

AIR EMISSION PERMIT NO. 14100059- 004

IS ISSUED TO

New Flyer USA, Inc. – St. Cloud
6200 Glenn Carlson Drive
St. Cloud, Stearns County, MN 56301

New Flyer USA, Inc. is the operator of the facility. The facility is owned by KPS Special Situations Fund, L.P., 200 Park Avenue, 58th Floor, New York, NY 10166.

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

| | |
|---------------------------------|--------------------|
| Permit Type | Application Date |
| Total Facility Operating Permit | July 17, 1998 |
| Major Amendment | September 17, 2001 |
| Major Amendment | May 22, 2002 |

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

Permit Type: Federal; Part 70/Limits to Avoid New Source Review

Issue Date: August 12, 2003

Expiration: August 12, 2008

All Title I Conditions do not expire.

Ann M. Foss
Major Facilities Section Manager
Majors and Remediation Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

CDT:lh

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Appendix: Insignificant Activities

NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

New Flyer currently operates a bus manufacturing facility in St. Cloud, Minnesota. The plant currently consists of two manufacturing lines. The facility currently has one complete build line for bus assembly from parts (A-line) and one finishing line to complete partially assembled buses (B-line) shipped from the New Flyer facilities located in Winnipeg, Canada and Crookston, Minnesota.

The permit contains limits which restrict emissions to levels that are below the major source thresholds in 40 CFR § 52.21 and 40 CFR pt. 63, so the facility is considered a minor source under the New Source Review program and the National Emission Standards for Hazardous Air Pollutants for Source Categories. The facility is classified as a major source under 40 CFR pt. 70.

A description of the emission units, stack vents and control equipment at the facility are shown below:

| Emission Unit | Emission Unit Number | Stack/Vent Number(s) | Control Equipment Number(s) |
|---|-----------------------------|-----------------------------|------------------------------------|
| Primer Booth | EU 002 | SV 001/002 | CE 001 |
| Undercoat Booth | EU 004 | SV 003/004 | CE 002 |
| Paint Prep* | EU 006 | SV 005 | CE 010 |
| Base Coat / Prime Booth | EU 007 | SV 005/006 | CE 003 |
| Topcoat Booth | EU 008 | SV 007/008 | CE 004 |
| Touch-up Booth | EU 009 | SV 009/010/011 | CE 005 |
| Touch-up Booth | EU 010 | SV 012/013/014 | CE 006 |
| Topcoat Booth | EU 011 | SV 015/016/017 | CE 007 |
| Standby Diesel Generator | EU 014 | SV 021 | ---- |
| Bus Engine Testing* | EU 015 | SV 022-037 | ---- |
| Grit Blasting – not vented* | EU 016 | ---- | ---- |
| Undercoating Booth No. 2 | EU 017 | SV 038/039 | CE 011 |
| Cleaning Solvents, Cleaners, Sealants and Adhesives Usage | EU 018 | Various | ---- |

* Insignificant Activities

The control equipment (CE) at the facility at the time of permit issuance is shown below:

| Control Equipment (CE) Number | Description |
|--------------------------------------|---------------------|
| CE 001 | Mat or Panel Filter |
| CE 002 | Mat or Panel Filter |
| CE 003 | Mat or Panel Filter |
| CE 004 | Mat or Panel Filter |
| CE 005 | Mat or Panel Filter |
| CE 006 | Mat or Panel Filter |
| CE 007 | Mat or Panel Filter |
| CE 010 | Bag filter |
| CE 011 | Mat or Panel Filter |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

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 |
| TOTAL FACILITY EMISSION LIMITS | hdr |
| <p>Volatile Organic Compounds: less than or equal to 140.0 tons/year using 12-month Rolling Sum for all product usage at the facility.</p> <p>Emissions from fuel combustion need not be included in the calculation of VOC emissions until VOC emissions in any 12-month period exceed 137.0 tons. When the 12-month rolling sum of VOC emissions from usage of VOC-containing materials exceeds 137.0 tons in any 12-month period, VOC emissions from fuel combustion shall be calculated and added to the VOC emissions for the previous month and for the previous 12-month rolling sum calculations.</p> | Title I Condition: Limit to avoid classification as a major source under 40 CFR 52.21 |
| HAPs - Total: less than or equal to 24.0 tons/year using 12-month Rolling Sum for all product usage at the facility. | Title I Condition: Limit to avoid 40 CFR 63.40 to 63.44 |
| HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum for all product usage at the facility. | Title I Condition: Limit to avoid 40 CFR 63.40 to 63.44 |
| Lead: less than or equal to 1036 lbs/year using 12-month Rolling Sum (usage). The limit is on the weight of lead or lead compounds in coatings containing lead or lead compounds. | Minn. R. 7007.0020 |
| Chromium: less than or equal to 134 lbs/year using 12-month Rolling Sum (usage) of chromium in coatings containing chromium or chromium compounds. | Minn. R. 7007.0800, subps. 2 and 5 |
| Nickel: less than or equal to 200 lbs/year using 12-month Rolling Sum (usage) of nickel or nickel compounds in coatings containing nickel or nickel compounds. | Minn. R. 7007.0800, subps. 2 and 5 |
| Recordkeeping - Lead, Chromium (elemental Chromium) and Nickel Usage | Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 5 |
| By the 15th day of each month, calculate and record the Lead (both Lead and Lead Compounds), elemental Chromium and Nickel (both Nickel and Nickel compounds) Usage for the previous month and for the previous 12-month period. | |
| MONITORING | hdr |
| <p>Determination of Material Content For Emission Calculations: VOC, HAP, and metal contents in all materials shall be determined by the Environmental Data Sheet (EDS) or the Material Safety Data Sheet (MSDS) provided by the supplier for each material used, except as specified below. If the EDS or MSDS provides a material content range, the highest number in the range shall be used in all calculations.</p> <p>Alternative methods approved by the MPCA may be used to determine material VOC, HAP, and metal contents. In addition, the Commissioner reserves the right to require the Permittee to determine the VOC, HAP, and metal contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the EDS or MSDS.</p> | Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Sections 52.21 and to avoid 40 CFR Sections 63.40 to 63.44; Minn. R. 7007.0800, subp. 4 |
| <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> | Title I Condition: Monitoring to avoid classification as a major source under 40 CFR Sections 52.21 and to avoid 40 CFR Sections 63.40 to 63.44; Minn. R. 7007.0800, subp. 4 |
| RECORDKEEPING | hdr |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

