March 2, 2005

Emission Point Modeling Using NYSDEC Air Guide-1 Software

Summary of Emissions

Prepared for:

SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION
1 Liberty Street
Hoosick Falls, New York 12090

Prepared by:

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C.T. Male Project No: 02.8298

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Summary of Emission Point Modeling
Saint-Gobain Performance Plastics Corp.
1 Liberty Street Hoosick Falls, New York

Scenario #1 - Existing Conditions

Modeling scenario #1 assumes that emissions from the Ludox process will be exhausted through the existing stack at the facility. This stack is approximately 40'8" according to drawings provided to C.T. Male by SGPPL, and is approximately 4 feet above the top of the building. The contaminant assessment for Octyl/Nonyl Phenoxypolyethoxyethanol (CAS Number 9036-19-5) shows that the potential annual impact for this contaminant is ±99.73% of the Annual Guidance Concentration (AGC) listed by the NYSDEC. None of the remaining contaminants exceeded ±41.14% of their respective AGC's. The maximum percentage of the Short Term Guidance Concentration (SGC) for the contaminants to be emitted is ±18.07% for Hydrogen Fluoride (CAS Number 7664-39-3).

Scenario #2 – Increasing Stack Height by 10'

Modeling scenario #2 assumes that emissions from the Ludox process will be exhausted through a stack at the facility which has been extended an additional 10 feet above its current height. Under this operating scenario, the stack would have an approximate 50'8" height, and would be approximately 14 feet above the top of the building. The contaminant assessment for Octyl/Nonyl Phenoxypolyethoxyethanol shows that the potential annual impact for this contaminant is ±61.03% of the AGC under this scenario. None of the remaining contaminants exceeded ±21.03% of their respective AGC's under this scenario. The maximum percentage of the SGC for any of the contaminants to be emitted is ±9.94% for Hydrogen Fluoride.

Modeling Notes:

1. On December 22, 2003, the NYSDEC revised the official DAR-1 (Air Guide-1) AGC/SGC Tables. These tables were last revised on July 12, 2000 and were originally included in Appendix C of the 1991 draft Edition of Air Guide-1.

   C.T. Male Associates, P.C. (C.T. Male) contacted the NYSDEC Division of Air Resources regarding the change in AGC/SGC values, and how to properly incorporate these changes into Air Guide-1 modeling. According to the NYSDEC, the Air Guide-1 modeling software cannot be modified by the user to include new or updated values, and the NYSDEC has not updated the model to include these changes. Their suggested method was to hand write any changes on the modeling results for any compounds for which the value(s) have been updated.

   As such, C.T. Male has hand written in values for updated AGC/SGC values where applicable, and has used these updated values to complete the analyses.

Scenario #1

Existing Stack Conditions

Air Guide-1 Software Analysis Printout

********** AIR GUIDE 1 - ANALYSIS **********

********** INPUT DATA **********

LOC	FAC	E.P.	CAS #	SOURCE TYPE	HA, or h(AREA) FEET	hs FEET	D IN.	T F	V FPS	Q ACFM	EMISSIONS #/HOUR	EMISSIONS #/YEAR	DPL, or D(AREA) FT	BW, or S(AREA) FT	BL FT
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	NY998-00-0	POINT	4.	41.	14.	270.	28.25	1812.00	0.00001	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	01336-21-6	POINT	4.	41.	14.	270.	28.25	1812.00	0.08000	40.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	25322-68-3	POINT	4.	41.	14.	270.	28.25	1812.00	0.00278	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00123-91-1	POINT	4.	41.	14.	270.	28.25	1812.00	0.00001	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00050-00-0	POINT	4.	41.	14.	270.	28.25	1812.00	0.00016	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	09036-19-5	POINT	4.	41.	14.	270.	28.25	1812.00	0.08080	40.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	03825-26-1	POINT	4.	41.	14.	270.	28.25	1812.00	0.00080	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	07664-39-3	POINT	4.	41.	14.	270.	28.25	1812.00	0.00160	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00353-50-4	POINT	4.	41.	14.	270.	28.25	1812.00	0.00160	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00382-21-8	POINT	4.	41.	14.	270.	28.25	1812.00	0.00002	0.	130.	80.	125.

