (feet)				
28	SV 028	Active	PER 004		EU 13 Engineering Testing	22	1.00		2310	77	Manufacturer	Up, With Cap
29	SV 029	Active	PER 004		EU 13 Engineering Testing	22	1.00		2310	77	Manufacturer	Up, With Cap
30	SV 030	Active	PER 004		EU 13 Engineering Testing	22	1.00		2310	77	Manufacturer	Up, With Cap
31	SV 031	Active	PER 004		EU 14 Engineering Testing	26	1.30		2310	77	Manufacturer	Up, With Cap
32	SV 032	Active	PER 004		EU 14 Engineering Testing	26	1.30		2310	77	Manufacturer	Up, With Cap
33	SV 033	Active	PER 004		EU 14 Engineering Testing	26	1.30		2310	77	Manufacturer	Up, With Cap
34	SV 034	Active	PER 004		EU 14 Engineering Testing	26	1.30		2310	77	Manufacturer	Up, With Cap
35	SV 035	Active	PER 004		EU 14 Engineering Testing	25	1.30		2310	77	Manufacturer	Up, With Cap
36	SV 036	Active	PER 004		Powder Coat Oven	29	1.5		650	250	Manufacturer	Up, No Cap
37	SV 037	Active	PER 004		Engineering Test	8.25	1.5		2310	77	Manufacturer	Up, No Cap
38	SV 038	Active	PER 004		Engineering Test	31	0.2			77	Manufacturer	Up, No Cap
39	SV 039	Active	PER 005		Paint Booth Exhaust				6000			
40	SV 040	Active	PER 005		Paint Booth Exhaust				6000			
41	SV 041	Active	PER 005		Paint Booth Exhaust				6000			
42	SV 042	Active	PER 005		Paint Booth Exhaust				6000			
43	SV 043	Active	PER 005		Cure Oven Exhaust							
44	SV 044	Active	PER 005		Cure Oven Exhaust							
45	SV 045	Active	PER 005		Cure Oven Exhaust							



FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collection Efficiency (%)	Afterburner Combustion Parameters
1	CE 001	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
2	CE 002	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
3	CE 003	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
4	CE 004	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
5	CE 005	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
6	CE 006	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
7	CE 007	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
8	CE 008	Active	PER 004			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F			PM	100	99	
9	CE 009	Removed	PER 004			058	Mat or Panel Filter	W W Sly Manufacturing	EE	PM	100	96.5	
10	CE 010	Removed	PER 004			058	Mat or Panel Filter			PM	80	96.5	
11	CE 011	Active	PER 005			058	Mat or Panel Filter	Columbus	Supra II	PM10 PM	100 100	92 92	
12	CE 012	Active	PER 005			058	Mat or Panel Filter	Columbus	Supra II	PM10 PM	100 100	92 92	
13	CE 013	Active	PER 005			058	Mat or Panel Filter	Columbus	Supra II	PM10 PM	100 100	92 92	
14	CE 014	Active	PER 005			058	Mat or Panel Filter	Columbus	Supra II	PM10 PM	100 100	92 92	