| | |
|--|--|
| <p>Calculation of Mass of Shipped VOCs and HAPs - If the Permittee elects to obtain credit for VOC and HAP contained in shipped waste, calculate and record the mass of shipped VOCs, individual HAP, and total HAPs using billing records and analyses or MSDS/EDS, as appropriate. If a range of values is given, use the minimum values.</p> <p>Calculations and recordings shall be made by the fifteenth day of the month following the month that the waste was generated. Emission credits for shipped VOCs and HAPs shall be applied to the monthly emission calculation for the month that the waste was generated.</p> | <p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Sections 52.21 and to avoid 40 CFR Sections 63.40 to 63.44; Minn. R. 7007.0800, subp. 5</p> |
| <p>Recordkeeping - VOC Emissions: for all VOC dispensed, calculate and record as follows:</p> <p>By the 15th day of each month, calculate and record the VOC emissions for the previous month (monthly VOC usage minus any VOC shipped as waste) and the previous 12-month period (by summing monthly VOC emissions data for the previous 12 months).</p> <p>If VOC emissions exceed 137.0 tons during the previous 12-month period, then VOC emissions from fuel combustion shall be calculated and added to total VOC emissions for the previous month and for the previous 12-month rolling sum calculations.</p> | <p>Title I Condition: Recordkeeping to avoid classification as a major source under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 5</p> |
| <p>Recordkeeping - Single HAP Emissions: for each HAP dispensed, calculate and record as follows:</p> <p>By the 15th day of each month, calculate and record single HAP emissions for the previous month and the previous 12-month period (by summing all monthly single HAP emissions for the previous 12 months).</p> | <p>Title I Condition: To avoid 40 CFR Sections 63.40 to 63.44; Minn. R. 7007.0800, subp. 5</p> |
| <p>Recordkeeping - Total HAP Emissions:</p> <p>By the 15th day of each month:</p> <p>1) Calculate and record total HAP emissions for the previous month by summing all single HAP emissions data for the month;</p> <p>2) Calculate and record total HAP emissions for the previous 12-month period by summing all monthly total HAPs emissions data for the previous 12 months.</p> | <p>Title I Condition: To avoid 40 CFR Sections 63.40 to 63.44; Minn. R. 7007.0800, subp. 5</p> |
| GENERAL REQUIREMENTS | hdr |
| Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. | Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J) |
| Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued. | Minn. R. 7007.0800, subp. 4(D) |
| Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit). | Minn. R. 7007.0800, subp. 4(D) |
| Operation of Monitoring Equipment: Unless otherwise noted in Tables A or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. | Minn. R. 7007.0800, subp. 4(D) |
| Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. | Minn. R. 7011.0020 |
| <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> |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

| | |
|---|--|
| Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over. | Minn. R. 7019.1000, subp. 2 |
| Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment. | Minn. R. 7019.1000, subp. 1 |
| Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. | Minn. R. 7019.1000, subp. 1 |
| Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate. | Minn. R. 7019.1000, subp. 4 |
| Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A. | Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J) |
| Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. | Minn. R. 7011.0150 |
| Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed. | Minn. R. 7007.1150 through Minn. R. 7007.1500 |
| Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). | Minn. R. 7007.1400, subp. 1(H) |
| Record keeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes. | Minn. R. 7007.0800, subp. 5(B) |
| Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). | Minn. R. 7007.0800, subp. 5(C) |
| Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable. | Minn. R. 7030.0010 - 7030.0080 |
| The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. | Minn. R. 7007.0800, subp. 16 |
| Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location. | Minn. R. 7007.0800, subp. 9(A) |
| Emission Fees: due 60 days after receipt of an MPCA bill. | Minn. R. 7002.0005 through Minn. R. 7002.0095 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

Subject Item: GP 002 Industrial Process Equipment Requirements**Associated Items:** EU 002 Primer Booth

EU 004 Undercoat Booth

EU 007 Base Coat/Prime Booth

EU 008 Topcoat Booth

EU 009 Touch-up Booth

EU 010 Touch-up Booth

EU 011 Topcoat Booth

EU 017 Undercoating Booth No. 2

| 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 meet the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This standard applies individually to each emission unit in GP 002. Other permit requirements (e.g., control requirements and coating usage limits) are more restrictive, for particulate matter emissions, than this rule. See GP 003, GP 004, EU 002, EU 004, and EU 006 for periodic monitoring requirements for particulate matter emissions. | Minn. R. 7011.0715, subp. 1(A) |
| Opacity: less than or equal to 20 percent opacity . This standard applies individually to each emission unit in GP 002. See GP 003 for periodic monitoring requirements for opacity. | Minn. R. 7011.0715, subp. 1(B) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

Subject Item: GP 003 Panel Filter Requirements**Associated Items:** CE 001 Mat or Panel Filter

