DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION
Revision 3
3/27/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Stack Height (m)**	**Modeled Diameter (m)**	**Stack Exit Temperature (K)**	**Stack Exit Flowrate (acfm)**	**Stack Exit Velocity (m/s)**	**Stack orientation (e.g., horizontal, rain cap)**
Point Source(s)										
Boiler	1	377688.0	4750349.0	1353.6	6.1	0.91	478	20000	14.3	Vertical
Hot Oil Heater	2	377679.0	4750356.0	1353.3	6.1	0.91	478	20000	14.3	Vertical
M.G. Silicon Bin Vent	3	377463.0	4750554.0	1350.7	7.3	0.15	293	800	20.7	Vertical
M.G. Silicon Primary Hopper	4	377460.0	4750520.8	1349.7	19.8	0.05	293	200	44.8	Vertical
M.G. Silicon Secondary Hopper	5	377470.0	4750519.0	1350.0	18.3	0.05	293	150	33.6	Vertical
Lime Storage Silo	6	378143.0	4750055.0	1353.0	6.1	0.30	293	1200	7.8	Vertical
Cooling Tower 1	7	377558.5	4750476.0	1354.1	9.1	10.67	302		5.3	Vertical
Cooling Tower 2	7	377566.0	4750487.5	1354.5	9.1	10.67	302		5.3	Vertical
Cooling Tower 3	7	377574.0	4750500.0	1354.3	9.1	10.67	302		5.3	Vertical
Laboratory Venting System	8	377923	4750113	1352.6	6.1	0.30	293	2600	16.8	Vertical
Chlorosilane Venting System	9	377618	4750300	1352	8.2	0.36	293	3200	15.1	Vertical
Relief Vent System	10	377646	4750273	1352.1	8.2	0.36	293	3200	15.1	Vertical
Emergency Generator	11	377521	4750503	1352.4	7.9	0.61	700	21000	34.0	Vertical
Fire Water Pump	12	378118	4750038	1353	6.1	0.30	700	4500	29.1	Vertical
(insert more rows as needed)										

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION
Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

FUGITIVE SOURCE PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Release Height (m)**	**Easterly Length (m)**	**Northerly Length (m)**	**Angle from North (°)**	**Initial Vertical Dimension (m)**	**Initial Horizontal Dimension (m)**
Area Source(s)										
HCL from Valves	13	377,686	4,750,248	1,350.30	1.52	45.72	51.82	35.00	2.44	
Volume Source(s)										
(insert more rows as needed)										

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

BUILDING AND STRUCTURE INFORMATION

1.	2.	3.	4.	5.	6.	7.
Building ID Number	**Length (ft)**	**Width (ft)**	**Base Elevation (m)**	**Building Height (m)**	**Number of Tiers**	**Description/Comments**
POSTPROC	180.00	168.00	1354.00	3.6576	1	Post Processing Building
POLYROOM	200.00	100.00	1353.00	24.384	1	Poly Building
COOLTWOR	65.00	216.00	1353.00	9.144	1	Cooling Tower
DMWATER	103.00	148.00	1353.00	5.49	1	D.M. Water Building
SHIPWRHS	123.00	186.00	1353.00	6.096	1	Shipping Warehouse
PUMPHS12	44.00	79.00	1353.00	3.66	1	Pump House 1 and 2
WWTREAT	38.00	82.00	1353.00	3.66	1	Waste Water Treatment Building
SUPERSAC	72.00	56.00	1350.30	6.10	1	Super Sack Staging
GDHOUSE	50.00	23.00	1350.60	3.66	1	Guard House
MNTWRHS	138.00	79.00	1351.90	10.36	1	Maintenance and Warehouse
BLRBLDG	23.00	32.80	1353.20	5.49	1	
BRCHLLRS	60.00	72.00	1352.90	6.10	1	Brine Chillers
ADMIN	72.00	33.00	1349.92	22.86	1	Administration Building
LAB	115.00	66.00	1350.43	3.05	1	TCS Lab