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
													Materials	Units n	Units d	
1	EU 001	Removed	EIS 003			SV 001 (M) SV 002 (M) SV 003 (M) SV 004 (P)	CE 002 CE 003	Fiberglass Lay-up Station	Glascraft		3799	7200		Lb	Hr	
2	EU 002	Removed	EIS 003			SV 005 (M) SV 006 (M) SV 007 (P)	CE 005 CE 006	Gel Coat Spray Molding	Glascraft		3799	270		Lb	Hr	
3	EU 003	Removed	EIS 003			SV 008 (M)		Gelcoat Backup	Glascraft		3799	360		Lb	Hr	
4	EU 004	Removed	EIS 003					Gluing Station	Arctco		3799	50		Lb	Hr	
5	EU 005	Removed	EIS 003					Assembly Gluing Station	EMC-2		3799	2400		Lb	Hr	
6	EU 006	Retired	PER 004					Logo Silk Screening	Arctco		3799	1.3		Lb	Hr	
7	EU 007	Active	PER 001			SV 010 (M)		Molded Foam Seat Station	High Tech Engineering		3799	31.2		Lb	Hr	
8	EU 008	Active	PER 001			SV 011 (M)		Electrodeposition Coating	Binks		3799	9		Lb	Hr	
9	EU 009	Active	PER 001			SV 012 (M)		Solvent Flashoff	Arctco		3799	1.1		Lb	Hr	
10	EU 010	Active	PER 001			SV 013 (M)		Solvent Flashoff	Arctco	ISD-H	3799	.9		Lb	Hr	
11	EU 011	Active	PER 001			SV 014 (M)		Solvent Flashoff	Arctco	LPA2-100 AAC	3799	.7		Lb	Hr	
12	EU 012	Active	PER 001			SV 015 (M)		Assembly Engine Testing	Arctco	LPA2-100 AAC	3799	3.3		Gal	Hr	
13	EU 013	Active	PER 001			SV 016 (M)		Engineering Testing	Arctco	Posi-Load Liquid Contr	3799	3.3		Gal	Hr	
14	EU 014	Active	PER 001			SV 017 (M)		Engineering Testing	Arctco	100	3799	3.3		Gal	Hr	
15	EU 015	Removed	EIS 003					Cold Press Fiberglass Molding	Arctco		3799	4500		Lb	Hr	
16	EU 016	Active	PER 001			SV 019 (M)		Powder Coat Bake Oven	Eclipse		3799	1.5	Heat	Mmbtu	Hr	
17	EU 017	Active	PER 001			SV 020 (M)		E Coating Drying Oven	Eclipse		3799	1.5	Heat	Mmbtu	Hr	
18	EU 018	Active	PER 001					Drying Oven (Washline Area)	Artic Enterprises		3799	1.5	Heat	Mmbtu	Hr	
19	EU 019	Removed	EIS 003			SV 022 (M)		Finish Routing Stations	DOTCO		3799	21		Each	Hr	
20	EU 020	Removed	EIS 003			SV 023 (M)	CE 010	Gel Coat Spray Layup	Glascraft	LPA2-100 AAC	3799	180		Lb	Hr	
21	EU 021	Active	PER 005			SV 039 (M)	CE 011	Paint Booth 1	PPD Recherche		3799	39.6		Gal	Hr	
22	EU 022	Active	PER 005			SV 040 (M)	CE 012	Paint Booth 2	PPD Recherche		3799	39.6		Gal	Hr	
23	EU 023	Active	PER 005			SV 041 (M)	CE 013	Paint Booth 3	PPD Recherche		3799	39.6				
24	EU 024	Active	PER 005			SV 042 (M)	CE 014	Paint Booth 4	PPD Recherche		3799	39.6		Gal	Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
1	EU 001	Removed	EIS 003	01/01/1985		12/31/1999				
2	EU 002	Removed	EIS 003	01/01/1989		12/31/1999				
3	EU 003	Removed	EIS 003	08/01/1993		12/31/1999				
4	EU 004	Removed	EIS 003	01/01/1983		12/31/1999				
5	EU 005	Removed	EIS 003	08/01/1993		12/31/1999				
6	EU 006	Retired	PER 004	01/01/1987						
7	EU 007	Active	PER 001	01/01/1971						
8	EU 008	Active	PER 001	01/01/1971						
9	EU 009	Active	PER 001	01/01/1971						
10	EU 010	Active	PER 001	01/01/1971						
11	EU 011	Active	PER 001	01/01/1971						
12	EU 012	Active	PER 001	04/01/1971						
13	EU 013	Active	PER 001	04/01/1971						
14	EU 014	Active	PER 001	04/01/1971						
15	EU 015	Removed	EIS 003	08/01/1993		12/31/1999				
16	EU 016	Active	PER 001	01/01/1971						
17	EU 017	Active	PER 001	01/01/1971						
18	EU 018	Active	PER 001	01/01/1971						
19	EU 019	Removed	EIS 003	01/01/1983		12/31/1999				
20	EU 020	Removed	EIS 003	08/01/1993		12/31/1999				
21	EU 021	Active	PER 005							
22	EU 022	Active	PER 005							
23	EU 023	Active	PER 005							
24	EU 024	Active	PER 005							



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 006

AQD Facility ID: 11300014

Facility Name: Arctic Cat Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
													Materials	Units n	Units d	
25	EU 025	Active	PER 005	<input type="checkbox"/>		SV 043 (M) SV 044 (M) SV 045 (M)		Cure Oven (Burners 1, 2, 3)	Reznor		3799	1.2	Heat	Mmbtu	Hr	1.2

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
25	EU 025	Active	PER 005							



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: Total Facility

	NC/CA	Type	Citation	Requirement
1.0		CD	hdr	SOURCE-SPECIFIC REQUIREMENTS - EMISSION LIMITS
2.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Total Particulate Matter: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM-emitting equipment, adds new PM-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
3.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	PM < 10 micron: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM10-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM10-emitting equipment, adds new PM10-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM10 calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
4.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	PM < 2.5 micron: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All PM2.5-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing PM2.5-emitting equipment, adds new PM2.5-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003 or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
5.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Carbon Monoxide: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All CO-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing CO-emitting equipment, adds new CO-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP002 or GP003, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete CO calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
6.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Nitrogen Oxides: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All NOX-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing NOX-emitting equipment, adds new NOX-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP002 or GP003, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete NOX calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