CE 002 Mat or Panel Filter

CE 003 Mat or Panel Filter

CE 004 Mat or Panel Filter

CE 005 Mat or Panel Filter

CE 006 Mat or Panel Filter

CE 007 Mat or Panel Filter

CE 011 Mat or Panel Filter

| What to do | Why to do it |
|--|--|
| Particulate Matter < 10 micron: greater than or equal to 92 percent control efficiency . | Title I Condition: to avoid classification as a major source under 40 CFR Sections 52.21; Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 14 |
| Total Particulate Matter: greater than or equal to 92 percent control efficiency . | Title I Condition: to avoid classification as a major source under 40 CFR Sections 52.21; Minn. R. 7007.0800, subp. 14 |
| Inspections: Once each operating day, the Permittee shall visually inspect the condition of the panel filters, including but not limited to, alignment, saturation, tears, and holes. The Permittee shall maintain a daily written record of filter inspections and maintenance. | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 4 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

Subject Item: EU 014 Standby Diesel Generator**Associated Items:** SV 021 emergency generator

| What to do | Why to do it |
|---|------------------------------------|
| Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained. | Minn. R. 7011.2300, subp. 1 |
| Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input . Potential to emit for this unit, using the AP-42 emissions factor, is 0.29 lb/MMBtu. | Minn. R. 7011.2300, subp. 2 |
| Sulfur Content of Fuel: less than 0.5 percent by weight | Minn. R. 7007.0800, subp. 2 |
| Fuel Restriction: EU 014 fuel is restricted to distillate fuel oil. | Minn. R. 7007.0800, subp. 2 |
| Recordkeeping - Hours of Operation: The Permittee shall record the number of hours the unit was operated at the end of each period of operation. | Minn. R. 7007.0800, subp. 5 |
| Fuel Supplier Certification: obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.5% by weight. | Minn. R. 7007.0800, subps. 4 and 5 |

TABLE B: SUBMITTALS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud
Permit Number: 14100059 - 004

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

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

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

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

TABLE B: RECURRENT SUBMITTALS

08/12/03

Facility Name: New Flyer USA Inc - St Cloud

Permit Number: 14100059 - 004

| What to send | When to send | Portion of Facility Affected |
|------------------------------|---|-------------------------------------|
| Semiannual Deviations Report | due 30 days after end of each calendar half-year starting 10/27/1998 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. | Total Facility |
| Compliance Certification | due 31 days after end of each calendar year starting 10/27/1998 (for the previous calendar year). To be submitted on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year. | Total Facility |
| Emissions Inventory Report | due 91 days after end of each calendar year starting 10/27/1998 (April 1). To be submitted on a form approved by the Commissioner. | Total Facility |

APPENDIX: INSIGNIFICANT ACTIVITIES

Facility Name: New Flyer Industries

Permit Number: 14100059-004

Insignificant Activities and Applicable Requirements

| Minn. R. 7007.1300, subpart | Activity | Applicable Requirement(s) |
|--|---|---|
| 3(H) | Brazing, soldering or welding equipment | Minn. R. 7011.0510/0515, Minn. R. 7011.0610 and Minn. R. 7011.0710/0715 |
| 3(D) | Grit blasting area from which emissions are collected and routed to an air cleaning system which is vented inside of the building 100 percent of the time | Minn. R. 7011.0710/0715 |
| 4(B) | Paint prep area | Minn. R. 7011.0710/0715 |
| 4(A) & 4(B) | Bus engine testing | Minn. R. 7011.2300 |

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 14100059-004

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

1. General Information

1.1. Applicant and Stationary Source Location:

| Owner/Operator Address and Phone Number | Facility Address (SIC Code: 3711) |
|---|--|
| Owner: KPS Special Situations Fund, L.P. 200 Park Avenue, 58 th Floor New York, NY 10166 | New Flyer USA, Inc. 6200 Glenn Carlson Drive St. Cloud, MN 56301 Stearns County |
| Operator: New Flyer USA 6200 Glenn Carlson Drive St. Cloud, MN 56301 Contact: Ken Day - (320)203-4928 | |

1.2. Description Of The Facility

New Flyer currently operates a bus manufacturing facility in St. Cloud, Minnesota. The plant currently consists of two manufacturing lines. The facility has one complete build line for bus assembly from parts (A-line) and one finishing line to complete partially assembled buses (B-line) shipped from the New Flyer facilities located in Winnipeg, Manitoba and Crookston, Minnesota. The facility began operating in September, 1999.

The complete-build and finishing lines produce articulated buses up to 60 feet in length and non-articulated buses up to 40 feet in length. The 60 foot buses consist of two, separate 30 foot “boxes”, while the non-articulated buses consist of one “box” and are 40 feet in length. Each line has the capacity to produce one box every four hours.

New Flyer has developed a new bus design, the Invero, which will be manufactured at the St. Cloud facility. This bus will be partially manufactured on the A-line and completed on the B-line.

The emission units, stack vents and control equipment at the facility are shown below:

| Emission Unit | Emission Unit Number | Stack/Vent Number(s) | Control Equipment Number(s) |
|---|-----------------------------|-----------------------------|------------------------------------|
| Primer Booth | EU 002 | SV 001/002 | CE 001 |
| Undercoat Booth | EU 004 | SV 003/004 | CE 002 |
| Paint Prep* | EU 006 | SV 005 | CE 010 |
| Base Coat / Prime Booth | EU 007 | SV 005/006 | CE 003 |
| Topcoat Booth | EU 008 | SV 007/008 | CE 004 |
| Touch-up Booth | EU 009 | SV 009/010/011 | CE 005 |
| Touch-up Booth | EU 010 | SV 012/013/014 | CE 006 |
| Topcoat Booth | EU 011 | SV 015/016/017 | CE 007 |
| Standby Diesel Generator | EU 014 | SV 021 | ---- |
| Bus Engine Testing* | EU 015 | SV 022-037 | ---- |
| Grit Blasting – not vented* | EU 016 | ---- | ---- |
| Undercoating Booth No. 2 | EU 017 | SV 038/039 | CE 011 |
| Cleaning Solvents, Cleaners, Sealants and Adhesives Usage | EU 018 | Various | ---- |

