



Greenhouse Gas Inventory Management Plan for Fairchild Semiconductor, an EPA Climate Leaders Partner

Partner Information

1. Company Name:
Fairchild Semiconductor International
2. Company Address:
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3. Inventory Contact:
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Boundary Conditions Organizational

5. Basis of reporting emissions data:

The equity approach shall be used in the reporting of Greenhouse Gas (GHG) emissions for Fairchild Semiconductor (FSC) U.S. wafer fabrication operations. FSC's headquarters, sale offices, technical labs, support offices, and design centers, both in the U.S. and international locations are leased spaces where FSC does not have ownership for building facilities and therefore will not be accounted for in this inventory. FSC's owned international wafer fabrication and assembly operations also will not be included in this inventory.

6. Facilities List:

FSC owns 100% of three wafer fabrication operations in the U.S. These facilities are located in Maine (FSP), Pennsylvania (FMT); and Utah (FSL). The table below lists the FSC, U.S. manufacturing operations in 2003.

FSC list of U.S. manufacturing Operations in 2003

Address	City	State
333 Western Avenue	South Portland	Maine
125 Crestwood Road	Mountaintop	Pennsylvania
3333 West 9000 South	West Jordan	Utah

Operational

7. GHG list:

The GHG included in this plan are; Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Nitrogen trifluoride (NF₃) (Hydrofluorocarbons (HFCs), Perfluorocarbons gases (PFCs) and Sulfur Hexafluoride (SF₆).

The Corporate Inventory Manager shall periodically update the list of GHG that are required to be reported as defined by the Climate Leaders. These updates will be posted to the list on the internal EHS web page (GHG to be reported and controlled) and the Greenhouse Gas Sources Usage Report Template (attachment 1).

8. Emission Source Identification Procedure:

Resource usages that are sources of GHG emissions are monitored and recorded by the Environmental Managers or Environmental Engineers at each FSC operational site (Site Inventory Managers). Resources that are monitored include consumption of electrical power, combustion fuels, refrigerants, VOCs and quantities of process gasses used.

The Site Inventory Managers shall be responsible to review all new process chemical used at their sites to determine if they are GHG emission sources that will be required to be reported. Any new chemical that is on the updated list provide by the Corporate Inventory Manager must be included in the annual Greenhouse Gas Sources Usage Report

The Corporate Inventory Manager has created and distributed the Greenhouse Gas Sources Usage Report to the Site Inventory Managers. Each of the Site Inventory Managers have reviewed and recorded usage quantities of these sources in the report. Discussions have been held between the sites and Corporate Inventory Manager to ensure all sources are accounted for. This report shall be completed by the Site Inventory Managers on an annual basis.

The Director of Corporate EHS requires each operational and major support site to report several EHS metrics on a quarterly basis. Relevant sources of GHG that are required to be reported on these metrics include usage of electrical power, natural gas, PFCs, NF₃, N₂O and SF₆ process gasses and VOC emissions

9. Direct Sources:

Each Site Inventory Manager maintains records of significant resource usage of direct GHG emission sources. The table below indicates the sources by resource used for each FSC site.

Source type	Resource used	Location		
		FMT	FSL	FSP
Stationary combustion	Natural gas	X	X	X
	Propane	X	X	X
	Diesel fuel	X	X	X
	Fuel oil	X	X	X

Mobile combustion		X	X	X
Process gasses	PFCs *	X	X	X
	HFCs (CHF3)	X	X	X
	NF3	X	X	X
	N2O	X	X	X
	SF6	X	X	X
	CO2		X	
VOCs Emissions		X	X	X
Stationary refrigerants	HFC and PFC	X	X	X

* PFCs include: CF4, C2F6, C3F8, cC4F8

10. Indirect Sources – Energy Import/Export:

Purchases of electrical power for each operational site are included in the inventory. There are no other indirect GHG sources used at FSC operations

11. Optional Sources:

Due to the complexity in estimating emissions of travel (business, employee commuting) and distribution, these sources have not been included in the inventory.