CONTAMINANT TOXICITY PROFILE FOR AIR GUIDE 1 ANALYSIS

CONTAMINANT NAME	CAS NUMBER	SGC ug/m3	HOW SGC ASSIGNED	AGC ug/m3	HOW AGC ASSIGNED	DAR TOXICITY	COMMENTS
FORMALDEHYDE	00050-00-0	30.00000	NYSDOH	0.060000000	NYSDOH	HIGH	B,C,H,U
DIOXANE,1,4	00123-91-1	3000.00000	NYSDEC	0.130000000	NYSDEC	MODERATE	H,I,U
CARBONYL FLUORIDE	00353-50-4	9.20 ~~12.00000~~	equivalent standard	0.12 ~~0.690000000~~	equivalent standard		
PERFLUOROISOBUTYLENE	00382-21-8	8.20000	PERFLUOROISOBUTYLENE	9999999.000000000	AG-1 EXEMPT COMPOUND		C
AQUA AMMONIA	01336-21-6	2400.00000	NYSDEC "ANALOGY"	100.000000000	NYSDEC "ANALOGY"	LOW	
AMMONIUM PERFLUOROOC	03825-26-1	0.00000	NO SGC EXISTS	0.024000000	ACGIH TWA-TLV		I
HYDROGEN FLUORIDE	07664-39-3	5.60 ~~7.50000~~	equivalent standard	0.071 ~~0.430000000~~	equivalent standard	MODERATE	C,H
TRITON X114 APA	09036-19-5	0.00000	NO SGC EXISTS	1.000000000	DE MINIMIS LIMIT	LOW	
POLYETHYLENE GLYCOL	25322-68-3	0.00000	NO SGC EXISTS	0.100000000	DE MINIMIS LIMIT	MODERATE	
TOTAL VOLATILE ORGAN	NY998-00-0	0.00000	NO SGC EXISTS	0.100000000	DE MINIMIS LIMIT		

COMMENTS :

(B) ACGIH Suspected Human Carcinogen.

(C) ACGIH or NIOSH CEILING LIMIT.

(H) HAP identified by 1990 CAAA.

(I) Refer to ACGIH Handbook.

(U) AGC equivalent to "one in a million risk".

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) ug/m3	CAVITY IMPACT ACTUAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL ug/m3
382800		00001	NY998-00-0	0.000010	0.0048	0.000001	0.006326	0.000000	0.000123	0.000007
382800		00001	01336-21-6	0.080000	40.0000	0.004566	50.607327	0.000000	0.987383	0.056422
382800		00001	25322-68-3	0.002784	1.3920	0.000159	1.761135	0.000000	0.034361	0.001963
382800		00001	00123-91-1	0.000010	0.0048	0.000001	0.006326	0.000000	0.000123	0.000007
382800		00001	00050-00-0	0.000160	0.0800	0.000009	0.101215	0.000000	0.001975	0.000113
382800		00001	09036-19-5	0.080800	40.4000	0.004612	51.113400	0.000000	0.997257	0.056986
382800		00001	03825-26-1	0.000800	0.4000	0.000046	0.506073	0.000000	0.009874	0.000564
382800		00001	07664-39-3	0.001600	0.8000	0.000091	1.012146	0.000000	0.019748	0.001128
382800		00001	00353-50-4	0.001600	0.8000	0.000091	1.012146	0.000000	0.019748	0.001128
382800		00001	00382-21-8	0.000016	0.0080	0.000001	0.010121	0.000000	0.000197	0.000011
SUMMARY TOTALS				0.167780	83.8896	0.009576	106.136215	0.000000	2.070789	0.118330

