State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: PERMIT TO INSTALL REGISTRATION
STARK COUNTY
Application No: 15-01447

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 12/21/2000

The Hoover Company Plant 1
Monica Satrape
101 East Maple Street
North Canton, OH 44720

Enclosed please find an Ohio EPA Permit to Install Registration which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit registration contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: Canton LAA

Permit to Install Registration
Terms and Conditions

PERMIT TO INSTALL REGISTRATION

Application Number: 15-01447

APS Premise Number: 1576170258

Permit Fee: **$450**

Name of Facility: The Hoover Company Plant 1

Person to Contact: Monica Satrape

Address: 101 East Maple Street

North Canton, OH 44720

Location of proposed air contaminant source(s) [emissions unit(s)]:
101 East Maple Street
North Canton, **Ohio**

Description of proposed emissions unit(s):
Six injection molding machines.

Date of Issuance: 12/21/2000

Effective Date: 12/21/2000

The above named entity is hereby granted a Permit to Install Registration for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and

conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
OC	**2.70**
Styrene	**1.85**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P170 - 300 ton, 95 pounds/hour, thermoplastic resin injection molding machine; No. 103.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.08 pound/hour and 0.35 ton/year. Styrene emissions shall not exceed 0.06 pound/hour and 0.26 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705
P046	No.2912605	P090	No.2933102	P134	No.2923802
P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

d. any use of photochemically reactive mold-release agents or plastics.

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

a. Emission Limitation:
The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

Applicable Compliance Method:
Record keeping as required in section C.1.

b. Emission Limitation:
Organic compound emissions shall not exceed 0.08 pound/hour.

Applicable Compliance Method:
Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

c. Emission Limitation:
Styrene emissions shall not exceed 0.06 pound/hour.

Applicable Compliance Method:
Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

d. Emission Limitation:
0.34 ton OC/year and 0.25 ton styrene/year

Applicable Compliance Method:
Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

e. Emission Limitation
47.74 tons OC/year from the 117 machines at this facility

Applicable Compliance Method
Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P171 - 220 ton, 338 pounds/hour, thermoplastic resin injection molding machine; No. 220.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.29 pound/hour and 1.21 tons/year. Styrene emissions shall not exceed 0.22 pound/hour and 0.90 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

C:\temp\permits3\13767.wpd

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705
P046	No.2912605	P090	No.2933102	P134	No.2923802

C:\temp\permits3\13767.wpd

P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

C:\temp\permits3\13767.wpd

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

   d. any use of photochemically reactive mold-release agents or plastics.

C:\temp\permits3\13767.wpd

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

   a. Emission Limitation:
   The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

   Applicable Compliance Method:
   Record keeping as required in section C.1.

   b. Emission Limitation:
   Organic compound emissions shall not exceed 0.29 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

   c. Emission Limitation:
   Styrene emissions shall not exceed 0.22 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

   d. Emission Limitation:
   1.21 tons OC/year and 0.9 ton styrene/year

   Applicable Compliance Method:
   Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

   e. Emission Limitation
   47.74 tons OC/year from the 117 machines at this facility

   Applicable Compliance Method
   Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

   0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

C:\temp\permits3\13767.wpd

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

C:\temp\permits3\13767.wpd

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P172 - 170 ton, 19 pounds/hour, thermoplastic resin injection molding machine; No. 31.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.02 pound/hour and 0.07 ton/year. Styrene emissions shall not exceed 0.01 pound/hour and 0.05 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

C:\temp\permits3\13767.wpd

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705

C:\temp\permits3\13767.wpd

P046	No.2912605	P090	No.2933102	P134	No.2923802
P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

C:\temp\permits3\13767.wpd

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

   d. any use of photochemically reactive mold-release agents or plastics.

C:\temp\permits3\13767.wpd

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

   a. Emission Limitation:
   The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

   Applicable Compliance Method:
   Record keeping as required in section C.1.

   b. Emission Limitation:
   Organic compound emissions shall not exceed 0.02 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

   c. Emission Limitation:
   Styrene emissions shall not exceed 0.01 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

   d. Emission Limitation:
   0.07 ton OC/year and 0.05 ton styrene/year

   Applicable Compliance Method:
   Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

   e. Emission Limitation
   47.74 tons OC/year from the 117 machines at this facility

   Applicable Compliance Method
   Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

   0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

C:\temp\permits3\13767.wpd

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

C:\temp\permits3\13767.wpd

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P173 - 230 ton, 55 pounds/hour, thermoplastic resin injection molding machine; No. 37.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.05 pound/hour and 0.2 ton/year. Styrene emissions shall not exceed 0.04 pound/hour and 0.15 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

C:\temp\permits3\13767.wpd

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705

C:\temp\permits3\13767.wpd

P046	No.2912605	P090	No.2933102	P134	No.2923802
P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

C:\temp\permits3\13767.wpd

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

   d. any use of photochemically reactive mold-release agents or plastics.