Emissions Quantification

12. Quantification Methods:

Note: All terms in bold italics are defined in section 13 (Emission Factors and Other Constants)

Electricity:

The following equation was used to determine the amount of CO₂ emitted from consumption of electrical power:

$$KWh \text{ purchased} \times 1 \text{ MWh}/1000 \text{ KWh} \times \text{lbs } CO_2/\text{1 MWh} \times 1 \text{ mt}/2205 \text{ lbs} = \text{mt (metric tons) } CO_2$$

The following equation was used to determine the amount of CO₂-equivalent emissions due to emission of CH₄ and N₂O from consumption of electrical power:

$$KWh \text{ purchased} \times \text{MWh}/1000 \text{ KWh} \times \text{lbs } CH_4 \text{ (N}_2\text{O)}/\text{1 MWh} \times 1 \text{ Kg}/2205 \text{ lbs} \times \text{GWP } CH_4 \text{ (N}_2\text{O)} \times 1 \text{ mt}/1000 \text{ Kg} = \text{mt } CO_2 \text{ equivalent}$$

Fuel combustion:

Emission estimates for direct emissions due to stationary fuel combustion are calculated in two steps. First volumes of consumed fuels were converted to energy units (if applicable).

- *Cubic feet (CF) of natural gas (NG) consumed* \times ***1027 Btu/1 CF of NG*** \times ***1 MMBtu/1,000,000 Btu*** = ***MMBtu consumed***
- *lbs of fuel consumed* \times ***gal/1 lbs fuel*** \times ***MMBtu/gal HHV*** = ***MMBtu***

The second step was to calculate the CO₂ or CO₂ equivalent emissions for consumed energy.

- *Amount of MMBtu* \times ***Kg CO₂/ 1 MMBtu*** \times ***1 mt/1000 Kg*** = ***mt CO₂ emitted***

- Amount of MMBtu x grams (g) CH₄ (N₂O)/ 1 MMBtu x 1 Kg/1000 g x 1 mt/1000 kg = mt CO₂ eq emitted

The following equations were used to estimate emissions for mobile combustion sources:

- Gallons of fuel used x Kg CO₂/1 gal x 1 mt CO₂/1000 kg = mt CO₂ emitted
- Miles traveled x g CH₄ (N₂O)/1 mile x 1 Kg/1000 g x 1 mt/1000 Kg x CH₄ (N₂O)GWP = mt CO₂ eq emitted

Emission estimates for Volatile Organic Compounds (VOC) are calculated using the following equation:

- lbs VOC emitted x 1 mt/2205 lbs x 56%⁽¹⁾ x 44/12 = mt CO₂ eq emitted

VOC emissions (lbs) for FMT are calculated using mass balance. FSL and FME emissions are calculated using stack sampling (permit specified method).

⁽¹⁾Assumed VOC carbon content from EPA 2004 Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2002, Table 2-36.

Process gasses:

Emission estimated for process gasses; PFC, CHF₃, SF₆ and NF₃ were calculated using the Intergovernmental Panel on Climate Change (IPCC) tier 2c methods published in chapter 3.6 of the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories.

- Emissions of FC_i = (1-h)*[(FC_i *(1-C_i)*(1-a_i*d_i)

Where: FC_i = Purchases of gas i in kg (CF₄, C₂F₆, C₃F₈, C₄F₈, CHF₃, NF₃, SF₆)

h = Fraction of gas remaining in the shipping container (heel) after use

C_i = Use rate of gas (fraction destroyed or transformed in process)

a_i = Fraction of gas i volume used in processes with emission control technologies (plant scale)

d_i = Fraction of gas i destroyed by the emission control technology.

Emission estimates for CF₄ that was created as the by-product emissions from usage of C₂F₆ and C₃F₈ are calculated using the equation below (in kilograms):

- CF₄ created as a by-product emissions from C₂F₆ (C₃F₈) = (1-h) x [(B_i x FC_i) x (1-a_i x dCF₄)]

Where: B_i = kg CF₄ created per kg of C₂F₆ (C₃F₈) used.