EMISSION POINT AND CONTAMINANT ASSESSMENT OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) % OF SGC	CAVITY IMPACT ACTUAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL % OF AGC
382800		00001	NY998-00-0	0.100000000	0.0000	0.0000	0.0000	0.1234	0.0068
382800		00001	01336-21-6	100.000000000	2400.0000	2.1086	0.0000	0.9874	0.0564
382800		00001	25322-68-3	0.100000000	0.0000	0.0000	0.0000	34.3609	1.9635
382800		00001	00123-91-1	0.130000000	3000.0000	0.0002	0.0000	0.0949	0.0052
382800		00001	00050-00-0	0.060000000	30.0000	0.3374	0.0000	3.2913	0.1881
382800		00001	09036-19-5	1.000000000	0.0000	0.0000	0.0000	99.7257	5.6986
382800		00001	03825-26-1	0.024000000	0.0000	0.0000	0.0000	41.1410	2.3509
382800		00001	07664-39-3	0.071 ~~0.420000000~~	5.60 ~~7.5000~~	18.07 ~~13.4333~~	0.0000	27.81 ~~4.7018~~	1.59 ~~0.2687~~
382800		00001	00353-50-4	0.12 ~~0.090000000~~	9.70 ~~22.0000~~	11.00 ~~8.4346~~	0.0000	16.46 ~~2.8620~~	0.94 ~~0.1635~~
382800		00001	00382-21-8	**********	8.2000	0.1234	0.0000	0.0000	0.0000
SUMMARY TOTALS						~~34.4895~~ 31.6453	0.0000	~~187.2834~~ 223.9458	~~10.7012~~ 12.7975

CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) ug/m3	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL ug/m3
00050-00-0	0.000160	0.0800	0.000009	0.101215	0.000000	0.001975	0.000113
00123-91-1	0.000010	0.0048	0.000000	0.006326	0.000000	0.000123	0.000007
00353-50-4	0.001600	0.8000	0.000091	1.012146	0.000000	0.019748	0.001128
00382-21-8	0.000016	0.0080	0.000001	0.010121	0.000000	0.000197	0.000011
01336-21-6	0.080000	40.0000	0.004566	50.607327	0.000000	0.987383	0.056422
03825-26-1	0.000800	0.4000	0.000046	0.506073	0.000000	0.009874	0.000564
07664-39-3	0.001600	0.8000	0.000091	1.012146	0.000000	0.019748	0.001128
09036-19-5	0.080800	40.4000	0.004612	51.113400	0.000000	0.997257	0.056986
25322-68-3	0.002784	1.3920	0.000159	1.761135	0.000000	0.034361	0.001963
NY998-00-0	0.000010	0.0048	0.000000	0.006326	0.000000	0.000123	0.000007
SUMMARY TOTALS	0.167780	83.8896	0.009576	106.136215	0.000000	2.070789	0.118330

CONTAMINANT ASSESSMENT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) % OF SGC	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL % OF AGC
00050-00-0	0.060000000	30.0000	0.3374	0.0000	3.2913	0.1881
00123-91-1	0.130000000	3000.0000	0.0002	0.0000	0.0949	0.0052
00353-50-4	0.12 ~~0.090000000~~	9.2 ~~12.0000~~	11.00 ~~0.4376~~	0.0000	16.46 ~~0.8680~~	0.94 ~~0.1635~~
00382-21-8	**********	8.2000	0.1234	0.0000	0.0000	0.0000
01336-21-6	100.000000000	2400.0000	2.1086	0.0000	0.9874	0.0564
03825-26-1	0.024000000	0.0000	0.0000	0.0000	41.1410	2.3509
07664-39-3	0.071 ~~0.420000000~~	5.6 ~~7.5000~~	18.07 ~~13.4853~~	0.0000	27.81 ~~4.7818~~	1.59 ~~0.0607~~
09036-19-5	1.000000000	0.0000	0.0000	0.0000	99.7257	5.6986
25322-68-3	0.100000000	0.0000	0.0000	0.0000	34.3609	1.9635
NY998-00-0	0.100000000	0.0000	0.0000	0.0000	0.1234	0.0068
SUMMARY TOTALS			~~24.6895~~ 31.6453	0.0000	~~197.2884~~ 223.9958	~~10.7017~~ 12.7975

Summary of Modeling Data

Emission Point and Contaminant Impact Summary of Air Guide 1 Analysis (Existing Stack)