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION
Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	**Stack ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Point Source(s)													
Boiler	1	0.40	1.74	0.03	0.14	5.24	22.94	4.40	19.27	0.29	1.26	0.00	0.00
Hot Oil Heater	2	0.40	1.74	0.03	0.14	5.24	22.94	4.40	19.27	0.29	1.26	0.00	0.00
M.G. Silicon Bin Vent	3	0.14	0.60										
M.G. Silicon Primary Hopper	4	0.03	0.15										
M.G. Silicon Secondary Hopper	5	0.03	0.11										
Lime Storage Silo	6	0.21	0.90										
Cooling Tower	7	1.47	6.43										
Laboratory Venting System	8	0.16	0.70	0.16	0.70	0.96	4.20						
Chlorosilane Venting System	9	1.83	8.01										
Relief Vent System	10	0.73	3.20										
Emergency Generator	11	3.28	0.82	18.97	4.74	112.56	28.14	25.80	6.45	3.31	0.82		
Fire Water Pump	12	0.56	0.14	3.24	0.81	19.20	4.80	4.40	1.10	0.56	0.14		
name of the emissions unit13													
name of the emissions unit14													
name of the emissions unit15													
name of the emissions unit16													
name of the emissions unit17													
name of the emissions unit18													
name of the emissions unit19													
name of the emissions unit20													
name of the emissions unit21													
(insert more rows as needed)													
Total		9.23	24.56	22.43	6.53	143.20	83.03	39.00	46.09	4.44	3.48	0.00	0.00

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													

Instructions for Form EI-CP1

This form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of all emission units at the facility. This name must match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this point source. In this form, emission rates for a point source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 2
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													
Cleaning	13									0.46	2.00		
name of fugitive source2													
name of fugitive source3													
name of fugitive source4													
name of fugitive source5													
name of fugitive source6													
name of fugitive source7													
name of fugitive source8													
name of fugitive source9													
name of fugitive source10													
name of fugitive source11													
name of fugitive source12													
name of fugitive source13													
name of fugitive source14													
name of fugitive source15													
name of fugitive source16													
name of fugitive source17													
name of fugitive source18													
name of fugitive source19													
name of fugitive source20													
name of fugitive source21													
(insert more rows as needed)													
Total										0.46	2.00		

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 2 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Fugitive Source(s)													

Instructions for Form EI-CP2

This form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

Fugitive emissions are those emissions that cannot reasonably be made to pass through a stack or vent or equivalent opening. Examples include coal piles, unpaved roads, etc. Fugitive emission sources at your plant must be included in this form.

1. Provide the name of all fugitive sources at the facility. This name must match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the fugitive source. This ID number should match ID numbers on other submittals to IDEQ and within this application.

3. Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, emission rates for a fugitive source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, then, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	**Stack ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Point Source(s)													
Boiler	1	0.11	0.48	0.01	0.04	1.43	6.26	1.20	5.26	0.08	0.34	0.00	0.00
Hot Oil Heater	2	0.11	0.48	0.01	0.04	1.43	6.26	1.20	5.26	0.08	0.34	0.00	0.00
M.G. Silicon Bin Vent	3	0.05	0.22										
M.G. Silicon Primary Hopper	4	0.01	0.04										
M.G. Silicon Secondary Hopper	5	0.01	0.04										
Lime Storage Silo	6	0.19	0.34										
Cooling Tower	7	0.74	3.22										
Laboratory Venting System	8	0.05	0.20	0.05	0.20	0.28	1.20						
Chlorosilane Venting System	9	0.69	3.01										
Relief Vent System	10	0.27	1.20										
Emergency Generator	11	0.94	0.23	5.42	1.35	32.16	8.04	7.37	1.84	0.96	0.23		
Fire Water Pump	12	(0.54)	(0.14)	2.21	0.55	3.70	0.93	1.06	0.27	(0.68)	(0.17)		
name of the emissions unit13													
name of the emissions unit14													
name of the emissions unit15													
name of the emissions unit16													
name of the emissions unit17													
name of the emissions unit18													
name of the emissions unit19													
name of the emissions unit20													
name of the emissions unit21													
(insert more rows as needed)													
Total		2.61	9.31	7.70	2.18	39.00	22.68	10.83	12.62	0.44	0.75	0.00	0.00

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													

Instructions for Form EI-CP3

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with this permit application. This information may be used by the IDEQ to perfo

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this emission unit. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the emis