7.0		LIMIT	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000	Volatile Organic Compounds: less than or equal to 240.0 tons/year using 12-month Rolling Sum . All VOC-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing VOC-emitting equipment, adds new VOC-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
8.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2	HAPs - Total: less than or equal to 23.0 tons/year using 12-month Rolling Sum . All HAP-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing HAP-emitting equipment, adds new HAP-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete HAP calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
9.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2	HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum . All HAP-emitting equipment at the Facility is subject to this limit. If the Permittee replaces any existing HAP-emitting equipment, adds new HAP-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the associated monitoring and recordkeeping requirements listed below and/or at GP001, GP002, GP003, or GP004, as applicable. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete HAP calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit.
10.0		CD	hdr	SOURCE-SPECIFIC REQUIREMENTS - OPERATING CONDITIONS ASSOCIATED WITH EMISSION LIMITS
11.0		CD	Minn. R. 7007.0800, subp. 2	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.
12.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	This permit establishes limits on the facility to keep it a minor source under New Source Review and Future NESHAPS (except 40 CFR pt. 63, Subpart PPPP). The Permittee cannot make any change at the source that would make the source a major source under New Source Review and NESHAPS until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.
13.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	Labeling Requirements: The Permittee shall permanently display on each emission unit the Emission Unit (EU) number and on each item of air pollution control equipment, the Control Equipment (CE) number. The identifying number shall be legible from a safe distance.
14.0		CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	Equipment List Inventory: The Permittee shall maintain a written list of all emission units on site that are not insignificant activities. The list shall include the type of equipment; identifying number; dates of installation, modification and/or reconstruction; and reference to applicable Standards of Performance for New Stationary Sources (40 CFR pt. 60) and National Emission Standards for Hazardous Air Pollutants (40 CFR pt. 63).



COMPLIANCE PLAN CD-01

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

15.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	Updating the Equipment List Inventory: The list shall be updated to include new, modified, or relocated equipment before making a change. New emission units may be installed if they are of a type already listed in this permit, and existing units may be modified or moved, without obtaining a permit amendment, provided total facility emissions remain within the limits specified in the permit.
16.0	S/A	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	Equipment List: due 30 days after end of each calendar year starting 10/07/1998 to be submitted with the Compliance Certification. This report shall describe changes made to the stationary source without applying for an amendment. Such changes may include installation of new emission units of the same type described in this permit, and modification or relocation of emission units.
17.0	CD	Minn. R. 7007.0800, subp. 2	Fuels Allowed: The Permittee shall use only natural gas, propane, diesel fuel (includes aviation fuel), and gasoline (includes indolene) in combustion sources.
18.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2	Emission Factors: At the time of issuance of Permit 11300014-006, the Permittee shall use the emission factors as provided in the Appendices. In addition, the Permittee shall use these emission factors, or emission factors published in EPA's AP-42 if revised after the issuance date of Permit 11300014-006, or on-site generated emission factors based upon an EPA Certificate of Conformity (40 CFR 96.106), state certification processes, or voluntary industry testing standards. The Permittee shall submit to the Commissioner for approval on-site generated emission factors and voluntary industry testing standards within 60 days before use, and shall not use such factors until approved by the Commissioner.
19.0	CD	Minn. R. 7007.0800, subps. 4 and 5	Waste Credit: If the Permittee elects to obtain credit for HAPs, solids, and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC, solids, and/or total and individual HAP content for each credited shipment. 1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, solids, total HAP, and each individual HAP, excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC, solids, and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC, solids, and total and individual HAP content of any of the materials.
20.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subps. 4 and 5	Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the following records: 1) total quantity of each coating and other VOC-, solids-, and HAP-containing materials used at the facility (in pounds), and the VOC, solids, and HAP contents of each 2) total quantity of propane combusted in all external combustion units including insignificant activities (in gallons) 3) total quantity of diesel/aviation fuel combusted in all internal combustion units including insignificant activities (in gallons) (continued below)
21.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subps. 4 and 5	continued from above: 4) total quantity of gasoline/indolene combusted in all internal combustion units including insignificant activities (in gallons) 5) for each internal combustion engine combusting gasoline/indolene, the total hp-hr (engine horsepower multiplied by the number of hours combusting gasoline/indolene) 6) the total hp-hr for the day, by summing the hp-hr values calculated for each individual unit