* Insignificant Activities

The control equipment (CE) at the facility at the time of permit issuance is shown below:

| Control Equipment (CE) Number | Description |
|--------------------------------------|---------------------|
| CE 001 | Mat or Panel Filter |
| CE 002 | Mat or Panel Filter |
| CE 003 | Mat or Panel Filter |
| CE 004 | Mat or Panel Filter |
| CE 005 | Mat or Panel Filter |
| CE 006 | Mat or Panel Filter |
| CE 007 | Mat or Panel Filter |
| CE 010 | Bag filter |
| CE 011 | Mat or Panel Filter |

1.3 Description of the Activities Allowed By This Permit Action

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 2 of 14

The initial permit for the facility was issued October 27, 1998. Several conservative assumptions were made when initially permitting the facility. These assumptions resulted in several restrictive conditions being placed in the permit.

New Flyer submitted an Air Toxics Review (ATR) and a permit application to revise the permit based on the results of the ATR. These documents are dated May 21, 2002. Supplemental information was submitted on May 12, 2003.

The permit application requests that permitted VOC emissions be increased from 95 to 140 tons per year. Emissions of hazardous air pollutants (HAPs) remain restricted to 9.0 tons of any single HAP and 24.0 tons of any combination of HAPs. Since permitted VOC emissions will be greater than 100 tons per year, a Federal part 70 (Title V) permit is necessary for the facility. The facility previously operated under a State permit.

1.4. Facility Emissions:

No new emission units will be installed as a result of this permit action. Maximum emissions of air toxics and criteria pollutants are discussed in detail in Section 3 of this document. The total facility potential to emit is summarized in the following table:

Table 1. Total Facility Potential to Emit Summary:

| | PM tpy | PM10 tpy | SO2 tpy | NOx tpy | CO tpy | VOC tpy | Pb tpy | Single HAP tpy | All HAPs tpy |
|--|-----------|-------------|------------|------------|-----------|------------|-----------|----------------------|--------------------|
| Total Facility Limited Potential Emissions | 24.6 | 24.6 | 0.91 | 18.9 | 12.5 | 140.0 | 0.01 | 9.0 | 24.0 |
| Total Facility Actual Emissions (2001 Data) | 2.7 | 2.7 | 0.87 | 3.2 | 2.4 | 37.3 | 0.0 | NR | NR |

NR = Not reported (not required to be reported).

Table 2. Permit Action Classification

| Classification | Major/Affected Source | *Synthetic Minor | *Minor |
|----------------------------|-----------------------|------------------|------------------------|
| PSD | | VOC | PM, PM10, NOx, CO, SO2 |
| Non Attainment Area Review | n/a | n/a | n/a |
| Part 70 Permit Program | VOC | PM10 | NOx, CO, SO2 |

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

2. Regulatory and/or Statutory Basis

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 3 of 14

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

Regulatory Overview of Units Affected by the Modification

No new emission units will be installed as a result of this permit action, so the regulatory status of the units at the facility is not affected. Since VOC emissions from the facility will be limited to greater than 100 tons per year, a federal part 70 (Title V) permit must be issued instead of the current State permit.

3. Technical Information

3.1 Calculations

Annual Potential to Emit

When calculating the maximum annual potential to emit for each pollutant from the facility from product usage (EU 002, EU 004, EU 007-011, EU 017, EU 018), it was assumed that the maximum amount of product used per box is used on each box. This assumption results in a conservatively high estimate of emissions, since every product is not used on every box. Maximum production through the primer booth (EU 002) is assumed to be 9 boxes per day (3,285 boxes per year). Maximum combined production through the undercoat booths (EU 004, EU 017) is assumed to be 12 boxes per day (4,380 boxes per year). Maximum combined production through the spray painting booths (EU 007-011) is assumed to be 12 boxes per day (4,380 boxes per year). Assumptions made when calculating maximum annual potential to emit from product usage, combustion sources and sources classified as insignificant activities and the resulting emission calculations are shown in Attachment A.

When calculating emissions from the undercoat booths (EU 004, EU 017), a 90% transfer efficiency is assumed. MPCA policy is to use a 75% transfer efficiency for normal painting operations; however, the undercoating operation uses a highly viscous material which does not become atomized during the application process. Due to the nature of the material and the application process used, the use of a 90% transfer efficiency is considered acceptable.

The undercoat booth emission calculations also assume a 100% capture efficiency for PM/PM-10 emissions, even though the booths are not a total enclosure. Due to the downdraft design of the booths, the type of material applied and the application method used, a 100% capture efficiency is considered acceptable.

Hourly Potential to Emit for Air Toxics

The assumptions used when calculating hourly potential to emit for air toxics and the resulting calculations are shown in Attachment B (Figure D-1).

Hourly potential emissions of air toxics are calculated with a total paints and coatings usage of 12.5 gal/hr and a total usage of other products (adhesives, sealants, clean-up solvents, frame primer) of approximately 11.8 gal/hr. MPCA staff believe that this is a conservative assumption based on information obtained during a February 21, 2003 conversation with New Flyer staff in which MPCA staff were informed that production had averaged 2 boxes per day on the A-line and 2 boxes per day on the B-line during February 2003. Total product usage (paints, solvents, etc.) during the month was 76 gallons per day, with 11 gallons per day of paints and coatings being used. This equates to a paints/coatings usage of approximately 2.75 gal/box and an “other products” usage of approximately 16.25 gal/box. The maximum capacity of the facility is 4 boxes per 8-hour shift (0.5 boxes per hour), so a maximum hourly usage rate based on recent actual usage would be approximately 1.38 gal/hr of paint (2.75 gal/box times 0.5 boxes /hr) and 8.13 gal/hr of other products (16.25 gal/box times 0.5 boxes/hr). This information indicates that the maximum product usages used to calculate maximum hourly emissions are conservatively high.