C:\temp\permits3\13767.wpd

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

   a. Emission Limitation:
   The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

   Applicable Compliance Method:
   Record keeping as required in section C.1.

   b. Emission Limitation:
   Organic compound emissions shall not exceed 0.05 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

   c. Emission Limitation:
   Styrene emissions shall not exceed 0.04 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

   d. Emission Limitation:
   0.2 ton OC/year and 0.15 ton styrene/year

   Applicable Compliance Method:
   Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

   e. Emission Limitation
   47.74 tons OC/year from the 117 machines at this facility

   Applicable Compliance Method
   Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

   0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

C:\temp\permits3\13767.wpd

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

C:\temp\permits3\13767.wpd

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P174 - 300 ton, 338 pounds/hour, thermoplastic resin injection molding machine; No. 48.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.08 pound/hour and 0.34 ton/year. Styrene emissions shall not exceed 0.06 pound/hour and 0.25 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

C:\temp\permits3\13767.wpd

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705

C:\temp\permits3\13767.wpd

P046	No.2912605	P090	No.2933102	P134	No.2923802
P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

C:\temp\permits3\13767.wpd

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

   d. any use of photochemically reactive mold-release agents or plastics.

C:\temp\permits3\13767.wpd

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

   a. Emission Limitation:
   The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

   Applicable Compliance Method:
   Record keeping as required in section C.1.

   b. Emission Limitation:
   Organic compound emissions shall not exceed 0.08 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

   c. Emission Limitation:
   Styrene emissions shall not exceed 0.06 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

   d. Emission Limitation:
   0.34 ton OC/year and 0.25 ton styrene/year

   Applicable Compliance Method:
   Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

   e. Emission Limitation
   47.74 tons OC/year from the 117 machines at this facility

   Applicable Compliance Method
   Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

   0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

C:\temp\permits3\13767.wpd

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

C:\temp\permits3\13767.wpd

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P175 - 300 ton, 95 pounds/hour, thermoplastic resin injection molding machine; No. 61.	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 0.08 pound/hour and 0.34 ton/year. Styrene emissions shall not exceed 0.06 pound/hour and 0.25 ton/year. This emissions unit shall not employ any photochemically reactive material. See section A.2.a below.
	OAC rule 3745-35-07(B)	The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded. No plastic shall contain more than 0.4% styrene monomer. The total annual organic compound emissions from all 117 plastic injection molding machines at this facility shall not exceed 47.4 tons/year. To achieve this limit, the maximum amount of plastic molded shall not exceed 325,000,000 pounds/year, based upon a rolling, 12-month summation of the plastic molded.

C:\temp\permits3\13767.wpd

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

a. This emissions unit shall not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). This includes both plastics and any mold-release agents. If no photochemically reactive materials are used, this emissions unit is exempt from the limits for organic compound emissions found in OAC rule 3745-21-07 because it qualifies for the exemption found in OAC rule 3745-21-07(G)(9)(f).

B. Operational Restrictions

1. To achieve enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the production levels specified in the following table for all plastic injection molding machines:

Calendar Month(s) (After Permit Issuance)	Maximum Allowable Cumulative lbs of Styrene-Emitting Plastic Molded	Maximum Allowable Cumulative lbs of Plastic Molded
1	2,333,000	27,083,333
1-2	4,666,000	54,166,667
1-3	7,000,000	81,250,000
1-4	9,333,000	108,333,333
1-5	11,666,000	135,416,667
1-6	14,000,000	162,500,000
1-7	16,333,000	189,583,333
1-8	18,666,000	216,666,667
1-9	21,000,000	243,750,000
1-10	23,333,000	270,833,333
1-11	25,666,000	297,916,667
1-12	28,000,000	325,000,000

After the first 12 calendar months of operation following the issuance of this permit, the annual production rate limitations shall be based upon a rolling, 12-month summation of the amount of styrene-emitting plastic molded and the total plastic molded.

2. The following is a list of the plastic injection molding machines at this facility:

P044	No.2911504	P088	No.2932902	P132	No.2918802
P045	No.2912505	P089	No.2933002	P133	No.2911705