Emissions estimates of the process effluent gasses were converted from Kgs to mt CO₂ eq using the following equation:

- mt CO₂ Eq = Q_i x GPW₁₀₀ x 1,000,000

Where: Q_i = the quantity of emissions of FC_i released in kg

(GWP₁₀₀)_i = the Global Warming Potential (GWP)_i for PFC_i integrated over a 100 year time horizon

Emission estimated for process gasses N₂O and CO₂ were calculated using the following equation (no consumption or destruction during process was used in the calculation of the GHG emissions for these two gases)..

- Amount of gas usage (metric tons/year) x GWP.

Refrigerants:

Emissions estimates for stationary refrigerant releases were calculated using the equation below:

- $Lbs\ of\ refrigerant\ used\ x\ 1\ Kg/2.205\ lbs\ x\ GWP\ x\ 1\ mt/1000\ Kgs = mt\ CO_2\ eq\ emitted$

Emission estimates for mobile source of refrigerant releases are calculated using the equations below:

- $Number\ of\ vehicles\ x\ charge/vehicle\ (Kgs)\ x\ EPA\ operating\ loss\ factor\ x\ GWP\ x\ 1mt/1000\ Kg = mt\ CO_2\ eq\ emitted$

13. Emission Factors and Other Constants:

The GWP for CH₄ and N₂O are published in Climate Leaders, Design Principal Guidance document, table 6.3 (Gas Atmospheric Lifetimes GWP). The values for CH₄ and N₂O are 21 and 310, respectively. These constants were used in all equations to convert from CH₄ and N₂O emission, to an equivalent of CO₂ emitted.

Factors and constants for electricity emissions calculations:

The conversion factor *lbs CO₂/1 MWh* are published in egrid 2002 v.2.01 year 2000 data. The conversion factor for *lbs CH₄ (N₂O)/1 MWh* are published in the Climate Leaders Core Sector Module Guidance document, ‘Indirect Emissions from Purchases/Sales of Electricity and Steam’. The values used in calculations described in section 12 are shown in the table below:

Site	lbs CO ₂ /1 MWh	lbs CH ₄ /1 MWh	lbs N ₂ O/1 MWh
FSP	897.11	0.0766	0.0159
FMT	1097.55	0.0241	0.0162
FSL	852.31	0.0121	0.0123

Factors and constants for stationary fuel combustion emissions calculations:

The heat content of each fuel type is published in the Climate Leaders Core Sector Module Guidance document, ‘Direct Emissions from Stationary Fuel Combustion’. CO₂ emission factors are published in table B-3 of the EPA Core Module Guidance document, ‘Direct Emissions from Stationary Combustion Sources’. The CH₄ and N₂O emission factors are published in table A-1 of the EPA Core Module Guidance document, ‘Direct Emissions from Stationary Combustion Sources’. The values used in calculations described in section 12 are shown in the table below:

Fuel type	CO ₂ emission factor (Kg CO ₂ /MMBtu)	CH ₄ emission factor (g/MMBtu)	N ₂ O emission factor (g/MMBtu)	Heat Content
Natural Gas	52.79	4.75	0.095	1027 Btu/ft ³ HHV
Distillate Fuel Oil (#1,2,4)	72.42	10.0	0.601	0.1387 MMBtu/gal HHV
LPG / Propane	62.93	10.0	0.601	0.0919 MMBtu/gal HHV

Factors and constants for mobile fuel combustion emissions calculations:

The conversion factor of 8.79 Kg CO₂/gallon of gasoline consumed was used for all vehicles in FSC fleet. This value is published in the Climate Leaders, Core Sector Module Guidance document, ‘Direct Emissions from Mobile Combustions Sources’. The constants factors *g CH₄ (N₂O)/1 mile* are

also published in the Climate Leaders, Core Sector Module Guidance document, ‘Direct Emissions from Mobile Combustions Sources’. The values used in calculations described in section 12 are shown in the table below:

Vehicle Model	Year	CH4 Emission Factor (g/mile)	N2O Emission Factor (g/mile)
Dodge Ram Pickup	1997	0.0563	0.058
GMC, Rally SXT	1990	0.1003	0.1143
Chevy, S10	1998	0.0535	0.0547
Dodge Ramcharger	1984	0.1003	0.1143
Chevy, Colorado	2005	0.0378	0.0491
Chevy, Cargo Truck	1999	0.0483	0.0529
Chevy, Cargo Truck	1996	0.058	0.0563

Factors and constants for process gas emissions calculations:

Default values for h , C_i and B_i are published in the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, Chapter 3.6, table 3.15, Tier 2c, for each gas. Values for h were estimated to be 0.1 (all cases). The value for B_i was 0.1 and 0.2 Kg of CF_4 created per Kg of C_2F_6 and C_3F_8 used, respectively. The factors used for $(GWP_{100})_i$ are published in the Intergovernmental Panel on Climate Change (IPCC) 2001, third assessment report. The values for 1-C and GPW_{100} used in the calculations describes in section 12 are shown in the table below:

GHG	1-C	GWP_{100}
CF_4	0.8	5700
CF_4 by product from C_xF_y	N.A.	5700
CHF_3	0.3	12000
C_2F_6	0.7	11900
NF_3	0.2	10800
SF_6	0.5	22200
C_3F_8	0.4	8600
C_4F_8	0.3	10000
N2O	N.A.	310
CO2	N.A.	1

Factors and constants for refrigerant emissions calculations:

All factors used in calculation for refrigerant emission are found in table 1,2 and 3 of the Climate Leaders Refrigerant Guidance document. The value used for *charge/vehicle (Kgs)* was 1.2 Kgs. The value used for the *EPA operating loss factor* was 20%. The assumption was made that all fleet vehicles that have air conditioning use R-134 and a value of 1300 was used for *GWP*. The table below list *GWP* values for refrigerant for stationary equipment:

Refrigerant	GWP
R407C	1,526
R402A	1,680

R134a	1,300
R404A	3,260
R403B	2,730
R409A	0
R401A	18

Data Management

14. Activity Data:

The usages of electrical power, fuel oils, natural gas and propane are reported directly from the monthly utility billings or billing statements of the respective contractor or service provider. In cases where there are no fuel oil deliveries during a year, fuel consumption is estimated based on the number of hours that engines or combustion units are operated, The conversion into energy units is described in section 12.

Process gas emissions were calculated from the amount of gas used in the manufacturing process. The Site Inventory Manager determines the amount of gas used from records of amounts of gasses issued to production operations from site stores. The Site Inventory Manager estimates emissions of VOC by methods described in section 12.

All new installation and replenishment of building refrigerants are contracted services at all FSC US operational sites. Records of types and quantities of refrigerant usage are maintained by the Site Inventory Manager.

The quantity of fuel used in mobile combustion sources is derived from either billing statement on file, or is estimated based on the number of miles traveled by the respective vehicles each year. In some cases the total number of miles traveled each year is estimated by dividing the total number of miles the vehicle has traveled over its life time by the number of years the vehicle has been in operation.

15. Data Management:

Acquiring and maintaining usage records of each GHG source is the responsibility of the Site Inventory Manager. The Site Inventory Managers are responsible for collecting and reporting data to the Corporate Inventory Manager. The Corporate Inventory Manager shall distribute the Greenhouse Gas Sources Usage Report to the Site Inventory Managers. These reports shall be completed on an annual basis.

The Site Inventory Managers are also required to complete a spreadsheet that contains data of various EHS metrics. These metrics include usage of electrical power, natural gas, process gasses and VOC emissions. The Site Inventory Managers submits this report to the Corporate Director of EHS on a quarterly basis.

The Corporate Inventory Manager is responsible for collecting the data from the Site Inventory Managers and performs energy unit and GHG emission calculations.

16. Normalization Factor(s) Selection

Historically, the demand and output of the semiconductor industry shows a cyclic trend. During years of low demand for semiconductor products, less process gas is used than in years of high product output. Because the greatest quantities of GHG emissions are due to gasses used in the product manufacturing processes, FSC has selected a normalization factor based on number of unit of production processed through specific manufacturing operations to measure GHG emissions reduction goals. The normalization factor that FSC will use is number of six inch equivalent mask moves.