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCES

1.	2.	3. Air Pollutant Maximum Change in Emissions Rate (lbs/hr or t/yr)											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													
Cleaning	13									0.23	1.00		
name of fugitive source2													
name of fugitive source3													
name of fugitive source4													
name of fugitive source5													
name of fugitive source6													
name of fugitive source7													
name of fugitive source8													
name of fugitive source9													
name of fugitive source10													
name of fugitive source11													
name of fugitive source12													
name of fugitive source13													
name of fugitive source14													
name of fugitive source15													
name of fugitive source16													
name of fugitive source17													
name of fugitive source18													
name of fugitive source19													
name of fugitive source20													
name of fugitive source21													
(insert more rows as needed)													
Total										0.23	1.00		

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Hoku Materials, Inc**
Facility Name:	Polysilicon Plant
Facility ID No.:	005-00058
Brief Project Description:	Construction of a 4,000 Mton/yr Polysilicon Production Facility

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCES

1.	2.	3. Air Pollutant Maximum Change in Emissions Rate (lbs/hr or t/yr)											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													

Instructions for Form EI-CP4

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with this permit application. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID Number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the fugitive source. This ID should match IDs on other submittals to IDEQ and within this application.

3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the fugitive source has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating proposed potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

Hoku Scientific, Inc.

Polysilicon Processing Facility Pocatello, Idaho

Emission Inventory

Emisison Unit ID	Source	Pollutant															
		PM		PM-10		VOC		SO_2		NO_X		CO		Lead		HCl	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1	Boiler	0.40	1.74	0.40	1.74	0.29	1.26	0.031	0.14	5.24	22.943	4.40	19.27	2.62E-05	1.15E-04		
2	Hot Oil Heater	0.40	1.74	0.40	1.74	0.29	1.26	0.031	0.14	5.24	22.94	4.40	19.27	2.62E-05	1.15E-04		
3	M.G. Silicon Bin Vent	0.14	0.60	0.14	0.60												
4	M.G. Silicon Primary Hopper	0.03	0.15	0.03	0.15												
5	M.G. Silicon Secondary Hopper	0.03	0.11	0.03	0.11												
6	Lime Storage Silo	0.21	0.90	0.21	0.90												
7	Cooling Tower	1.47	6.4333	1.47	6.43												
8	Lab Scrubber	0.16	0.70	0.16	0.70			0.16	0.70	0.96	4.20					0.01	0.03
9	Chlorosilane Scrubber	1.83	8.01	1.83	8.01											0.37	1.60
10	Relief Vent Scrubber	0.73	3.20	0.73	3.20											0.18	0.80
11	Emergency Generator	3.28	0.82	3.28	0.82	3.31	0.82	18.97	4.74	112.56	28.14	25.80	6.45				
12	Fire Water Pump	0.56	0.14	0.56	0.14	0.56	0.14	3.24	0.81	19.20	4.80	4.40	1.10				
13	Fugitive Emissions					0.46	2.00									0.78	3.40
TOTAL		**9.23**	**24.56**	**9.23**	**24.56**	**4.90**	**5.49**	**22.43**	**6.53**	**143.20**	**83.03**	**39.00**	**46.09**	**0.00**	**0.00**	**1.33**	**5.83**

Boiler No. 1 - Natural Gas

Boiler Capacity MMBtu/hr
55.0

Maximum[b] scf/hr
52,381

Maximum hrs/yr
8,760

Criteria Pollutant Estimates, <100 MMBTU/hr (AP-42, Tables 1.4-1 and 1.4-2, 9/98)

	Pollutant					
	SO_2	NO_X[c]	CO	PM/PM-10[a]	VOC	Lead
Emission Factor, lb/10^6 scf	0.6	100	84	7.6	5.5	0.0005
Emissions, lb/hr	0.0314	5.24	4.40	0.40	0.2881	2.62E-05
Emissions, ton/yr	0.1377	22.943	19.272	1.744	1.262	1.15E-04

Notes:

[a]PM factor is sum of filterable PM plus condensable PM

[b]Heat content of natural gas = 1,050 BTU/scf

[c]Boiler is controlled with low NOx burners and flue gas recirculation

Hot Oil Heater - Natural Gas

Heater Capacity MMBtu/hr
55.0

Maximum[b] scf/hr
52,381

Maximum hrs/yr
8,760

Criteria Pollutant Estimates, <100 MMBTU/hr (AP-42, Tables 1.4-1 and 1.4-2, 9/98)

	Pollutant					
	SO_2	NO_X[c]	CO	PM/PM-10[a]	VOC	Lead
Emission Factor, lb/10^6 scf	0.6	100	84	7.6	5.5	0.0005
Emissions, lb/hr	0.0314	5.24	4.40	0.40	0.29	2.62E-05
Emissions, ton/yr	0.14	22.94	19.27	1.74	1.26	1.15E-04

Notes:

[a]PM factor is sum of filterable PM plus condensable PM.