When calculating the maximum hourly emission rate for each air toxic, emissions from paintings/coatings (EU 007-011), Frame Priming (EU 002), Adhesives/Sealants/Solvents (EU 018) and combustion/insignificant activities are summed to arrive at a total emission rate for each air toxic. It is then assumed that each air toxic calculated in this manner is emitted through the “worst-case stack” (see Section 3.2). An example calculation of maximum hourly xylene emissions is shown below:

Xylene emissions from paintings/coatings (EU 007-011, Table D-7 of calculations):

$$12.5 \text{ gal/hr} * (2.3341 \text{ lb/gal})^{**} = \underline{29.18 \text{ lb/hr}}$$

* It is assumed that 12.5 gal/hr of the painting/coating with the highest xylene content is used.

** Of all the painting/coating products used, product DCU2002 has the highest xylene content of 2.3341 lb/gal.

Xylene emissions from Frame Priming (EU 002, Table D-8 of calculations):

$$\begin{aligned} \text{Xylene emissions from usage of Product ID S28079} &= 2.57 \text{ gal/hr}(8.29 \text{ lb/gal})(1.90\% \text{ xylene}) \\ &= 0.405 \text{ lb/hr} \end{aligned}$$

$$\begin{aligned} \text{Xylene emissions from usage of Product ID S28492C} \\ &= 0.36 \text{ gal/hr}(7.33 \text{ lb/gal})(2.85\% \text{ xylene}) \\ &= 0.075 \text{ lb/hr} \end{aligned}$$

$$\text{Total xylene emissions from Frame Priming} = 0.405 \text{ lb/hr} + 0.075 \text{ lb/hr} = \underline{0.48 \text{ lb/hr}}$$

Xylene emissions from Adhesive Application (EU 018, Table D-9 of calculations):

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 5 of 14

Xylene emissions from usage of Product ID SIKA 201:

Hourly usage = 577.6362 gal/243 days/8 hours per day = 0.2971 gal/hr usage

Hourly emissions = 0.2971 gal/hr(0.52 lb/gal) = 0.155 lb/hr

Xylene emissions from usage of Product ID SIKA PRIMER 206:

Hourly usage = 206.9590 gal/243 days/8 hours per day = 0.1065 gal/hr usage

Hourly emissions = 0.1065 gal/hr(0.10 lb/gal) = 0.011 lb/hr

Xylene emissions from usage of Product ID SIKAFLEX 221:

Hourly usage = 3993.9506 gal/243 day/8 hours per day = 2.0545 gal/hr usage

Hourly emissions = 2.0545 gal/hr(0.44 lb/gal) = 0.90 lb/hr

Xylene emissions from usage of Product ID SIKAFLEX 252:

Hourly usage = 1221.7962 gal/243 gal/8 hours per day = 0.6285 gal/hr usage

Hourly emissions = 0.6285 gal/hr(0.39 lb/gal) = 0.24 lb/hr

Total xylene emissions from Adhesive Application

= (0.155 + 0.011 + 0.90 + 0.24) lb/hr = 1.31 lb/hr

Xylene emissions from Combustion/Insignificant Activities:

Xylene emissions from the diesel generator (EU 014, Table D-11) = 0.0003 lb/hr

Xylene emissions from bus engine operation (EU 015, Table D-12) = 0.0006 lb/hr

Total xylene emissions from Combustion/Insignificant Activities

= 0.0003 lb/hr + 0.0006 lb/hr = 0.0009 lb/hr

Total facility hourly xylene emissions = (29.18 + 0.48 + 1.31 + 0.0009) lb/hr = 30.97 lb/hr

For the purposes of the analysis, it is assumed that all air toxics are emitted at the maximum emission rate at the same time. This is a conservative estimate of maximum hourly emissions, since all products cannot be used at the same time. The analysis also assumes that all emissions are emitted through a “worst-case” stack, which should over-estimate the ambient air impact.

Short-term Potential Emissions for Criteria Pollutants

The assumptions used when calculating maximum hourly emissions from combustion sources and the resulting calculations are shown in Attachment B.

When calculating maximum 24-hour PM-10 emissions from coating operations, the same assumptions used when calculating annual potential to emit were used (these assumptions are shown in Attachment A). Since the short-term ambient standard for PM-10 is a 24-hour

standard, the emission calculation methodology shown in Attachment A is acceptable for 24-hour PM-10 emissions since the maximum daily production capacity of the facility is used in the calculations.

3.2 Air Toxics Emissions Summary

Maximum air toxics emissions on an hourly basis from the entire facility are shown below (only those pollutants with acute (short term) toxicity values are shown). The ambient air impacts resulting from these emissions are shown in the MPCA technical summary of New Flyer's risk analysis. The technical summary is attached to this document as Attachment C.