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

22.0	CD	Minn. R. 7007.0800, subs. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the following:</p> <ol style="list-style-type: none"> 1) the total quantity of propane combusted in external combustion units during the previous month (Qprop, thousands of gallons) 2) the total quantity of diesel/aviation fuel combusted in internal combustion units during the previous month (Qdiesel, thousands of gallons) 3) the total quantity of gasoline/indolene combusted in internal combustion units during the previous month (Qgas, thousands of gallons) 4) the total hp-hr of all engines combusting gasoline/indolene during the previous month, by summing the daily calculated totals (Qhp, hp-hr)
23.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Part 63.2; Minn. R. 7007.0800, subs. 4 and 5	<p>Monthly Recordkeeping: The Permittee shall record natural gas meter readings to determine monthly natural gas usage for each calendar month (Qng, mmcf)</p>
24.0	CD	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subs. 4 and 5	<p>Recordkeeping: The solids, VOC and HAP content of purchased materials shall be determined by the Material Safety Data Sheet (MSDS) or technical data sheet provided by the supplier for each material used. If a material content range is given on the MSDS or technical data sheet, the highest number in the range shall be used in all compliance calculations. Other methods approved by the MPCA may be used to determine the material content. The Commissioner reserves the right to require the Permittee to take samples of the materials, and to conduct analysis of material content using EPA reference methods. If an EPA reference method is used for material content determination, the data obtained shall supercede the MSDS and/or technical data sheet.</p>
25.0	CD	Minn. R. 7007.0800, subs. 4 and 5	<p>Recordkeeping for PM emissions: By the last day of each month, the Permittee shall calculate and record the PM emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM = [(XnVn \times (1-TE) \times (1-CE)) + (EF1pm \times Qng) + (EF2pm \times Qprop) + (EF3pm \times Qgas) + (EF4pm \times Qdiesel \times 137)] \times 0.0005$ <p>where:</p> <p>PM = PM emissions in tons/month</p> <p>Xn = Weight percent of solids in Vn as a weight fraction</p> <p>Vn = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
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26.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF1pm = Most current emission factor for PM emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2pm = Most current emission factor for PM emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF3pm = Most current emission factor for PM emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4pm = Most current emission factor for PM emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>
27.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>For all equations used in this permit:</p> <p>Qng = Quantity of natural gas combusted in external combustion units during the previous calendar month, in mcf</p> <p>Qprop = Quantity of propane combusted in external combustion units during the previous calendar month, in thousands of gallons</p> <p>Qgas = Quantity of gasoline and/or indolene combusted in internal combustion units during the previous calendar month, in thousands of gallons</p> <p>Qdiesel = Quantity of diesel and/or aviation fuel combusted in internal combustion units during the previous calendar month, in thousands of gallons</p>
28.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for PM10 emissions: By the last day of each month, the Permittee shall calculate and record the PM10 emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM10 = [(XnVn \times (1-TE) \times (1-CE)) + (EF1pm \times Qng) + (EF2pm \times Qprop) + (EF3pm \times Qgas) + (EF4pm \times Qdiesel \times 137)] \times 0.0005$ <p>where:</p> <p>PM10 = PM10 emissions in tons/month</p> <p>Xn = Weight percent of solids in Vn as a weight fraction</p> <p>Vn = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM10 capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>



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29.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF1pm = Most current emission factor for PM10 emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2pm = Most current emission factor for PM10 emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF3pm = Most current emission factor for PM10 emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4pm = Most current emission factor for PM10 emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>
30.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for PM2.5 emissions: By the last day of each month, the Permittee shall calculate and record the PM2.5 emissions from all fuel combustion units (including insignificant activities) and coating operations, using the following equation:</p> $PM2.5 = [(X_n V_n \times (1-TE) \times (1-CE)) + (EF1_{pm} \times Q_{ng}) + (EF2_{pm} \times Q_{prop}) + (EF3_{pm} \times Q_{gas}) + (EF4_{pm} \times Q_{diesel} \times 137)] \times 0.0005$ <p>where:</p> <p>PM2.5 = PM2.5 emissions in tons/month</p> <p>Xn = Weight percent of solids in Vn as a weight fraction</p> <p>Vn = Amount of coating "n" used during the previous month, in pounds</p> <p>TE = Coating application transfer efficiency, as a fraction. At the time of permit issuance, this is 0.33.</p> <p>CE = Total PM10 capture and control efficiency of control equipment as specified in Minn. R. 7011.0070</p> <p>(continued below)</p>
31.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF1pm = Most current emission factor for PM2.5 emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2pm = Most current emission factor for PM2.5 emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>EF3pm = Most current emission factor for PM2.5 emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4pm = Most current emission factor for PM2.5 emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see below.</p> <p>137 = conversion factor, MMBtu/1000 gallons</p> <p>0.0005 = conversion factor, ton/lb</p>