CAS No.	Emissions	Emissions	Annnual Emissions	Max Short	Actual Annual	Potential	Actual
	lb/hr	lb/yr	lb/hr	Term (ug/m3)	Cavity (ug/m3)	Annual (ug/m3)	Annual (ug/m3)
NY998-00-0	0.00001	0.0048	0.000001	0.006326	0	0.000123	0.000007
01336-21-6	0.08	40	0.004566	50.607327	0	0.987383	0.056422
25322-68-3	0.002784	1.392	0.000159	1.761135	0	0.034361	0.001963
00123-91-1	0.00001	0.0048	0.000001	0.006326	0	0.000123	0.000007
00050-00-0	0.00016	0.08	0.000009	0.101215	0	0.001975	0.000113
09036-19-5	0.0808	40.4	0.004612	51.1134	0	0.997257	0.056986
03825-26-1	0.0008	0.4	0.000046	0.506073	0	0.009874	0.000564
07664-39-3	0.0016	0.8	0.000091	1.012146	0	0.019748	0.001128
00353-50-4	0.0016	0.8	0.000091	1.012146	0	0.019748	0.001128
00382-21-8	0.000016	0.008	0.000001	0.010121	0	0.000197	0.000011
SUMMARY	0.16778	83.8896	0.009577	106.136215	0	2.070789	0.118329

Emission Point and Contaminant Impact Summary of Air Guide 1 Analysis (Existing Stack)

CAS No.	AGC	SGC	Max Short Term	Actual Annual	Potential Annual	Actual Annual
	ug/m3	ug/m3	% of SGC	Cavity (% AGC)	% of AGC	% of AGC
NY998-00-0	0.1	0	0.00%	0.0000%	0.1230%	0.0070%
01336-21-6	100	2400	2.1086%	0.0000%	0.9874%	0.0564%
25322-68-3	0.1	0	0.00%	0.0000%	34.3610%	1.9630%
00123-91-1	0.13	3000	0.0002%	0.0000%	0.0946%	0.0054%
00050-00-0	0.06	30	0.3374%	0.0000%	3.2917%	0.1883%
09036-19-5	1	0	0.00%	0.0000%	99.7257%	5.6986%
03825-26-1	0.024	0	0.00%	0.0000%	41.1417%	2.3500%
07664-39-3	0.071	5.6	18.0740%	0.0000%	27.8141%	1.5887%
00353-50-4	0.12	9.2	11.0016%	0.0000%	16.4567%	0.9400%
00382-21-8	*	8.2	0.1234%	0.0000%	0.0000%	0.0000%
SUMMARY			31.6453%	0.0000%	223.9958%	12.7975%

Contaminant Impact Summary of Air Guide 1 Analysis (Existing Stack)

CAS No.	Emissions	Emissions	Annnual Emissions	Max Short	Actual Annual	Potential	Actual
	lb/hr	lb/yr	lb/hr	Term (ug/m3)	Cavity (ug/m3)	Annual (ug/m3)	Annual (ug/m3)
00050-00-0	0.00016	0.08	0.000009	0.101215	0	0.001975	0.000113
00123-91-1	0.00001	0.0048	0	0.006326	0	0.000123	0.000007
00353-50-4	0.0016	0.8	0.000091	1.012146	0	0.019748	0.001128
00382-21-8	0.000016	0.008	0.000001	0.010121	0	0.000197	0.000011
01336-21-6	0.08	40	0.004566	50.607327	0	0.987383	0.056422
03825-26-1	0.0008	0.4	0.000046	0.506073	0	0.009874	0.000564
07664-39-3	0.0016	0.8	0.000091	1.012146	0	0.019748	0.001128
09036-19-5	0.0808	40.4	0.004612	51.1134	0	0.997257	0.056986
25322-68-3	0.002784	1.392	0.000159	1.761135	0	0.034361	0.001963
NY998-00-0	0.00001	0.0048	0	0.006326	0	0.000123	0.000007
SUMMARY	0.16778	83.8896	0.009575	106.136215	0	2.070789	0.118329

Contaminant Impact Summary of Air Guide 1 Analysis (Existing Stack)