Table 3. Maximum Hourly Air Toxics Emission Rates

| Pollutant | HAP | Max. Hourly Emission Rate (lb/hr) | | | | Total (lb/hr) |
|---------------------|-----|-----------------------------------|------------------|--|--------------------------------|---------------|
| | | Painting / Coatings (EU 007-011) | Priming (EU 002) | Adhesives / Sealants / Solvents (EU 018) | Combustion / Insig. Activities | |
| Acrolein | Y | | | | 0.0015 | 0.0015 |
| Benzene | Y | | | | 0.0012 | 0.0012 |
| 2-Butoxyethanol | N | 7.7501 | | | | 7.7501 |
| Ethyl benzene | Y | 11.5191 | 0.0872 | 0.0615 | | 11.668 |
| Formaldehyde | Y | | | | 0.012 | 0.012 |
| Isopropyl Alcohol | N | 12.0845 | | 0.3795 | | 12.464 |
| Methanol | Y | | | 0.0007 | | 0.0007 |
| Methyl Ethyl Ketone | Y | 28.0460 | | 0.4436 | | 28.4896 |
| Nickel Compounds | Y | | | | 0.0001 | 0.0001 |
| Styrene Monomer | Y | 0.25 | | | | 0.25 |
| Toluene | Y | 17.6158 | | 0.6718 | 0.0036 | 18.290 |
| Xylene | Y | 29.1765 | 0.4796 | 1.3049 | 0.0009 | 30.962 |

Maximum air toxics emissions on an annual basis are shown below (only those pollutants with chronic toxicity values and cancer toxicity values are shown):

Table 4. Maximum Annual Air Toxics Emission Rates

| Pollutant | Max. Annual Emission Rate (tons/year) | | | | Total (tons/yr) |
|--------------------------------|---------------------------------------|------------------|--|--------------------------------|-----------------|
| | Painting / Coatings (EU 007-011) | Priming (EU 002) | Adhesives / Sealants / Solvents (EU 018) | Combustion / Insig. Activities | |
| 1,3-Butadiene | | | | 0.0001 | 0.0001 |
| 2-Butoxyethanol | 2.4691 | | | | 2.4691 |
| Acetaldehyde | | | | 0.0022 | 0.0022 |
| Acrolein | | | | 0.0003 | 0.0003 |
| Benzene | | | | 0.0027 | 0.0027 |
| Chromium in Chromium Compounds | 0.00134* | | | 0.00036 | 0.0017 |
| Cumene | 0.0003 | 0.9258 | | | 0.9261 |
| Ethylbenzene | 3.0433 | 0.4133 | 0.6564 | | 4.113 |
| Formaldehyde | | | | 0.0033 | 0.0033 |
| Hexamethylene Di-isocyanate | 0.0015 | | | | 0.0015 |
| Isopropyl Alcohol | 1.2358 | | 4.3446 | | 5.5804 |
| Lead and Lead Compounds | 0.0104** | | | | 0.0104 |
| Manganese | | | | 0.0888 | 0.0888 |
| Methylene bisphenyl isocyanate | | 0.0004 | | | 0.0004 |
| Methyl Ethyl Ketone | 13.5753 | | 4.8606 | | 9.0**** |
| Methyl Cyclohexane | 3.7362 | | 0.0341 | | 3.7703 |
| Methyl Methacrylate | 0.0012 | | | | 0.0012 |
| n-Hexane | | | 14.2108 | | 9.0**** |
| Naphthalene | | | | 0.0002 | 0.0002 |
| Nickel and Nickel Compounds | 0.0020*** | | | 0.000336 | 0.0024 |
| Styrene Monomer | 0.0011 | | | | 0.0011 |
| Toluene | 23.4020 | | 2.9144 | 0.0012 | 9.0**** |
| Xylene | 12.4603 | 2.2679 | 14.3405 | 0.0003 | 9.0**** |

* The permit limits the usage of chromium in chromium compounds to 134 pounds per year, which equates to 0.00134 tons of emissions per year (assuming a transfer efficiency of 75% and a control efficiency of 92%).

** The permit limits usage of lead and lead compounds in paints and coatings to 1036 pounds per year, which equates to 0.0104 tons of emissions per year (assuming a transfer efficiency of 75% and a control efficiency of 92%).

*** The permit limits usage of nickel and nickel compounds to 200 pounds per year, which equates to 0.0020 tons of emissions per year (assuming a transfer efficiency of 75% and a control efficiency of 92%).

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 8 of 14

**** The permit limits emissions of methyl ethyl ketone, n-hexane, toluene and xylene to 9.0 tons per year.

A modeling analysis was conducted to determine a “worst-case” stack to be used in the modeling analysis for air toxics. Both the ISCST3 and ISCPRIME models were run for both the 1-hour and annual averaging periods. The stack resulting in the maximum concentration for each scenario are shown below:

Table 5. Stack Resulting in the Maximum Concentration for Each Scenario

| Receptor Location | 1-hour concentration | | Annual concentration | |
|------------------------------|-----------------------------|-----------------|-----------------------------|-----------------|
| | ISCST3 | ISCPRIME | ISCST3 | ISCPRIME |
| Maximum Offsite Receptor | SV 16 | SV 09 | SV 09 | SV 15 |
| Maximum Residential Receptor | SV 12 | SV 14 | SV 17 | SV 17 |

The concentrations (results) for the worst-case stack analysis are shown below:

Table 6. Dispersion Modeling Concentrations for Worst-Case Stacks

| Receptor Location | 1-hour concentration (ug/m3 per gram/second of emissions) | | Annual concentration (ug/m3 per gram/second of emissions) | |
|------------------------------|--|-----------------|--|-----------------|
| | ISCST3 | ISCPRIME | ISCST3 | ISCPRIME |
| Maximum Offsite Receptor | 186.3 | 476.4 | 3.5 | 13.3 |
| Maximum Residential Receptor | 85.2 | 99.8 | 1.1 | 1.4 |

Utilizing the above pollutant emission rates and the modeling information, a worst-case 1-hour and annual concentration for each air toxic was calculated for both the maximum offsite receptor and the maximum residential receptor. For the purposes of the analysis, it is assumed that all emissions from the facility are vented through a single stack. The Air Toxics Review is discussed further in Attachment C to this document.