[b]Heat content of natural gas = 1,050 BTU/scf;

[c]Boiler is controlled with low NOx burners and flue gas recirculation

Diesel Emergency Generator

Generator Capacity Kw
3,500

Generator Capacity Hp
4,690

Generator Capacity MMBtu/hr
11.94

Maximum hrs/yr
500

Criteria Pollutant Estimates, >600 Hp (AP-42, Tables 3.4-1 and 3.4-2, 10/96)

	Pollutant				
	SO_2[b]	NO_X	CO	PM/PM-10[a]	VOC
Emission Factor, lb/hp-hr	4.05E-03	0.024	5.50E-03	7.00E-04	7.05E-04
Emissions, lb/hr No control	18.9711	112.6	25.7950	3.2830	3.3065
Emissions, ton/yr No control	4.743	28.140	6.449	0.821	0.83

Notes:

[a]PM factor is sum of filterable PM plus condensable PM.

[b]Assumes distillate fuel sulfur content of 0.5%

Diesel Fired Water Pump

Generator Capacity Hp

800

Generator Capacity MMBtu/hr

2.04

Maximum hrs/yr

500

Criteria Pollutant Estimates, >600 Hp (AP-42, Tables 3.4-1 and 3.4-2, 10/96)

	Pollutant				
	SO_2	NO_X	CO	PM/PM-10[a]	VOC
Emission Factor, lb/hp-hr	4.05E-03	0.024	5.50E-03	7.00E-04	7.05E-04
Emissions, lb/hr No control	3.2360	19.2000	4.4000	0.5600	0.5640
Emissions, ton/yr No control	0.809	4.800	1.1000	0.140	0.14

Notes:

[a]PM factor is sum of filterable PM plus condensable PM.

M.G. Silicon Process Emissions

	Capacity ft^3	Exhaust Flow acfm	Control Efficiency gr/dscf[b]	PM/PM-10 Emission Rate lb/hr	PM/PM-10 Emission Rate tpy[a]	Silicon Emission Rate lb/hr	Silicon Emission Rate tpy[a]
M.G. Silicon Bin Vent	250	800	0.02	0.137	0.601	0.14	0.60
M.G. Silicon Primary Feed Hopper	15	200	0.02	0.034	0.150	0.03	0.15
M.G. Silicon Secondary Feed Hoppe	20	150	0.02	0.026	0.113	0.03	0.11
Total				**0.20**	**0.86**	**0.20**	**0.86**

[a]PM-10/PM emissions are in the form of Silicon.
[b]Baghouse and fabric filter control efficiency

Lime Storage Process Emissions

	Capacity ft^3	Exhaust Flow acfm	Control Efficiency gr/dscf[b]	PM/PM-10 Emission Rate lb/hr	PM/PM-10 Emission Rate tpy[a]	Calcium Carbonate Emission Rate lb/hr	Calcium Carbonate Emission Rate tpy
Lime Storage Silo	900	1200	0.02	0.21	0.90	0.21	0.901
Total				**0.21**	**0.90**	**0.21**	**0.90**

[a]PM-10/PM emissions are in the form of Calcium Carbonate.
[b]Baghouse control efficiency

Cooling Tower Emissions

	Total Liquid Drift Factor (lb/1000 gal)[b]	TDS Content Fraction	Emission Factor (lb/1000 gal)	Evaporation Rate[c] (gal/hr)	PM/PM-10 (lb/hr)	PM/PM-10 (tpy)
Cooling Tower	1.7	0.012000	0.020400	72,000	1.47	6.43
Total					**1.47**	**6.43**

[a]PM-10 emission factor assumed to be equal to PM emission factor.
[b]AP-42 Table 13.4-1 Total liquid drift for induced draft tower

