



High Global Warming Potential Greenhouse Gas Reporting Form

Air Emission Inventory Program

Manufacturers, Wholesalers, and Purchasers

Doc Type: Annual Report

Instructions

The Minnesota legislature has required that manufacturers and purchasers of chemicals that are considered high global warming potential (GWP) greenhouse gases (GHGs) must report the sales and purchases of these chemicals in Minnesota (Minn. Stat. § 216H.11).

This spreadsheet is designed to facilitate the reporting of both the manufacture and purchase of high GWP chemicals, and is designed to include the following elements:

1. Company Information
2. Additional Site Data
3. Purchaser Report
4. Manufacturer Report
5. Certification

Please note that there are a total of six tabs in this worksheet. Please review each tab in the workbook carefully. The information submitted becomes a matter of public record.

All manufacturers that provide high GWP GHGs to destinations within Minnesota must complete this form.

Wholesalers located in Minnesota should follow the directions for purchasers.

Purchasers of high GWP chemicals are required to report **all** purchases in the event that they purchase *any* identified high GWP chemical in an amount that is greater than 10,000 metric tonnes of carbon dioxide equivalent. The purchaser reporting spreadsheet is designed to conduct the chemical-specific conversions to the metric tonnes units of carbon dioxide equivalent.

This form includes sections for manufacturers and purchasers as it is conceivable that a company may be both a manufacturer and purchaser of an identified high GWP chemical.

Required Information

Company information

The information requested in tab "Company Information" is required of all parties. This information is collected to identify the company and provide contact information.

Additional site data

Some companies may need to use the Additional Site Data page in order to report multiple facilities that purchase or use these chemicals. If you are a company that owns or operates one or more facilities that hold separate MPCA permit, then you should report each facility separately, using a separate Excel workbook for each location.

If you own one or more facilities that operate without an MPCA permit, you will need to add together the purchases of each chemical at each facility and generate a sum total of the chemicals used to reflect the company annual purchases. You will enter only the company name in Line #1. You will identify the additional facilities in the "Addl Facility Info" tab in this workbook.

If you are a company that has a combination of permitted and unpermitted facilities, you will create an Excel workbook for each permitted facility and one workbook for the sum total of the chemicals for all unpermitted facilities. Follow the instructions described above for the reporting specifics.

If you are an HVAC contractor or owner/operator of the electrical transmission equipment, you may report the sum total of each chemical used throughout the operation in one Excel workbook. You will enter the company name in Line #1. You will not have any specific facilities to report.

Purchasers and wholesalers

Companies that are purchasers of high GWP chemicals should review their chemical purchases in comparison to the high GWP chemical chemicals listed in the "Purchaser Rpt" tab. Wholesalers should report as though they are purchasers. The information required to complete this section of the report is the amount of the high GWP gas in pounds, purchased over the past year. The spreadsheet calculates the metric tonnes conversion of carbon dioxide equivalent, and will also indicate whether reporting is required. *If the purchase of any one chemical triggers a reporting requirement, then all of the gases purchased must be reported - including those under the reporting threshold.*

If you use other high GWP HFCs or PFCs that are not included on this list, contact the MPCA for further assistance.

In addition, the new law also requires that you report how the chemical is used in your operation, for example, refrigeration, electronics manufacturing, or electricity transmission.

Manufacturers

Companies that are manufacturers of high GWP chemicals should review their high GWP chemical manufacture inventory in comparison to the high GWP chemicals listed in the "Mfg Rpt" tab. In order for a manufacturer or wholesaler to be subject to the Minnesota reporting requirement, a physical presence is not necessary. The test is whether your high GWP chemicals are sold in Minnesota. If your product is sold in Minnesota, you must report the quantities sold. The high GWP greenhouse gas sales may be reported in either pounds or kilograms.

If you sell other high GWP HFCs or PFCs that are not included on this list, contact the MPCA for further assistance.

Certification - To be completed by all companies

The final section of the reporting spreadsheet is a certification from the reporting agent for the company.

Under certain circumstances, a company may wish to the sales data of their high GWP gases confidential. Please note that if you wish to claim your data as non-public under the Minnesota Data Practices Act or the MPCA public records authority (Minn. Stat. §116.075 Subd. 2), you will be required to submit your report and request, along with justification, to the MPCA under a separate letter.

Submittal Instructions

High GWP gas manufacturers must report sales into Minnesota and purchasers must report qualifying purchases for the previous calendar year by October 1 of each year. For example the high GWP gas quantities sold in Minnesota or purchased during 2011 must be reported to the MPCA by October 1, 2012.