CAS No.	AGC	SGC	Max Short Term	Actual Annual	Potential Annual	Actual Annual
	ug/m3	ug/m3	% of SGC	Cavity (% AGC)	% of AGC	% of AGC
00050-00-0	0.06	30	0.3374%	0.0000%	3.2917%	0.1883%
00123-91-1	0.13	3000	0.0002%	0.0000%	0.0946%	0.0054%
00353-50-4	0.12	9.2	11.0016%	0.0000%	16.4567%	0.9400%
00382-21-8	*	8.2	0.1234%	0.0000%	0.0000%	0.0000%
01336-21-6	100	2400	2.1086%	0.0000%	0.9874%	0.0564%
03825-26-1	0.024	0	0.0000%	0.0000%	41.1417%	2.3500%
07664-39-3	0.071	5.6	18.0740%	0.0000%	27.8141%	1.5887%
09036-19-5	1	0	0.0000%	0.0000%	99.7257%	5.6986%
25322-68-3	0.1	0	0.0000%	0.0000%	34.3610%	1.9630%
NY998-00-0	0.1	0	0.0000%	0.0000%	0.1230%	0.0070%
SUMMARY			31.6453%	0.0000%	223.9958%	12.7975%

Scenario #2

50′ Stack Height

Air Guide-1 Software Analysis Printout

50' STACK HEIGHT
±14' ABOVE BUILDING

********** AIR GUIDE 1 - ANALYSIS **********

********** INPUT DATA **********

LOC	FAC	E.P.	CAS #	SOURCE TYPE	HA, or h(AREA) FEET	hs FEET	D IN.	T F	V FPS	Q ACFM	EMISSIONS #/HOUR	EMISSIONS #/YEAR	DPL, or D(AREA) FT	BW, or S(AREA) FT	BL FT
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	NY998-00-0	POINT	14.	51.	14.	270.	28.25	1812.00	0.00001	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	01336-21-6	POINT	14.	51.	14.	270.	28.25	1812.00	0.08000	40.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	25322-68-3	POINT	14.	51.	14.	270.	28.25	1812.00	0.00278	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00123-91-1	POINT	14.	51.	14.	270.	28.25	1812.00	0.00001	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00050-00-0	POINT	14.	51.	14.	270.	28.25	1812.00	0.00016	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	09036-19-5	POINT	14.	51.	14.	270.	28.25	1812.00	0.08080	40.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	03825-26-1	POINT	14.	51.	14.	270.	28.25	1812.00	0.00080	0.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	07664-39-3	POINT	14.	51.	14.	270.	28.25	1812.00	0.00160	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00353-50-4	POINT	14.	51.	14.	270.	28.25	1812.00	0.00160	1.	130.	80.	125.
Facility Name & Address: SAINT-GOBAIN PERF PLASTICS 1 LIBERTY STREET HOOSICK FALLS															
SIC Code: 2295 Application: CO UTME: 0. UTMN: 0. BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
382800		00001	00382-21-8	POINT	14.	51.	14.	270.	28.25	1812.00	0.00002	0.	130.	80.	125.

CONTAMINANT TOXICITY PROFILE FOR AIR GUIDE 1 ANALYSIS

CONTAMINANT NAME	CAS NUMBER	SGC ug/m3	HOW SGC ASSIGNED	AGC ug/m3	HOW AGC ASSIGNED	DAR TOXICITY	COMMENTS
FORMALDEHYDE	00050-00-0	30.00000	NYSDOH	0.060000000	NYSDOH	HIGH	B,C,H,U
DIOXANE,1,4	00123-91-1	3000.00000	NYSDEC	0.130000000	NYSDEC	MODERATE	H,I,U
CARBONYL FLUORIDE	00353-50-4	9.2 ~~12.00000~~	equivalent standard	0.12 ~~0.690000000~~	equivalent standard		
PERFLUOROISOBUTYLENE	00382-21-8	8.20000	PERFLUOROISOBUTYLENE	9999999.000000000	AG-1 EXEMPT COMPOUND		C
AQUA AMMONIA	01336-21-6	2400.00000	NYSDEC "ANALOGY"	100.000000000	NYSDEC "ANALOGY"	LOW	
AMMONIUM PERFLUOROOC	03825-26-1	0.00000	NO SGC EXISTS	0.024000000	ACGIH TWA-TLV		I
HYDROGEN FLUORIDE	07664-39-3	5.6 ~~7.50000~~	equivalent standard	0.071 ~~3.420000000~~	equivalent standard	MODERATE	C,H
TRITON X114 APA	09036-19-5	0.00000	NO SGC EXISTS	1.000000000	DE MINIMIS LIMIT	LOW	
POLYETHYLENE GLYCOL	25322-68-3	0.00000	NO SGC EXISTS	0.100000000	DE MINIMIS LIMIT	MODERATE	
TOTAL VOLATILE ORGAN	NY998-00-0	0.00000	NO SGC EXISTS	0.100000000	DE MINIMIS LIMIT		