17. Data Collection Process – Normalization Factors

FSC Production department monitors and reports mask moves to the site Finance department. It is the responsibility of the Site Inventory Manager to obtain the mask moves, perform calculations and report the six inch equivalent mask moves on the quarterly Fairchild Semiconductor EHS Metrics report. It is the responsibility of the Corporate Inventory Manager to apply the normalization factor for calculations of the annual GHG.

18. Data Collection Process – Quality Assurance:

It is the responsibility of each Site Inventory Manager to collect the usage amounts of GHG sources, to report and maintain records of these usages to the Corporate Inventory Manager on a quarterly or annual basis.

The Corporate Inventory Manager is responsible to validate the data by comparing site to site reported data, previous years data, and verify consistency were the data is recorded at multiple sources. The Corporate Inventory Manager is also responsible for performing calculations necessary to convert source usage data into equivalent GHG emissions.

19. Data Collection System Security:

The source usage data files, spreadsheets used to calculate GHG emissions, and GHG emission reports reside in a folder labeled “Climate Leaders”, located on the U drive of the FSC Salt Lake IT network. Documents added to this file or changes to existing documents may only be done by personnel delegated by the Corporate Inventory Contact. These files are backed up on a network server every 24 hours.

20. Integrated Tools:

The FSC sites included in this IMP have attained ISO 14001 certification. Many of the objectives and goals identified by each site either directly or indirectly are associated with reduction in GHG emissions.

21. Frequency:

GHG source usage data is reported by each Site Inventory Manager to the Corporate Inventory Manager on a quarterly or annual basis, or whenever requested by the Corporate Inventory Manager. Emissions calculations are performed on an annual basis. GHG emissions reports are issued to the EPA annually.

Base Year

22. Adjustment – Structural Changes:

In the event of acquisitions and/or mergers of a facility that existed during the base year, the acquired or merged facility's GHG emissions will be added to the company's base year emissions. If the facility did not exist during the base year, no adjustment will be made to the company's baseline emissions.

In the event of a divestiture of a facility that existed during the base year, the facility's GHG emissions will be subtracted from the company's baseline emissions. If the facility did not exist during the base year, no adjustment will be made to the company's baseline emissions.

No adjustments will be done to the base year for any projects undertaken to increase or decrease production capacity subsequent to the base year.

The Corporate EHS organization shall update due diligence procedures for mergers, acquisitions and divestitures to include GHG emission reporting to the Corporate Inventory Manager. The Corporate EHS Director is informed by the Corporate Legal department to perform due diligence in all actions regarding mergers, acquisitions and divestitures.

23. Adjustment – Methodology Changes:

The Corporate Inventory Manager shall periodically review GHG emission methodologies, constants and emission factors for need of changes or updates.

Changes in calculations and/or emissions factors will be done if required by law, regulation, EPA Climate Leaders specification or new methodologies recommended by scientific associations. Any changes in methodologies must be reviewed and approved by the EPA Climate Leaders staff.

In the event changes are made to methodologies, GHG emissions shall be recalculated for all years prior to the change, including the base year.

In an event that an error is found in the data, calculations, or reports, the error shall be corrected.

A log sheet shall be maintained in the Climate Leaders Partners folder and a log entry made for any change in methodology including; data, calculations, emissions factors, or reports.

Management Tools

24. Roles and Responsibilities:

Each site has an Environmental Manager or Environmental Engineer (referred to in this document as the Site Inventory Manager) that is responsible for the collection of GHG usage data from all sources, for their respective facility. The Site Inventory Manager is responsible for reporting the data to the Corporate Inventory Manager on the Greenhouse Gas Sources Usage Report, on an annual basis. The Site Inventory Manager is responsible to report site EHS metrics (attachment 2) to the Corporate Director of EHS on a quarterly basis.