To submit you report, e-mail the completed spreadsheet workbook to HGWP@state.mn.us. Purchasers and wholesalers should type "**Purchaser High GWP Report**" in the subject line. Manufacturers should type "**Manufacturer High GWP Report**" in the subject line.

If you have any questions, please contact Azra Kovacevic at Azra.Kovacevic@state.mn.us or 651-757-2505.



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

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Air Emission Inventory Program

Manufacturers, Wholesalers, and Purchasers

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Company Information

1	Company/Facility name:	
2	*NAICS code:	
3	Contact - Last name	
4	Contact - First name	
5	Title	
6	Address:	
7	City:	
9	State or Province:	
10	Postal code:	
11	Country:	
12	Telephone:	
13	E-mail:	
14	Webpage address	
15	MPCA Permit # (Air, Water, or Solid Waste)	
16	Purchaser status: Wholesaler (1); Contractor (2); End User/Retailer (3). Enter number to the right.	

Additional Facility Information

[Additional information]

	*Facility Name	NACIS Code	Contact - Last Name	Contact - First Name	Title	Address	City	State or Province	Postal Code	Country	Telephone	E-mail
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2												
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High GWP Chemical - Annual Facility-Level Purchaser Report

Inventory Assessment

				Pounds Purchased	Carbon Dioxide Equivalent (Metric Tons)	Is this amount greater than 10,000 metric tons? (Yes/No)	Chemical use and amount used.
Hydrofluorocarbons							
HFC-23	trifluoromethane	75-46-7	CHF ₃				
HFC-32	difluoromethane	75-10-5	CH ₂ F ₂				
HFC-41	fluoromethane	593-53-3	CH ₃ F				
HFC-43-10mee	1,1,1,2,2,3,4,5,5,5-decafluoropentane	138495-42-8	CF ₃ CHFCHFCF ₂ CF ₃				
HFC-125	1,1,1,2,2-pentafluoroethane	354-33-6	CHF ₂ CF ₃				
HFC-134	1,1,2,2-tetrafluoroethane	359-35-3	CHF ₂ CHF ₂				
HFC-134a	1,1,1,2-tetrafluoroethane	811-97-2	CH ₂ FCF ₃				
HFC-143	1,1,2-trifluoroethane	430-66-0	CH ₂ FCHF ₂				
HFC-143a	1,1,1-trifluoroethane	420-46-2	CH ₃ CF ₃				
HFC-152	1,2-difluoroethane	624-72-6	CH ₂ FCH ₂ F				
HFC-152a	1,1-difluoroethane	75-37-6	CHF ₂ CH ₃				
HFC-161	fluoroethane	353-36-6	CH ₃ CH ₂ F				
HFC-227ca	1,1,1,2,2,3,3-heptafluoropropane	2252-84-8	CF ₃ CF ₂ CHF ₂				
HFC-227ea	1,1,1,2,3,3,3-heptafluoropropane	431-89-0	CF ₃ CHFCF ₃				
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	677-56-5	CHF ₂ CF ₂ CHF ₂				
HFC-236fa	1,1,1,3,3,3-hexafluoropropane	690-39-1	CH ₂ FCF ₂ CF ₃				
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	431-63-0	CHF ₂ CHFCF ₃				
HFC-245ca	1,1,2,2,3-pentafluoropropane	679-86-7	CH ₂ FCF ₂ CHF ₂				
HFC-245fa	1,1,1,3,3-pentafluoropropane	460-73-1	CHF ₂ CH ₂ CF ₃				
HFC-365mfc	1,1,1,3,3-pentafluorobutane	406-58-6	CH ₃ CF ₂ CH ₂ CF ₃				
HFC-c-447-ef	heptafluorocyclopentane	15290-77-4	c-C ₅ H ₃ F ₇				
Other HFCs					Contact The MPCA		
Other HFCs					Contact The MPCA		
Perfluorocarbons							
PFC-14	tetrafluoromethane	75-73-0	CF ₄				
PFC-116	1,1,1,2,2,2-hexafluoroethane	76-16-4	C ₂ F ₆				
PFC-218	perfluoropropane	76-19-7	C ₃ F ₈				
PFC-318 or PFC-c318	1,1,2,2,3,3,4,4-octofluorocyclobutane	115-25-3	c-C ₄ F ₈				
PFC-3-1-10	perfluorobutane	355-25-9	C ₄ F ₁₀				
PFC-4-1-12	perfluoropentane	678-26-2	C ₅ F ₁₂				
PFC-5-1-14	perfluorohexane	355-42-0	C ₆ F ₁₄				
PFC-9-1-18	perfluorodecalin	306-94-5	C ₁₀ F ₁₈				
c-C3F6	perfluorocyclopropane	931-91-9	c-C ₃ F ₆				
SF ₅ CF ₃	trifluoromethyl sulfur pentafluoride	373-80-8	SF ₅ CF ₃				
CH ₃ IF ₃	trifluoroiodomethane	2314-97-8	CF ₃ I				
Other							
NF ₃	nitrogen trifluoride	7783-54-2	NF ₃				
SF ₆	sulfur hexafluoride	2551-62-4	SF ₆				
Other PFCs					Contact The MPCA		
Other PFCs					Contact The MPC		
Total							