COMMENTS :

(B) ACGIH Suspected Human Carcinogen.

(C) ACGIH or NIOSH CEILING LIMIT.

(H) HAP identified by 1990 CAAA.

(I) Refer to ACGIH Handbook.

(U) AGC equivalent to "one in a million risk".

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) ug/m3	CAVITY IMPACT ACTUAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL ug/m3
382800		00001	NY998-00-0	0.000010	0.0048	0.000001	0.003480	0.000000	0.000076	0.000004
382800		00001	01336-21-6	0.080000	40.0000	0.004566	27.836887	0.000000	0.604250	0.034529
382800		00001	25322-68-3	0.002784	1.3920	0.000159	0.968724	0.000000	0.021028	0.001202
382800		00001	00123-91-1	0.000010	0.0048	0.000001	0.003480	0.000000	0.000076	0.000004
382800		00001	00050-00-0	0.000160	0.0800	0.000009	0.055674	0.000000	0.001208	0.000069
382800		00001	09036-19-5	0.080800	40.4000	0.004612	28.115255	0.000000	0.610292	0.034874
382800		00001	03825-26-1	0.000800	0.4000	0.000046	0.278369	0.000000	0.006042	0.000345
382800		00001	07664-39-3	0.001600	0.8000	0.000091	0.556738	0.000000	0.012085	0.000691
382800		00001	00353-50-4	0.001600	0.8000	0.000091	0.556738	0.000000	0.012085	0.000691
382800		00001	00382-21-8	0.000016	0.0080	0.000001	0.005567	0.000000	0.000121	0.000007
SUMMARY TOTALS				0.167780	83.8896	0.009576	58.380905	0.000000	1.267262	0.072415

EMISSION POINT AND CONTAMINANT ASSESSMENT OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) % OF SGC	CAVITY IMPACT ACTUAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL % OF AGC
382800		00001	NY998-00-0	0.100000000	0.0000	0.0000	0.0000	0.0755	0.0041
382800		00001	01336-21-6	100.000000000	2400.0000	1.1599	0.0000	0.6042	0.0345
382800		00001	25322-68-3	0.100000000	0.0000	0.0000	0.0000	21.0279	1.2016
382800		00001	00123-91-1	0.130000000	3000.0000	0.0001	0.0000	0.0581	0.0032
382800		00001	00050-00-0	0.060000000	30.0000	0.1856	0.0000	2.0142	0.1151
382800		00001	09036-19-5	1.000000000	0.0000	0.0000	0.0000	61.0292	3.4874
382800		00001	03825-26-1	0.024000000	0.0000	0.0000	0.0000	25.1771	1.4387
382800		00001	07664-39-3	0.071 ~~0.420000000~~	5.60 ~~7.5000~~	9.44 ~~7.4232~~	0.0000	17.02 ~~2.0774~~	0.97 ~~0.1644~~
382800		00001	00353-50-4	0.12 ~~0.690000000~~	9.20 ~~12.0000~~	6.05 ~~4.6395~~	0.0000	10.07 ~~1.2514~~	0.58 ~~0.1001~~
382800		00001	00382-21-8	**********	8.2000	0.0679	0.0000	0.0000	0.0000
SUMMARY TOTALS						~~13.4761~~ 17.4067	0.0000	~~114.6151~~ 137.0762	~~0.7491~~ 7.8326

CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) ug/m3	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL ug/m3
00050-00-0	0.000160	0.0800	0.000009	0.055674	0.000000	0.001208	0.000069
00123-91-1	0.000010	0.0048	0.000000	0.003480	0.000000	0.000076	0.000004
00353-50-4	0.001600	0.8000	0.000091	0.556738	0.000000	0.012085	0.000691
00382-21-8	0.000016	0.0080	0.000001	0.005567	0.000000	0.000121	0.000007
01336-21-6	0.080000	40.0000	0.004566	27.836887	0.000000	0.604250	0.034529
03825-26-1	0.000800	0.4000	0.000046	0.278369	0.000000	0.006042	0.000345
07664-39-3	0.001600	0.8000	0.000091	0.556738	0.000000	0.012085	0.000691
09036-19-5	0.080800	40.4000	0.004612	28.115255	0.000000	0.610292	0.034874
25322-68-3	0.002784	1.3920	0.000159	0.968724	0.000000	0.021028	0.001202
NY998-00-0	0.000010	0.0048	0.000000	0.003480	0.000000	0.000076	0.000004
SUMMARY TOTALS	0.167780	83.8896	0.009576	58.380909	0.000000	1.267263	0.072415

CONTAMINANT ASSESSMENT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) % OF SGC	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL % OF AGC
00050-00-0	0.060000000	30.0000	0.1856	0.0000	2.0142	0.1151
00123-91-1	0.130000000	3000.0000	0.0001	0.0000	0.0581	0.0032
00353-50-4	0.12 ~~0.090000000~~	9.2 ~~12.0000~~	6.05 ~~4.6395~~	0.0000	10.07 ~~[illegible]~~	0.58 ~~0.1001~~
00382-21-8	**********	8.2000	0.0679	0.0000	0.0000	0.0000
01336-21-6	100.000000000	2400.0000	1.1599	0.0000	0.6042	0.0345
03825-26-1	0.024000000	0.0000	0.0000	0.0000	25.1771	1.4387
07664-39-3	0.071 ~~0.420000000~~	5.6 ~~7.5000~~	9.24 ~~7.4232~~	0.0000	17.02 ~~2.8774~~	0.97 ~~0.1644~~
09036-19-5	1.000000000	0.0000	0.0000	0.0000	61.0292	3.4874
25322-68-3	0.100000000	0.0000	0.0000	0.0000	21.0279	1.2016
NY998-00-0	0.100000000	0.0000	0.0000	0.0000	0.0755	0.0041
SUMMARY TOTALS			~~13.1761~~ 17.4067	0.0000	~~[illegible]~~ 137.0767	~~6.5491~~ 7.8326

Summary of Modeling Data

Emission Point and Contaminant Impact Summary of Air Guide 1 Analysis (50' Stack Height)

CAS No.	Emissions	Emissions	Annnual Emissions	Max Short	Actual Annual	Potential	Actual
	lb/hr	lb/yr	lb/hr	Term (ug/m3)	Cavity (ug/m3)	Annual (ug/m3)	Annual (ug/m3)
NY998-00-0	0.00001	0.0048	0.000001	0.00348	0	0.000076	0.000004
01336-21-6	0.08	40	0.004566	27.836887	0	0.60425	0.034529
25322-68-3	0.002784	1.392	0.000159	0.968724	0	0.021028	0.001202
00123-91-1	0.00001	0.0048	0.000001	0.00348	0	0.000076	0.000004
00050-00-0	0.00016	0.08	0.000009	0.055674	0	0.001208	0.000069
09036-19-5	0.0808	40.4	0.004612	28.115255	0	0.610292	0.034874
03825-26-1	0.0008	0.4	0.000046	0.278369	0	0.006042	0.000345
07664-39-3	0.0016	0.8	0.000091	0.556738	0	0.012085	0.000691
00353-50-4	0.0016	0.8	0.000091	0.556738	0	0.012085	0.000691
00382-21-8	0.000016	0.008	0.000001	0.005567	0	0.000121	0.000007
SUMMARY	0.16778	83.8896	0.009577	58.380912	0	1.267263	0.072416