The Corporate Inventory Manager is responsible for performing GHG emission calculations, preparing and submitting the annual GHG inventory report to the EPA Climate Leaders staff. It is the responsibility of the Corporate Inventory Manager to validate the data and maintain the reports submitted by the Site Inventory Managers, emissions calculations and inventory reports sent to the EPA.

25. Training:

It is the responsibility of the Corporate Inventory Manager to read all Climate Leaders requirements regarding inventory guidance, reporting requirements, and setting GHG emission reduction goals. The Corporate Inventory Manager shall forward relevant inventory requirements to the Site Inventory Managers.

Quarterly meetings will be held with Site Inventory Managers and the Corporate Inventory Manager. Topics of discussion will include, but not be limited to, current inventory status, new GHG sources, additional or new inventory guidance. Minutes will be kept of all meetings and archived in the Climate Leaders file on the FSC Salt Lake server.

New employees that will have responsibilities for any part of GHG inventory management shall be trained by the Site Inventory Manager and/or the Corporate Inventory Manager.

26. Document Retention and Control Policy:

All GHG inventory resource usage data sent to the Corporate Inventory manager, the GHG emissions calculations and reports sent to the EPA Climate Leaders shall be retained indefinitely in electronic format. These document will be stored in the 'Climate Leaders' folder on the Salt Lake sever

A current copy of the GHG Inventory Management Plan shall be available for viewing on the internal Corporate EHS web page.

Auditing and Verification

27. Internal Auditing:

Periodic auditing shall be preformed regarding methods of tracking the types, quantities and sources of GHG gasses. The audit procedures are documented in the corporate FSC 'Air Quality Standards and Checklist'.

28. External Validation and/or Verification- TBD

29. Management Review

The Corporate Inventory Manager shall include relevant information regarding GHG management in the monthly EHS report to the corporate senior management. This information includes data management, goal setting and progress toward achieving GHG emissions goals. Senior management shall provide direction appropriate to improving GHG emissions performance and achieving goals.

30. Corrective Action:

Corrective actions are identified in section 23

Attachment 1 continued

HFCs	Formula	Pounds Used
HFC-23	CHF ₃	
HFC-32	CH ₂ F ₂	
HFC-41	CH ₃ F	
HFC-125	C ₂ HF ₅	
HFC-134	C ₂ H ₂ F ₄	
HFC-134a	C ₂ H ₂ F ₄	
HFC-143	C ₂ H ₃ F ₃	
HFC-143a	C ₂ H ₃ F ₃	
HFC-152a	C ₂ H ₄ F ₂	
HFC-227ea	C ₃ HF ₇	
HFC-236fa	C ₃ H ₂ F ₆	
HFC-245ca	C ₃ H ₃ F ₅	
HFC-4310mee	C ₅ H ₂ F ₁₀	
PFCs	Formula	Pounds Used
PFC-14	CF ₄	
PFC-116	C ₂ F ₆	
PFC-218	C ₃ F ₈	
PFC-3-1-10	C ₄ F ₁₀	
PFC-c318	c-C ₄ F ₈	
PFC-4-1-12	C ₅ F ₁₂	
PFC-5-1-14	C ₆ F ₁₄	
Refrigerant Blends		
ASHRAE #	Trade Name	Pounds Used
R-401A	MP-39	
R-401B	MP-66	
R-401C	MP-52	
R-402A	HP-80	
R-402B	HP-81	
R-403B	R-403B	
R-404A	HP-62, FX-70	
R-406A	GHG	
R-407A	KLEA 407A	
R-407B	KLEA 407B	
R-407C	KLEA 407C,	
R-408A	FX-10	
R-409A	FX-56	
R-410A	AZ-20, Puron,	
R-410B	AC9100	
R-411A	R-411A	
R-411B	R-411B	
R-414A	GHG-X4	
R-414B	Hot Shot	
R-500		
R-507	AZ-50	
R-508A	Klea 5R3	
R-508B	Suva 95	