3.3 Criteria Pollutant Emissions

Maximum annual criteria pollutant emissions are calculated by summing emissions from painting/coating, natural gas combustion, the diesel generator, bus engine operation, welding and other insignificant activities. Calculation of annual potential to emit is shown in Attachment C. Summing of emissions for each criteria pollutant results in potential annual emissions as follows:

VOCs

VOC emissions from painting/coating usage = 457.14 tpy
VOC emissions from natural gas combustion = 0.76 tpy
VOC emissions from the diesel generator (500 hr/yr operation) = 0.32
Total potential VOC emissions = $(457.14 + 0.76 + 0.32)$ tpy = 458.2 tpy
Total limited VOC emissions (by permit condition) = 140.0 tpy

PM/PM-10

PM/PM-10 emissions from painting/coating usage = 21.4 tpy
PM/PM-10 emissions from natural gas combustion = 1.05 tpy
PM/PM-10 emissions from the diesel generator (500 hr/yr operation) = 0.27
PM/PM-10 emissions from bus engine operation = 0.08 tpy
PM/PM-10 emissions from welding = 1.47 tpy
PM/PM-10 emissions from other insignificant activities = 0.37 tpy
Total potential PM/PM-10 emissions = $(21.4 + 1.05 + 0.27 + 0.08 + 1.47 + 0.37)$ tpy = 24.6 tpy

Carbon Monoxide (CO)

CO emissions from natural gas combustion = 11.56 tpy
CO emissions from the diesel generator (500 hr/yr operation) = 0.83 tpy
CO emissions from bus engine operation = 0.15 tpy
Total potential CO emissions = $(11.56 + 0.83 + 0.15)$ tpy = 12.5 tpy

Nitrogen Oxides (NOx)

NOx emissions from natural gas combustion = 13.77 tpy
NOx emissions from the diesel generator (500 hr/yr operation) = 3.86 tpy
NOx emissions from bus engine operation = 1.31 tpy
Total potential NOx emissions = $(13.77 + 3.86 + 1.31)$ tpy = 18.9 tpy

Sulfur Dioxide (SO2)

SO2 emissions from natural gas combustion = 0.08 tpy
SO2 emissions from the diesel generator (500 hr/yr operation) = 0.25 tpy
SO2 emissions from bus engine operation = 0.57 tpy
Total potential SO2 emissions = $(0.08 + 0.25 + 0.57)$ tpy = 0.9 tpy

Lead (Pb)

Pb from painting/coating usage (permit limit) = 0.0104 tpy

3.4 Modeled Criteria Pollutant Emission Rates

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 11 of 15

Modeled criteria pollutant emissions from the facility on an hourly and annual average basis are shown below:

Table 7. Modeled Criteria Pollutant Emission Rates

| SV # | EU | PM10 24-hr avg. (lb/hr) | PM10 Annual avg. (lb/hr) | NOx Annual avg. (lb/hr) | CO 1-hr avg. (lb/hr) | SO2 1-hr avg. (lb/hr) | SO2 Annual avg. (lb/hr) | Lead Annual avg. (lb/hr) |
|------|-----|-------------------------------|-----------------------------------|----------------------------------|----------------------------|-----------------------------|----------------------------------|-----------------------------------|
| 001 | 002 | 1.81 | 1.81 | --- | --- | --- | --- | --- |
| 002 | 002 | 1.81 | 1.81 | --- | --- | --- | --- | --- |
| 003 | 004 | 0.11 | 0.11 | --- | --- | --- | --- | --- |
| 004 | 004 | 0.11 | 0.11 | --- | --- | --- | --- | --- |
| 005 | 007 | 0.085 | 0.085 | 0.3143 | 0.264 | 0.0019 | 0.0019 | 0.00024 |
| 006 | 007 | 0.085 | 0.085 | 0.3143 | 0.264 | 0.0019 | 0.0019 | 0.00024 |
| 007 | 008 | 0.085 | 0.085 | 0.3143 | 0.264 | 0.0019 | 0.0019 | 0.00024 |
| 008 | 008 | 0.085 | 0.085 | 0.3143 | 0.264 | 0.0019 | 0.0019 | 0.00024 |
| 009 | 009 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 010 | 009 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 011 | 009 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 012 | 010 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 013 | 010 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 014 | 010 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 015 | 011 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 016 | 011 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 017 | 011 | 0.057 | 0.057 | 0.2095 | 0.176 | 0.0013 | 0.0013 | 0.00016 |
| 021 | 014 | 1.085 | 0.062 | 0.881 | 3.325 | 1.015 | 0.058 | --- |
| 022 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 023 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 024 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 025 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 026 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 027 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 028 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 029 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 030 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 031 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 032 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 033 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 034 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 035 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 036 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 037 | 015 | 0.0053 | 0.009 | 0.019 | 0.011 | 0.041 | 0.0081 | --- |
| 038 | 017 | 0.11 | 0.11 | --- | --- | --- | --- | --- |
| 039 | 017 | 0.11 | 0.11 | --- | --- | --- | --- | --- |
| 040 | * | 0.14 | 0.14 | --- | --- | --- | --- | --- |
| 041 | * | 0.14 | 0.14 | --- | --- | --- | --- | --- |
| 042 | * | 0.14 | 0.14 | --- | --- | --- | --- | --- |

* SV 040, 041 and 042 vent sources classified as insignificant activities through building exhausts #16, #15 and #14, respectively.