Scrubber Emissions

	PM/PM-10 Emission Rate lb/hr	PM/PM-10 Emission Rate tpy[b]	SOx Emission Rate lb/hr	SOx Emission Rate tpy[b]	NOx Emission Rate lb/hr	NOx Emission Rate tpy[b]	HCl Emission Rate lb/hr	HCl Emission Rate tpy[b]	HNO3 Emission Rate lb/hr	HNO3 Emission Rate tpy[b]	HF Emission Rate lb/hr	HF Emission Rate tpy[b]
Lab Scrubber[a]	0.16	0.70	0.16	0.70	0.96	4.20	0.007	0.03	0.005	0.02	0.005	0.02
Chlorosilane Scrubber[a]	1.83	8.01					0.37	1.60				
Relief Vent Scrubber[a]	0.73	3.20					0.18	0.80				
Total	**2.72**	**11.91**	**0.16**	**0.70**	**0.96**	**4.20**	**0.55**	**2.43**	**0.00**	**0.02**	**0.00**	**0.02**

[a]Based on emissions from 4,000 Mton/yr polysilicon plant

[b]Annual production =8,760

Fugitive Emission Calculations

Source	VOC (lb/hr)	VOC (tpy)	HCl (lb/hr)	HCl (tpy)
Valves and Fittings[a]			0.78	3.40
Cleaning[a]	0.46	2.0		

[a]Based on emissions from 1,800 Mton/yr polysilicon plant and revised to reflect actual operations at Pocatello facility.

Grain Loading Calculations

Source	PM lb/hr	Flow rate, dscf/m @3% O_2	Grain Loading, g/dscf @ 3%	Grain Loading Standard, grain/dscf	Meet Grain Loading Standard?
Boiler	0.40	20,000	0.0023	0.015	Yes
Hot Oil Heater	0.40	20,000	0.0023	0.015	Yes

Process Weight Calculations

Source	Process Weight, lb/hr	E, Emission Limit, lb/hr	PM Emissions, lb/hr	Meet E?
Silicon Storage Bin	2,000	4.304	0.14	Yes
Silicon Feed Hopper	2,000	4.304	0.03	Yes
Silicon Lock Hopper	2,000	4.304	0.03	Yes
Lime Storage System	800	2.484	0.21	Yes
Cooling Tower	600,480	30.621	1.47	Yes
Lab Scrubber	300	1.379	0.16	Yes
Chlorosilane Scrubber	600	2.090	1.83	Yes
Relief Vent Scrubber	600	2.090	0.73	Yes

$E = 0.045*(PW)^{0.60}$ E= Emission Limit < 9,250 lb/hr PW

$E = 1.10*(PW)^{0.25}$ E= Emission Limit ≥ 9,250 lb/hr PW

TOXIC AIR POLLUTANT CALCULATIONS

TABLE 1. BOILER #1 - NON-CARCINOGENS
NATURAL GAS

Pollutant	Emission Factor (lb/1,000,000 scf)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Barium	4.4E-03	2.3E-04	1.0E-03	2.9E-05
Chromium	1.4E-03	7.3E-05	3.2E-04	9.2E-06
Cobalt	8.4E-05	4.4E-06	1.9E-05	5.5E-07
Copper	8.5E-04	4.5E-05	2.0E-04	5.6E-06
Hexane	1.8E+00	9.4E-02	4.1E-01	1.2E-02
Manganese	3.8E-04	2.0E-05	8.7E-05	2.5E-06
Mercury	2.6E-04	1.4E-05	6.0E-05	1.7E-06
Molybdenum	1.1E-03	5.8E-05	2.5E-04	7.3E-06
Naphthalene	6.1E-04	3.2E-05	1.4E-04	4.0E-06
Pentane	2.6E+00	1.4E-01	6.0E-01	1.7E-02
Phosphorous	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Selenium	2.4E-05	1.3E-06	5.5E-06	1.6E-07
Toluene	3.4E-03	1.8E-04	7.8E-04	2.2E-05
o-Xylene	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Vanadium	2.3E-03	1.2E-04	5.3E-04	1.5E-05
Zinc	2.9E-02	1.5E-03	6.7E-03	1.9E-04