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32.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for VOC emissions: By the last day of each month, the Permittee shall calculate and record the VOC emissions from all fuel combustion units (including insignificant activities), coating applications, and all units using any VOC-containing material, using the following equation:</p> $\text{VOC} = [(X_n \times V_{\text{voc}}) + (EF_{1\text{voc}} \times Q_{\text{ng}}) + (EF_{2\text{voc}} \times Q_{\text{prop}}) + (EF_{3\text{voc}} \times Q_{\text{gas}}) + (EF_{4\text{voc}} \times Q_{\text{diesel}} \times 137)] \times 0.0005$ <p>Where:</p> <p>VOC = VOC emissions in tons/month</p> <p>X_n = Weight percent of VOC in V_n as a weight fraction</p> <p>V_n = Amount of the VOC-containing material "n" used during the previous month, in pounds</p> <p>EF_{1voc} = Most current emission factor for VOC from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF_{2voc} = Most current emission factor for VOC from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>
33.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF_{3voc} = Most current emission factor for VOC from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF_{4voc} = Most current emission factor for VOC from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Q_{ng}, Q_{prop}, Q_{gas}, and Q_{diesel}, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>
34.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for Individual HAP emissions: By the last day of each month, the Permittee shall calculate and record the emissions of each Individual HAP from all combustion units (including insignificant activities), coating applications, and all units using any HAP-containing material, using the following equation:</p> $\text{HAP} = [(X_n \times V_{\text{hap}}) + (EF_{1\text{hap}} \times (Q_{\text{ng}} + \{Q_{\text{prop}} \times 90.5/1020\})) + (EF_{3\text{hap}} \times Q_{\text{hp}}) + (EF_{4\text{hap}} \times Q_{\text{diesel}} \times 137)] \times 0.0005$ <p>Where:</p> <p>HAP = Individual HAP emissions in tons/month</p> <p>X_n = Weight percent of the individual HAP in V_n as a weight fraction</p> <p>V_n = Amount of the HAP-containing material "n" used during the previous month, in pounds</p> <p>EF_{1hap} = Most current emission factor for the individual HAP from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix F of this permit.</p> <p>(continued below)</p>



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35.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF3hap = Most current emission factor for the individual HAP from gasoline combustion, in lb/hp-hr, as listed in Appendix E of this permit.</p> <p>EF4hap = Most current emission factor for the individual HAP from diesel combustion, in lb/MMBtu, as listed in Appendix E of this permit.</p> <p>Qhp = Total horsepower-hour of engines combusting gasoline and/or indolene during the previous calendar month, in hp-hr</p> <p>For definition of Qng, Qprop, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons of diesel fuel</p> <p>90.5 = conversion factor, MMBtu/1000 gallons of propane</p> <p>1020 = conversion factor, MMBtu/mmcf of natural gas</p>
36.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for NOx emissions: By the last day of each month, the Permittee shall maintain records and calculate and record the NOx emissions from all fuel combustion units, including insignificant activities. The emissions shall be calculated using the following equation:</p> $NOx = [(EF1nox \times Qng) + (EF2nox \times Qprop) + (EF3nox \times Qgas) + (EF4nox \times Qdiesel \times 137)] \times 0.0005$ <p>where:</p> <p>NOx = NOx emissions in tons/month</p> <p>EF1nox = Most current emission factor for NOx emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2nox = Most current emission factor for NOx emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>
37.0	CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF3nox = Most current emission factor for NOx emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4nox = Most current emission factor for NOx emissions from diesel fuel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>