High GWP Chemical -Annual Manufacturer Report

Hydrofluorocarbons		CAS#	Chemical Formula	Kilograms Sold	Converted pounds
HFC-23	trifluoromethane	75-46-7	CHF ₃		
HFC-32	difluoromethane	75-10-5	CH ₂ F ₂		
HFC-41	fluoromethane	593-53-3	CH ₃ F		
HFC-43-10mee	1,1,1,2,2,3,4,5,5,5-decafluoropentane	138495-42-8	CF ₃ CHFCHFCF ₂ CF ₃		
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HFC-152	1,2-difluoroethane	624-72-6	CH ₂ FCH ₂ F		
HFC-152a	1,1-difluoroethane	75-37-6	CHF ₂ CH ₃		
HFC-161	fluoroethane	353-36-6	CH ₃ CH ₂ F		
HFC-227ca	1,1,1,2,2,3,3-heptafluoropropane	2252-84-8	CF ₃ CF ₂ CHF ₂		
HFC-227ea	1,1,1,2,2,3,3-heptafluoropropane	431-89-0	CF ₃ CHFCF ₃		
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	677-56-5	CHF ₂ CF ₂ CHF ₂		
HFC-236fa	1,1,1,3,3,3-hexafluoropropane	690-39-1	CH ₂ FCF ₂ CF ₃		
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	431-63-0	CHF ₂ CHFCF ₃		
HFC-245ca	1,1,2,2,3-pentafluoropropane	679-86-7	CH ₂ FCF ₂ CHF ₂		
HFC-245fa	1,1,1,3,3-pentafluoropropane	460-73-1	CHF ₂ CH ₂ CF ₃		
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HFC-c-447-ef	heptafluorocyclopentane	15290-77-4	c-C ₅ H ₃ F ₇		
Other HFCs					
Other HFCs					
Perfluorocarbons					
PFC-14	tetrafluoromethane	75-73-0	CF ₄		
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PFC-218	perfluoropropane	76-19-7	C ₃ F ₈		
PFC-318 or PFC-c318	1,1,2,2,3,3,4,4-octofluorocyclobutane	115-25-3	c-C ₄ F ₈		
PFC-3-1-10	perfluorobutane	355-25-9	C ₄ F ₁₀		
PFC-4-1-12	perfluoropentane	678-26-2	C ₅ F ₁₂		
PFC-5-1-14	perfluorohexane	355-42-0	C ₆ F ₁₄		
PFC-9-1-18	perfluorodecalin	306-94-5	C ₁₀ F ₁₈		
c-C3F6	perfluorocyclopropane	931-91-9	c-C ₃ F ₆		
SF ₅ CF ₃	trifluoromethyl sulfur pentafluoride	373-80-8	SF ₅ CF ₃		
CH ₃ IF ₃	trifluoroiodomethane	2314-97-8	CF ₃ I		
Other					
NF ₃	nitrogen trifluoride	7783-54-2	NF ₃		
SF ₆	sulfur hexafluoride	2551-62-4	SF ₆		
Other PFCs					
Other PFCs					
			Kilogram Total		
				Converted Pound Value	



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St. Paul, MN 55155-4194

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Manufacturers, Wholesalers, and Purchasers

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Certification and Signature

I certify that the information provided on this form is a true and accurate representation of the purchase/manufacture of High Global Warming Potentials (HGWPs). I understand that misrepresenting or falsifying data requests or failing to report pursuant to a mandatory reporting requirement may result in enforcement actions and/or monetary penalties.

Type name: _____

Title: _____

Phone: _____

E-mail: _____

Date of completion: _____
(MM/DD/YYYY)