TABLE 2. BOILER #1 - CARCINOGENS
NATURAL GAS

Pollutant	Emission Factor (lb/1,000,000 scf)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Arsenic	2.0E-04	1.0E-05	4.6E-05	1.3E-06
Benzene	2.1E-03	1.1E-04	4.8E-04	1.4E-05
Beryllium	1.2E-05	6.3E-07	2.8E-06	7.9E-08
Cadmium	1.1E-03	5.8E-05	2.5E-04	7.3E-06
Formaldehyde	7.5E-02	3.9E-03	1.7E-02	5.0E-04
Nickel	2.1E-03	1.1E-04	4.8E-04	1.4E-05
Benzo(a)pyrene	1.2E-06	6.3E-08	2.8E-07	7.9E-09
Benz(a)anthracene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Benzo(b)fluoranthene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Benzo(k)fluoranthene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Chrysene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Dibenzo(a,h)anthracene	1.2E-06	6.3E-08	2.8E-07	7.9E-09
Indeno(1,2,3-cd)pyrene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Total PAHs	1.1E-05	6.0E-07	2.6E-06	7.5E-08

Notes: Emissions based on boiler operating at maximum rate of 55 MMBTU/hr.
Assumed 1,050 BTU/scf heat content of natural gas.
Emissions based on 8,760 hours/year of operation.

Source: AP-42 Tables 1.4-3 and 1.4-4, 7/98.

TOXIC AIR POLLUTANT CALCULATIONS

TABLE 3. HOT OIL HEATER - NON-CARCINOGENS
NATURAL GAS

Pollutant	Emission Factor (lb/1,000,000 scf)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Barium	4.4E-03	2.3E-04	1.0E-03	2.9E-05
Chromium	1.4E-03	7.3E-05	3.2E-04	9.2E-06
Cobalt	8.4E-05	4.4E-06	1.9E-05	5.5E-07
Copper	8.5E-04	4.5E-05	2.0E-04	5.6E-06
Hexane	1.8E+00	9.4E-02	4.1E-01	1.2E-02
Manganese	3.8E-04	2.0E-05	8.7E-05	2.5E-06
Mercury	2.6E-04	1.4E-05	6.0E-05	1.7E-06
Molybdenum	1.1E-03	5.8E-05	2.5E-04	7.3E-06
Naphthalene	6.1E-04	3.2E-05	1.4E-04	4.0E-06
Pentane	2.6E+00	1.4E-01	6.0E-01	1.7E-02
Phosphorous	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Selenium	2.4E-05	1.3E-06	5.5E-06	1.6E-07
Toluene	3.4E-03	1.8E-04	7.8E-04	2.2E-05
o-Xylene	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Vanadium	2.3E-03	1.2E-04	5.3E-04	1.5E-05
Zinc	2.9E-02	1.5E-03	6.7E-03	1.9E-04

TABLE 4. HOT OIL HEATER - CARCINOGENS
NATURAL GAS

Pollutant	Emission Factor (lb/1,000,000 scf)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Arsenic	2.0E-04	1.0E-05	4.6E-05	1.3E-06
Benzene	2.1E-03	1.1E-04	4.8E-04	1.4E-05
Beryllium	1.2E-05	6.3E-07	2.8E-06	7.9E-08
Cadmium	1.1E-03	5.8E-05	2.5E-04	7.3E-06
Formaldehyde	7.5E-02	3.9E-03	1.7E-02	5.0E-04
Nickel	2.1E-03	1.1E-04	4.8E-04	1.4E-05
Benzo(a)pyrene	1.2E-06	6.3E-08	2.8E-07	7.9E-09
Benz(a)anthracene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Benzo(b)fluoranthene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Benzo(k)fluoranthene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Chrysene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Dibenzo(a,h)anthracene	1.2E-06	6.3E-08	2.8E-07	7.9E-09
Indeno(1,2,3-cd)pyrene	1.8E-06	9.4E-08	4.1E-07	1.2E-08
Total PAHs	1.1E-05	6.0E-07	2.6E-06	7.5E-08

Notes: Emissions based on hot oil heater operating at maximum rate of 55 MMBTU/hr.
Assumed 1,050 BTU/scf heat content of natural gas.
Emissions based on 8,760 hours/year of operation.

Source: AP-42 Tables 1.4-3 and 1.4-4, 7/98.