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38.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Recordkeeping for CO emissions: By the last day of each month, the Permittee shall calculate and record the CO emissions from the combustion units, including insignificant activities, using the following equation:</p> $CO = [(EF1co \times Qng) + (EF2co \times Qprop) + (EF3co \times Qgas) + (EF4co \times Qdiesel \times 137)] \times 0.0005$ <p>where:</p> <p>CO = CO emissions in tons/month</p> <p>EF1co = Most current emission factor for CO emissions from natural gas combustion in external combustion units, in lb/mmcf, as listed in Appendix D of this permit.</p> <p>EF2co = Most current emission factor for CO emissions from propane combustion in external combustion units, in lb/1000 gallons, as listed in Appendix D of this permit.</p> <p>(continued below)</p>
39.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>continued from above:</p> <p>EF3co = Most current emission factor for CO emissions from gasoline combustion in internal combustion units, in lb/1000 gallons, as listed in Appendix C of this permit.</p> <p>EF4co = Most current emission factor for CO emissions from diesel combustion in internal combustion units, in lb/MMBtu, as listed in Appendix C of this permit.</p> <p>For definition of Qng, Qprop, Qgas, and Qdiesel, see above.</p> <p>0.0005 = conversion factor, ton/lb</p> <p>137 = conversion factor, MMBtu/1000 gallons</p>
40.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM emissions, by summing the monthly PM emissions calculated for the previous 12 months.</p>
41.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM10 emissions, by summing the monthly PM10 emissions calculated for the previous 12 months.</p>
42.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of PM2.5 emissions, by summing the monthly PM2.5 emissions calculated for the previous 12 months.</p>
43.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of CO emissions, by summing the monthly CO emissions calculated for the previous 12 months.</p>
44.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of NOx emissions, by summing the monthly NOx emissions calculated for the previous 12 months.</p>
45.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of VOC emissions, by summing the monthly VOC emissions calculated for the previous 12 months.</p>
46.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of emissions of each Individual HAP, by summing the monthly Individual HAP emissions calculated for the previous 12 months.</p>
47.0		CD	Minn. R. 7007.0800, subps. 4 and 5	<p>Monthly Recordkeeping: By the last day of each month, the Permittee shall calculate and record the 12-month rolling sum of Total HAP emissions, by summing all of the monthly Individual HAP emissions calculated for the previous 12 months.</p>
48.0		CD	hdr	NESHAPS APPLICABLE - ONCE IN ALWAYS IN



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49.0		CD	Applicability: 40 CFR Section 63.9280	<p>This facility is subject to NESHAPs: "Subpart P - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands".</p> <p>Subpart 63.9285 Arctic Cat is subject to (a) and (b).</p> <p>Subpart 63.9290 (a) Arctic Cat is an affected source with existing engine test cell/stands. (b) Existing engine test cells/stands do not have to meet the requirements of this part</p> <p>Arctic Cat has not added new engine test cells/stands or any that meet the definition of reconstructed.</p>
50.0		CD	40 CFR Section 63.1290	This facility is also subject to: "Subpart III - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production".
51.0		CD	Applicability: 40 CFR Section 63.1290 Continued	<p>Arctic Cat meets 40 CFR Sections 63.1290(a)(1-3) (NESHAP Subpart III)</p> <p>63.1291 Compliance Schedule Arctic Cat meets 63.1291(a) existing affected sources shall be in compliance with all provisions of this subpart no later than October 8, 2001.</p> <p>63.1300 Standards for molded flexible polyurethane foam production Arctic Cat does not use any HAP based material or cleaning or release agents.</p> <p>63.1306 Reporting Requirements Arctic Cat provided initial notification.</p> <p>63.1307 Recordkeeping requirements 63.1307(g & h) Arctic Cat maintain MSDS for cleaning and release agents</p>
52.0		CD	Applicability: 40 CFR Section 63.3881	This facility is also subject to: "Subpart M - National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products".
53.0		CD	Applicability: 40 CFR Section 63.3881 Continued	<p>Miscellaneous metal parts and products include metal components of recreational vehicles. Surface Coating is coating of a substrate using spray guns or dip tanks. Arctic Cat has booth E-coating and powder coating operations.</p> <p>40 CFR 63.3881 (b) Arctic Cat is below the applicability threshold of 250 gallons of HAP based coatings as defined by the rule and explained below.</p> <p>Powder coat at this facility does not have any HAPs according to the MSDS sheets and the e-coating is considered a non-HAP coating under the non-HAP coating definition.</p> <p>A non-HAP coating means a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200 (d)(4) and no more than 1.0 percent by mass for any other individual HAP.</p>
54.0		CD	Applicability: 40 CFR Section 63.3881 Continued	<p>Arctic Cat e-coat formulation has 0.006 lbs of HAPS/lb of coating according to the chemical manufacturer information (Email dated January 26, 2004) There are three individual HAPS included in this total; therefore each individual HAP is less than the 1% mass requirement for a non-HAP coating.</p> <p>This MACT standard does not apply to paint processes at Arctic Cat.</p> <p>Arctic Cat changed paint composition for E-coat at this time. The E-coat is a non-HAP based material. Therefore 40 CFR Section 63.3881(c)(1) applies to Arctic Cat again saying that the standard does not apply to Arctic Cat Processes.</p>
55.0		CD	hdr	OPERATIONAL REQUIREMENTS
56.0		CD	Minn. Statute 116.04, subd. 2b and Minn. R. 4410.4300, subp. 15	<p>Environmental Assessment Worksheet (EAW): The Permittee shall not begin actual construction of any single project or projects that are connected or phased action which will cause a total increase in actual emissions of greater than 249 tons per year of any single criteria pollutant without first completing an EAW.</p> <p>"Connected actions" and "phased action" have the meanings given in Minn. R. 4410.0200, subps. 9b and 60.</p>