Emission Point and Contaminant Impact Summary of Air Guide 1 Analysis (50' Stack Height)

CAS No.	AGC	SGC	Max Short Term	Actual Annual	Potential Annual	Actual Annual
	ug/m3	ug/m3	% of SGC	Cavity (% AGC)	% of AGC	% of AGC
NY998-00-0	0.1	0	0.00%	0.0000%	0.0760%	0.0040%
01336-21-6	100	2400	1.1599%	0.0000%	0.6043%	0.0345%
25322-68-3	0.1	0	0.00%	0.0000%	21.0280%	1.2020%
00123-91-1	0.13	3000	0.0001%	0.0000%	0.0585%	0.0031%
00050-00-0	0.06	30	0.1856%	0.0000%	2.0133%	0.1150%
09036-19-5	1	0	0.00%	0.0000%	61.0292%	3.4874%
03825-26-1	0.024	0	0.00%	0.0000%	25.1750%	1.4375%
07664-39-3	0.071	5.6	9.9418%	0.0000%	17.0211%	0.9732%
00353-50-4	0.12	9.2	6.0515%	0.0000%	10.0708%	0.5758%
00382-21-8	*	8.2	0.0679%	0.0000%	0.0000%	0.0000%
SUMMARY			17.4067%	0.0000%	137.0762%	7.8326%

Contaminant Impact Summary of Air Guide 1 Analysis (50' Stack Height)

CAS No.	Emissions	Emissions	Annnual Emissions	Max Short	Actual Annual	Potential	Actual
	lb/hr	lb/yr	lb/hr	Term (ug/m3)	Cavity (ug/m3)	Annual (ug/m3)	Annual (ug/m3)
00050-00-0	0.00016	0.08	0.000009	0.055674	0	0.001208	0.000069
00123-91-1	0.00001	0.0048	0	0.00348	0	0.000076	0.000004
00353-50-4	0.0016	0.8	0.000091	0.556738	0	0.012085	0.000691
00382-21-8	0.000016	0.008	0.000001	0.005567	0	0.000121	0.000007
01336-21-6	0.08	40	0.004566	27.836887	0	0.60425	0.034529
03825-26-1	0.0008	0.4	0.000046	0.278369	0	0.006042	0.000345
07664-39-3	0.0016	0.8	0.000091	0.556738	0	0.012085	0.000691
09036-19-5	0.0808	40.4	0.004612	28.115255	0	0.610292	0.034874
25322-68-3	0.002784	1.392	0.000159	0.968724	0	0.021028	0.001202
NY998-00-0	0.00001	0.0048	0	0.00348	0	0.000076	0.000004
SUMMARY	0.16778	83.8896	0.009575	58.380912	0	1.267263	0.072416

Contaminant Impact Summary of Air Guide 1 Analysis (50' Stack Height)

CAS No.	AGC	SGC	Max Short Term	Actual Annual	Potential Annual	Actual Annual
	ug/m3	ug/m3	% of SGC	Cavity (% AGC)	% of AGC	% of AGC
00050-00-0	0.06	30	0.1856%	0.0000%	2.0133%	0.1150%
00123-91-1	0.13	3000	0.0001%	0.0000%	0.0585%	0.0031%
00353-50-4	0.12	9.2	6.0515%	0.0000%	10.0708%	0.5758%
00382-21-8	*	8.2	0.0679%	0.0000%	0.0000%	0.0000%
01336-21-6	100	2400	1.1599%	0.0000%	0.6043%	0.0345%
03825-26-1	0.024	0	0.0000%	0.0000%	25.1750%	1.4375%
07664-39-3	0.071	5.6	9.9418%	0.0000%	17.0211%	0.9732%
09036-19-5	1	0	0.0000%	0.0000%	61.0292%	3.4874%
25322-68-3	0.1	0	0.0000%	0.0000%	21.0280%	1.2020%
NY998-00-0	0.1	0	0.0000%	0.0000%	0.0760%	0.0040%
SUMMARY			17.4067%	0.0000%	137.0762%	7.8326%