C:\temp\permits3\13767.wpd

P046	No.2912605	P090	No.2933102	P134	No.2923802
P047	No.2913205	P091	No.2930302	P135	No.2918205
		P092	No.2931802	P136	No.2928901
P049	No.2920101	P093	No.2934102	P137	No.2929001
P050	No.2920201			P138	No.2929101
P051	No.2923902			P139	No.2929502
		P096	No.2914602	P140	No.2929402
		P097	No.2917502	P141	No.2929302
P054	No.2925402	P098	No.2919604	P142	No.2929202
P055	No.2920502			P143	No.2923002
P056	No.2927302	P100	No.2912804	P144	No.2922602
P057	No.2927702	P101	No.2912904	P145	No.2923102
P058	No.2926002	P102	No.2913104	P146	No.2923202
P059	No.2926102	P103	No.2918904	P147	No.2929602
P060	No.2927902			P148	No.2923602
P061	No.2928502			P149	No.2960402
P062	No.2934801			P150	No.2960502
P063	No.2926501	P107	No.2914305	P151	No.2917005
P064	No.2926401	P108	No.2912405	P152	No.2917105
P065	No.2926601	P109	No.2911405	P153	No.2918302
P066	No.2921101	P110	No.2915705	P154	No.
P067	No.2928201			P155	No.2912202
P068	No.2931201			P156	No.2960901
P069	No.2932301	P113	No.2924201	P157	No.2961102
P070	No.2932601	P114	No.2924601	P158	No.2937402
P071	No.2934201			P159	No.2914502
P072	No.2934301	P116	No.2925601	P160	No.2915305
P073	No.2934401			P161	No.2911605
P074	No.2935001	P118	No.2926301	P162	No.2913605
P075	No.2934901	P119	No.2921701	P163	No.2960601
P076	No.2935201	P120	No.2925502	P164	No.2960701
P077	No.2930902	P121	No.2927802	P165	No.2960801
P078	No.2931002	P122	No.2928802	P166	No.2937502
		P123	No.2922402	P167	No.2921A02
P080	No.2931402	P124	No.2928602	P168	No.2935601
P081	No.2931602	P125	No.2921602	P169	No. 2921B02
P082	No.2931502	P126	No.2932701	**P170**	**No. 103**
P083	No.2931702	P127	No.2933201	**P171**	**No. 127**
P084	No.2931902	P128	No.2933301	**P172**	**No. 31**
P085	No.2932102	P129	No.2934001	**P173**	**No. 37**
P086	No.2932502	P130	No.2934501	**P174**	**No. 48**
P087	No.2932802	P131	No.2930401	**P175**	**No. 61**

C. Monitoring and/or Record keeping Requirements

C:\temp\permits3\13767.wpd

1. The permittee shall maintain records that list the following information for all plastic injection molding machines at this facility:

   a. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total amount of both the styrene-emitting plastic molded and the total plastic molded in all 117 of the plastic injection molding machines at this facility during each calendar month; and

   b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of both the total amount of styrene-emitting plastic molded and of the total plastic molded in all 117 of the plastic injection molding machines at this facility for each calendar month.

2. The permittee shall collect and record the following information for each grade of plastic employed in this emissions unit:

   a. the company identification of each grade of plastic;

   b. the amount of styrene monomer in each grade of plastic; and

   c. whether each grade of plastic contains photochemically reactive materials (PRM) as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information for each mold-release agent employed in this emissions unit:

   a. the company identification of each mold-release agent employed; and

   b. documentation on whether or not each mold-release agent is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:

   a. any use of plastic which contains more than 0.4% styrene monomer;

   b. any exceedance of the total cumulative monthly limitations on either the amount of styrene-emitting plastic molded or the total plastic molded in the 117 plastic injection molding machines at this facility;

   c. any exceedances of the rolling, 12-month limits of either the amount of styrene-emitting plastic molded or the total plastic molded; and

   d. any use of photochemically reactive mold-release agents or plastics.

C:\temp\permits3\13767.wpd

E. Testing Requirements

1. Compliance with the emission limitation(s) in these terms and conditions shall be determined in accordance with the following methods(s):

   a. Emission Limitation:
   The total annual styrene emissions from all 117 plastic injection molding machines at this facility shall not exceed 9.1 tons/year. To achieve this limit, the maximum amount of styrene-emitting plastic molded shall not exceed 28,000,000 pounds/year, based upon a rolling, 12-month summation of the styrene-emitting plastic molded.

   Applicable Compliance Method:
   Record keeping as required in section C.1.

   b. Emission Limitation:
   Organic compound emissions shall not exceed 0.08 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-containing plastics of 0.00087 lb OC/pound of plastic times the pounds of plastic made per hour.

   c. Emission Limitation:
   Styrene emissions shall not exceed 0.06 pound/hour.

   Applicable Compliance Method:
   Multiply the facility-provided emission factor for styrene-emitting plastic of 0.00065 lb styrene/ lb of styrene-emitting plastic times the pounds of styrene-emitting plastic per hour.

   d. Emission Limitation:
   0.34 ton OC/year and 0.25 ton styrene/year

   Applicable Compliance Method:
   Multiply the hourly emission limit times 8,760 hours/year and divide by 2,000.

   e. Emission Limitation
   47.74 tons OC/year from the 117 machines at this facility

   Applicable Compliance Method
   Limiting the amount of total plastics molded to 325,000,000 pounds/year, based upon a rolling, 12-month summation. The facility supplied emission factor for styrene-containing plastics is 0.00087 lb OC/pound. The facility supplied emission factor for nonstyrene plastic is 0.00023 lb OC/pound.

   0.00087 lb OC/pound (styrene plastic) times 28,000,000 pounds/year times 1 ton/2000 lbs = 12.18 tons OC/yr

C:\temp\permits3\13767.wpd

0.00023 lb OC/pound (nonstyrene plastic) times 297,000,000 lbs/year times 1 ton/2000 lbs = 34.16 tons/year

F. Miscellaneous Requirements

1. FESOPs will be used to make the limits found in this permit to install federally enforceable.

C:\temp\permits3\13767.wpd