TOXIC AIR POLLUTANT CALCULATIONS

TABLE 5. EMERGENCY GENERATOR- NON-CARCINOGENS
DIESEL FUEL

Pollutant	Emission Factor (lb/MMBtu)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Acrolein	7.88E-06	9.41E-05	2.35E-05	1.19E-05
Barium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Manganese	0.00E+00	0.00E+00	0.00E+00	0.00.E+00
Mercury	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Moybdenum	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Naphthalene	1.30E-04	1.55E-03	3.88E-04	1.96E-04
Pentane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phosphorous	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Selenium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	2.81E-04	3.36E-03	8.39E-04	4.23E-04
o-Xylene	1.93E-04	2.30E-03	5.76E-04	2.90E-04
Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zinc	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TABLE 6. EMERGENCY GENERATOR - CARCINOGENS
DIESEL FUEL

Pollutant	Emission Factor (lb/MMBtu)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Arsenic	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	7.76.E-04	9.27E-03	2.32E-03	1.17E-03
Beryllium	0.00E+00	0.00E+00	0.00E+00	0.E+00
Cadmium	0.00E+00	0.00E+00	0.00E+00	0.E+00
Formaldehyde	7.89E-05	9.42E-04	2.36E-04	1.19E-04
Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo(a)pyrene	2.57E-07	3.07E-06	7.67E-07	3.87E-07
Benz(a)anthracene	6.22E-07	7.43E-06	1.86E-06	9.36E-07
Benzo(b)fluoranthene	1.11E-06	1.33E-05	3.31E-06	1.67E-06
Benzo(k)fluoranthene	2.18E-07	2.60E-06	6.51E-07	3.28E-07
Chrysene	1.53E-06	1.83E-05	4.57E-06	2.30E-06
Dibenzo(a,h)anthracene	3.46E-07	4.13E-06	1.03E-06	5.21E-07
Indeno(1,2,3-cd)pyrene	4.14E-07	4.94E-06	1.24E-06	6.23E-07
Total PAHs	4.50E-06	5.37E-05	1.34E-05	6.77E-06

Notes: * Emission factor units in pounds per MMBTU.
Emission estimates represent maximum emissions based on burning diesel fuel and based on AP-42 Tables 3.4-3 and 3.4-4.
Emissions based on generator operating with maximum rating of 11.9 MMBtu/hour.
Emissions based on 500 hours/year of operation.

TOXIC AIR POLLUTANT CALCULATIONS

TABLE 7. FIRE PUMP- NON-CARCINOGENS
DIESEL FUEL

Pollutant	Emission Factor (lb/MMBtu)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Acrolein	7.88E-06	1.61E-05	4.01E-06	2.02E-06
Barium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hexane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Manganese	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mercury	0.00E+00	0.00E+00	0.00E+00	0.00.E+00
Moybdenum	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Naphthalene	1.30E-04	2.65E-04	6.62E-05	3.34E-05
Pentane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phosphorous	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Selenium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	2.81E-04	5.72E-04	1.43E-04	7.21E-05
o-Xylene	1.93E-04	3.93E-04	9.83E-05	4.95E-05
Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zinc	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TABLE 8. FIRE PUMP - CARCINOGENS
DIESEL FUEL

Pollutant	Emission Factor (lb/MMBtu)	Emissions (lb/hr)	Emissions (tons/yr)	Emissions (grams/sec)
Arsenic	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	7.76.E-04	1.58E-03	3.95E-04	1.99E-04
Beryllium	0.00E+00	0.00E+00	0.00E+00	0.E+00
Cadmium	0.00E+00	0.00E+00	0.00E+00	0.E+00
Formaldehyde	7.89E-05	1.61E-04	4.02E-05	2.03E-05
Nickel	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo(a)pyrene	2.57E-07	5.24E-07	1.31E-07	6.60E-08
Benz(a)anthracene	6.22E-07	1.27E-06	3.17E-07	1.60E-07
Benzo(b)fluoranthene	1.11E-06	2.26E-06	5.65E-07	2.85E-07
Benzo(k)fluoranthene	2.18E-07	4.44E-07	1.11E-07	5.60E-08
Chrysene	1.53E-06	3.12E-06	7.79E-07	3.93E-07
Dibenzo(a,h)anthracene	3.46E-07	7.05E-07	1.76E-07	8.88E-08
Indeno(1,2,3-cd)pyrene	4.14E-07	8.43E-07	2.11E-07	1.06E-07
Total PAHs	4.50E-06	9.16E-06	2.29E-06	1.15E-06

Notes: * Emission factor units in pounds per MMBTU.
Emission estimates represent maximum emissions based on burning diesel fuel and based on AP-42 Tables 3.4-3 and 3.4-4.
Emissions based on fire pump operating with maximum rating of 2.73 MMBtu/hour.
Emissions based on 500 hours/year of operation.