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57.0		CD	40 CFR pt. 68	Risk Management Plan: The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR 68 which was promulgated on June 20, 1996. The rule requires each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process to design and implement an accidental release prevention program. The RMP must be submitted to a centralized located as specified by US EPA. The Permittee shall obtain the RMP submittal information at http://www.epa.gov/swercepp or call 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.
58.0		CD	40 CFR Section 63.5(b)(3)	The Permittee shall not "construct or reconstruct" a major source of hazardous air pollutants as defined in 40 CFR pt. 63, subp. B without first obtaining a preconstruction permit.
59.0		CD	Minn. Stat. Section 116.07, subs. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subs. 1, 2 & 4; Minn. R. 7009.0010-7009.0080	The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.
60.0		CD	Minn. R. 7011.0020	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.
61.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.
62.0		CD	Minn. R. 7007.0800, subs. 14 and 16(J)	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 control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices 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 practices, and the records kept to demonstrate plan implementation.
63.0		CD	Minn. R. 7019.1000, subp. 4	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.
64.0		CD	Minn. R. 7011.0150	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.
65.0		CD	Minn. R. 7030.0010 - 7030.0080	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.
66.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
67.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
68.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.



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69.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.</p>
70.0		CD	Minn. R. 7017.2025, subp. 3	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.
71.0		CD	Minn. R. 7007.0800, subp. 4(D)	Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).
72.0		CD	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.
73.0		CD	Minn. R. 7007.0800, subp. 5(C)	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, 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).
74.0		CD	Minn. R. 7007.0800, subp. 5(B)	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.
75.0		CD	Minn. R. 7007.1200, subp. 4	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.
76.0		CD	Minn. R. 7019.1000, subp. 3	<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>



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77.0		CD	Minn. R. 7019.1000, subp. 2	<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>
78.0		CD	Minn. R. 7019.1000, subp. 1	<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>
79.0		CD	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"> 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.
80.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	<p>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. If no deviations have occurred, the Permittee shall submit the report stating no deviations.</p>
81.0		CD	Minn. R. 7007.1150 - 7007.1500	<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>
82.0		S/A	Minn. R. 7007.0400, subp. 2	<p>Application for Permit Reissuance: due 180 days before expiration of Existing Permit</p>
83.0		CD	Minn. R. 7007.1400, subp. 1(H)	<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). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H).</p>
84.0		S/A	Minn. R. 7007.0800, subp. 6(C)	<p>Compliance Certification: due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.</p>
85.0		CD	Minn. R. 7019.3000 - 7019.3100	<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.</p>
86.0		CD	Minn. R. 7002.0005 - 7002.0095	<p>Emission Fees: due 30 days after receipt of an MPCA bill.</p>



COMPLIANCE PLAN CD-01

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: GP 001 Molding, Coating (each unit)

Associated Items: EU 007 Molded Foam Seat Station
 EU 008 Electrodeposition Coating
 EU 009 Solvent Flashoff
 EU 010 Solvent Flashoff
 EU 011 Solvent Flashoff

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735	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.
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity .



COMPLIANCE PLAN CD-01

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: GP 002 Engine Testing (each engine)

Associated Items: EU 012 Assembly Engine Testing
 EU 013 Engineering Testing
 EU 014 Engineering Testing

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.2300, subp. 1	Opacity: less than or equal to 20 percent opacity once operating temperature have ben attained.
2.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: GP 003 Ovens (each oven)

Associated Items: EU 016 Powder Coat Bake Oven
 EU 017 E Coating Drying Oven
 EU 018 Drying Oven (Washline Area)

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(1)	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.
2.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(2)	Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.
3.0		LIMIT	Minn. R. 7011.0610, subp. 2(B)	Sulfur Dioxide: less than or equal to 2.0 lbs/million Btu heat input .