SEMI CONDUCTOR Site	FAIRCHILD SEMICONDUCTOR EHS METRICS - Q4 - FY 2003 Full Year Total													Totals
	FME	FSL	FMT	FBK	FPM	FCP	FSC	FSG	FKL	FWC	FCA	FHQ	FCO	
Factoring Data														
Headcount														0
Total Hours Worked														0
6 Inch Equivalent Mask Moves - Wafer Fabs Only														0.0
Square Inches of Silicon Produced														0.0
1K - 14 Pin Equivalents - Test/Assembly Only														0
Safety and Health														
Recordable Injuries and Illnesses														0
Recordable Injury/Illness Incidence Rate														#DIV/0!
Lost Workday Injuries and Illnesses														0
Lost Workday Injury/Illness Case Rate														#DIV/0!
Lost Workdays - Current														0
Lost Workdays - Historical														0
Lost Workday Incidence Rate - Current														#DIV/0!
Regulatory Inspections														0
Notices of Violation														0
Regulatory Fines (\$US)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Workers Comp Costs - Current (US only)														\$0.00
Workers Comp Costs - Historical (US only)														\$0.00
Environment														
Water Use (gallons)														0.0
Ultra Pure Water Use (gallons)														0.0
Energy Use (kilowatt hours)														0.0
Hazardous/Scheduled Waste - Total (tons)														0.0
Hazardous/Scheduled Waste - Recycled (tons)														0.0
Nonhazardous/Nonscheduled Waste - Total (tons)														0.0
Nonhaz./Nonsched. Waste - Total Recycled (tons)														0.0
Glass Recycled (tons)														0.0
Plastic Recycled (tons)														0.0
Paper Recycled (tons)														0.0
Metals Recycled (tons)														0.0
Other Recycled (tons)														0.0
Regulatory Inspections														0
Notices of Violation														0
Regulatory Fines (\$US)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PFC Usage (global warming gases) - (lbs)														
Perfluoromethane - CF ₄														0.0
Perfluoroethane - C ₂ F ₆														0.0
Perfluoropropane - C ₃ F ₈														0.0
Trifluoromethane - CHF ₃														0.0
Nitrogen Trifluoride - NF ₃														0.0
Sulfur Hexafluoride - SF ₆														0.0
Octafluorocyclobutane - C ₄ F ₈														0.000
Other Environmental														
Class 1 ODS Consumption (lbs) (annual Q4 only)													0.0	0.0
Class 2 ODS Consumption (lbs) (annual Q4 only)													0.0	0.0
VOC Emissions (lbs)														0.0
EHS Standards Compliance Score														
EHS Management Standards Score	100%	100%	100%	100%	93%	93%	24%	3%		36%	36%			
Environmental Standards Score	93%	98%	92%	93%	98%	96%	33%	17%		45%	37%			
Health & Safety Standards Score	90%	84%	90%	85%	89%	89%	33%	6%		59%	41%			
Overall EHS Stds. Compliance Score	92%	88%	92%	88%	91%	91%	31%	7%		53%	39%			66%

DEFINITIONS:

Total Hours Worked = All hours actually worked by employees at the site. Includes overtime. Does not include vacation, sick leave, or holiday hours.

6 Inch Equivalent Mask Move = 4 inch MM/2.25, 5 inch MM/1.44, and 8 inch MM X 1.78

Recordable Injury/Illness = Work-related injuries and illnesses that meet the SIA definition of recordable. Rate = # recordables/100 workers/year

Lost Workday Injury/Illness = Work-related injury/illness resulting in 1 or more lost workdays beyond the date of the injury/illness. Rate = # cases/100workers/year

Lost Workdays - Current = Total lost workdays this year for injuries/illnesses occurring this year. Does not include the day of the injury/illness.

Lost Workday Incident Rate - Current = # current lost workdays/100 workers/year

Lost Workdays - Historical = Workdays lost this year due to injuries or illnesses that occurred prior to this year.

Workers Comp Costs - Current = Costs actually paid for claims occurring in this fiscal year.

Workers Comp Costs - Historical = Costs paid this year for open claims that occurred in previous fiscal years.

Recycled Hazardous/Scheduled Waste = Includes waste oils and solvents used as fuel for incineration or other purposes. South Portland hazardous waste includes waste fluoride shipped to DuPont for treatment.