TOXIC AIR POLLUTANT EMISSION INVENTORY

TABLE 1. NON-CARCINOGENS

Pollutant	Max. Hourly Emissions (lb/hr)	Screening Level (lb/hr)	Modeling? (Y/N)	Emissions (tons/yr)
Acrolein	1.10E-04	1.7E-02	N	2.75E-05
Barium	4.61E-04	3.3E-02	N	2.02E-03
Chromium	1.47E-04	3.3E-02	N	6.42E-04
Cobalt	8.80E-06	3.3E-03	N	3.85E-05
Copper	8.90E-05	6.7E-02	N	3.90E-04
Hexane	1.89E-01	1.2E+01	N	8.26E-01
Manganese	3.98E-05	3.33E-01	N	1.74E-04
Mercury	2.72E-05	3.E-03	N	1.19E-04
Molybdenum	1.15E-04	6.67E-01	N	5.05E-04
Naphthalene	1.88E-03	3.33E+00	N	7.34E-04
Pentane	2.72E-01	1.18E+02	N	1.19E+00
Selenium	2.51E-06	1.3E-02	N	1.10E-05
Toluene	4.28E-03	2.5E+01	N	2.54E-03
o-Xylene	2.70E-03	2.9E+01	N	6.74E-04
Vanadium	2.41E-04	3.0E-03	N	1.06E-03
Zinc	3.04E-03	6.7E-01	N	1.33E-02
Silicon	1.97E-01	6.7E-01	N	8.63E-01
Calcium Carbonate	2.06E-01	6.7E-01	N	9.01E-01
Hydrogen Chloride	1.33E+00	5.0E-02	Y	5.83E+00
Nitric Acid	4.57E-03	3.3E-01	N	2.00E-02

TABLE 2. CARCINOGENS

Pollutant	Max. Hourly Emissions (lb/hr)	Screening Level (lb/hr)	Modeling? (Y/N)	Emissions (tons/yr)
Arsenic	2.10E-05	1.5E-06	Y	9.18E-05
Benzene	1.11E-02	8.0E-04	Y	3.68E-03
Beryllium	1.26E-06	2.8E-05	N	5.51E-06
Cadmium	1.15E-04	3.7E-06	Y	5.05E-04
Formaldehyde	8.96E-03	5.1E-04	Y	3.47E-02
Nickel	2.20E-04	2.7E-05	Y	9.64E-04
Benzo(a)pyrene	3.72E-06	2.0E-06	Y	1.45E-06
Benz(a)anthracene	8.88E-06	NA	NA	3.00E-06
Benzo(b)fluoranthene	1.57E-05	NA	NA	4.71E-06
Benzo(k)fluoranthene	3.24E-06	NA	NA	1.59E-06
Chrysene	2.16E-05	NA	NA	6.17E-06
Dibenzo(a,h)anthracene	4.96E-06	NA	NA	1.76E-06
Indeno(1,2,3-cd)pyrene	5.98E-06	NA	NA	2.27E-06
Total PAHs	6.41E-05	2.0E-06	Y	2.09E-05

HAPs Inventory

Pollutant	Emissions (tons/yr)
Arsenic	9.18E-05
Acrolein	2.75E-05
Benzene	3.68E-03
Beryllium	5.51E-06
Cadmium	5.05E-04
Formaldehyde	3.47E-02
Chromium	6.42E-04
Lead	2.29E-04
Mercury	1.19E-04
Naphthalene	7.34E-04
Nickel	9.64E-04
Xylene	6.74E-04
Selenium	1.10E-05
Toluene	2.54E-03
Dichlorobenzene	1.26E-04
Hexane	8.26E-01
Hydrogen Chloride	5.83E+00
Hydrogen Fluoride	2.00E-02
Total	**6.72E+00**

Note: Emission Factors for lead, POM, dichlorobenzene and hexane are as follows (i.e., for those HAPs not listed above):

Dichlorobenzene	1.20E-03	lb/MMscf
Lead	5.00E-04	lb/MMscf