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: GP 007 Paint Booths and Control Equipment

- Associated Items:**
- CE 011 Mat or Panel Filter
 - CE 012 Mat or Panel Filter
 - CE 013 Mat or Panel Filter
 - CE 014 Mat or Panel Filter
 - EU 021 Paint Booth 1
 - EU 022 Paint Booth 2
 - EU 023 Paint Booth 3
 - EU 024 Paint Booth 4
 - SV 039 Paint Booth Exhaust
 - SV 040 Paint Booth Exhaust
 - SV 041 Paint Booth Exhaust
 - SV 042 Paint Booth Exhaust

	NC/CA	Type	Citation	Requirement
1.0		CD	hdr	FOLLOWING REQUIREMENTS APPLY TO EACH EMISSION UNIT AND CONTROL EQUIPMENT INDIVIDUALLY
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A); Minn. R. 7011.0730; Minn. R. 7011.0735	Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot based on Allowable Emission Limit.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity
4.0		CD	hdr	CONTROL EQUIPMENT REQUIREMENTS
5.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency, for Particulate Matter < 10 micron: greater than or equal to 92.0 percent
6.0		LIMIT	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency, for Total Particulate Matter: greater than or equal to 92.0 percent
7.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5	The Permittee shall operate and maintain the panel filters any time that any process equipment controlled by the panel filters is (are) in operation. The Permittee shall document periods of non-operation of the control equipment.
8.0		CD	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5	Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.
9.0		CD	Minn. R. 7007.0800, subp. 4, 5, and 14; Also meets 40 CFR Part 64	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.
10.0		CD	Minn. R. 7007.0800, subp. 4, 5, and 14; Also meets 40 CFR Part 64	Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
Permit Number: 11300014 - 006

11.0		CD	Minn. R. 7007.0800, subp. 14; Also meets 40 CFR Part 64	Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.
12.0		CD	Minn. R. 7011.0060, subp. 5; Minn. R. 7007.0800, subp. 4, and 5	Annual Total Enclosure Certification and Evaluation: The Permittee shall maintain a copy of the evaluation and certification on site. "Total enclosure" means an enclosure that completely surrounds emissions from an emissions unit such that all emissions are captured and discharged through ductwork to control equipment.



COMPLIANCE PLAN **CD-01**

Facility Name: Arctic Cat Inc
 Permit Number: 11300014 - 006

Subject Item: EU 025 Cure Oven (Burners 1, 2, 3)

Associated Items: SV 043 Cure Oven Exhaust
 SV 044 Cure Oven Exhaust
 SV 045 Cure Oven Exhaust

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(1)	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.
2.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(2)	Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.

Attachment 3

Points/Fees Calculation

Points-Based Fee Calculator

1) AQ Facility ID No.:	11300014
2) Facility Name:	Arctic Cat Inc
3) Small business? y/n?	No
4) DQ Numbers (including all rolled) :	4168
5) Date of each Application Received:	11/19/2012
6) Final Permit No.	11300014-006
7) Permit Staff	Toni Volkmeier
8) "Work completed" in which .xls file (i.e. unit 2b, unit 1a, biofuels)?	No

Total Points	25
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<u>Application Type</u>	<u>DQ No.</u>	<u>Qty.</u>	<u>Points</u>	<u>Total Points</u>	<u>Details</u>
Administrative Amendment			1	0	
Minor Amendment			4	0	
Applicability Request			10	0	
Moderate Amendment			15	0	
Major Amendment	4168	1	25	25	
Individual State Permit - First Time			50	0	
Individual Part 70 Permit - First Time			75	0	

Additional Points

Modeling Review			15	0	
BACT Review			15	0	
LAER Review			15	0	
CAIR/Part 75 CEM analysis			10	0	
NSPS Review			10	0	
NESHAP Review			10	0	
Case-by-case MACT Review			20	0	
Netting			10	0	
Limits to remain below threshold			10	0	
Plantwide Applicability Limit (PAL)			20	0	
AERA review			15	0	
Variance request under 7000.7000			35	0	
Confidentiality request under 7000.1300			2	0	
<u>EAW review</u>					
Part 4410.4300, subparts 18, item A; and 29			15	0	
Part 4410.4300, subparts 8, items A & B; 10, items A to C; 16, items A & D; 17, items A to C & E to G; and 18, items B & C			35	0	
Part 4410.4300, subparts 4; 5 items A & B; 13; 15; 16, items B & C; and 17 item D			70	0	

NOTES:

Application fee paid at time of application. No additional points (strengthened the recordkeeping for the existing synthetic minor limits, but did not add any new limits).