3.5 Criteria Pollutant Analysis Results

When predicting the ambient impact of criteria pollutant emissions, the emissions were modeled on a stack-by-stack basis. The emissions were modeled using both the ISCST3 and ISCPRIME models. The results of the criteria pollutant are shown in Attachment D. The results are summarized below:

Table 8. Summary of Criteria Pollutant Analysis Results

| Pollutant | Averaging Period | Modeled ISCST3 Concentration divided by MAAQS (NOT including background) | Modeled ISCPRIME Concentration divided by MAAQS (NOT including background) | Modeled ISCST3 Concentration divided by MAAQS (including background) | Modeled ISCPRIME Concentration divided by MAAQS (including background) |
|------------------|-------------------------|---|---|---|---|
| CO | 8-hour | 0.005 | 0.008 | 0.225 | 0.228 |
| | 1-hour | 0.002 | 0.005 | 0.096 | 0.099 |
| NO2 | Annual | 0.015 | 0.040 | 0.135 | 0.160 |
| SO2 | Annual | 0.004 | 0.004 | 0.029 | 0.029 |
| | 24-hour | 0.034 | 0.046 | 0.066 | 0.079 |
| | 3-hour | 0.022 | 0.031 | 0.121 | 0.130 |
| | 1-hour | 0.043 | 0.048 | 0.182 | 0.187 |
| PM-10 | Annual | 0.076 | 0.175 | 0.352 | 0.451 |
| | 24-hour | 0.240 | 0.406 | 0.414 | 0.580 |
| Lead | Quarterly | 0.001 | 0.002 | 0.007 | 0.009 |

The highest concentrations for each pollutant and averaging time occur when using the ISCPRIME model. As can be seen from the table, the highest predicted concentrations are below the applicable MAAQS (i.e., the modeled concentrations divided by the applicable MAAQS is less than 1.0).

3.4 Changes to the Permit

Several changes to the permit were made as a result of the new ATR and modeling analysis for criteria pollutants. The significant changes are summarized below:

1. The VOC emission limit of 95.0 tons/year is included as an emission limit in the existing permit and is applicable only to booths at the facility. The VOC emission limit is changed to a total facility emission limit and is increased from 95.0 to 140.0 tons/year. Since the emission limit for VOCs is increased to greater than 100 tons/year, New Flyer is required to obtain a Federal part 70 (Title V) permit as opposed to the current State permit. This permit is considered a Federal part 70 permit.

2. The existing permit limits annual emissions from the booths for the following pollutants: Lead, Antimony, Barium Sulfate and Benzene. The existing permit also restricts the use of paints to those which contain no chromium or nickel. The existing permit also limits toluene emissions to 30.0 lb/hr and xylene emissions to 10.0 lb/hr. With this permit action, the above limits and associated recordkeeping are removed and replaced with the following usage limits:
 - a) 1,036 lb/year usage limit for lead or lead compounds in coatings containing lead or lead compounds.
 - b) 134 lb/year usage limit for chromium in coatings containing chromium or chromium compounds.
 - c) 200 lb/year usage limit for nickel or nickel compounds in coatings containing nickel or nickel compounds.
3. The 24.0 ton/year limit on total HAP emissions and the 9.0 ton/year limit on single HAP emissions are currently applicable only to the booths. These limits are moved to the total facility section.
4. The requirement to monitor pressure drop across the panel filters is removed. It is not MPCA policy to require pressure drop monitoring across panel filters. The requirement to inspect the filters daily remains in the permit.
5. The current permit includes coating usage limits and coatings solids content limits which were necessary to demonstrate compliance with the 24-hour PM-10 MAAQS based upon conservative screening modeling. For this permit action, more refined PM-10 emissions calculations have been performed based upon the operational capacity of the facility and more refined dispersion modeling was conducted. The results indicate that maximum expected 24-hour PM-10 emissions will not result in ambient concentrations which exceed the 24-hour MAAQS (see Section 3.3). Based upon these results, the existing coatings usage and coatings solids content limits are removed.
6. The existing permit requires performance testing to determine the control efficiencies of the paint booths. It has been determined that testing to determine the control efficiencies of the booths is not feasible. In addition, the analysis conducted for the current permit action uses the default collection efficiency of 92% for the panel filters. Minnesota Rules 7011.0070 grants a 92% control efficiency for panel filters. Since the default value of 92% collection efficiency is being used, performance testing to measure the control efficiency is not necessary.

3.5 Comment Received During the Public Comment Period

No comments from either the public or EPA were received during the public comment period. When sent the permit, EPA Region V was asked to waive the EPA 45-day review period. In July 11, 2003 and July 22, 2003 emails (attached as Attachment E to this document), EPA Region V stated that comments from Region V would be provided to the MPCA within the 30-day comment period and that EPA Region V did not intend to provide any comments within the 45-day review period.

No public comments or EPA Region V comments were received during the 30-day public comment period. Based upon the EPA Region V statement that all EPA comments would be received during the public comment period, it is highly unlikely that EPA will comment during

Air Emission Permit No. 14100059-004

Date: 2/23/2004

Page 14 of 15

the 45-day review period. Due to the unlikelihood of EPA comment, the permit is being issued after completion of the 30-day review period. This does not affect EPA's right to comment during the 45-day review period as established by Minn. R. 7007.0950, subp. 2.

4. Conclusion

The Air Toxics Risk Analysis conducted by New Flyer demonstrates that the risk associated with emissions from the facility is within the allowable levels established by the MPCA. The acute and chronic hazard indices are calculated to be less than the acceptable value of 1.0 and the estimated cancer risk is less than the acceptable value of 1.0×10^{-5} (1 in a 100,000). Uncertainties associated with the air toxics analysis are discussed in Attachment C to this document.

Emissions of criteria pollutants are not expected to result in ambient air concentrations greater than the applicable state or federal ambient air quality standards.

Based on the information provided by New Flyer, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in Air Emission Permit No. 14100059-004 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:

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Vanessa Ranck, risk assessment
Jenny Reinertsen, peer review
Craig Thorstenson, permitting

Attachments:

- A Calculation of Annual Potential to Emit
- B Calculation of Hourly Potential to Emit
- C MPCA Technical Summary of New Flyer's Inhalation Air Emissions Risk Analysis
- D Criteria Pollutant Analysis Results
- E Selected Correspondence with US EPA Region V