

enSearch[home](#) [login](#)**Hercules Inc**[MASTERFILE](#)[RELATED](#)[STATUS](#)[ATTACHMENTS](#)[TASKS](#)

ID	Branch	SIC	County	Basin	Start	End
2022	Chemical	2821, 2861, 2899, 2899	Forrest	Pascagoula River	06/11/1991	

Physical Address (Primary)	Mailing Address
613 West 7th Street Hattiesburg, MS 39401	613 West 7th Street Hattiesburg, MS 39401

Telecom Type	Address or Phone
Website	www.herc.com
Work Phone Number	(601) 545-3450

Alt ID	Alt Name	Alt Type	Start	End
2803500001	Hercules Inc	Air-AIRS AFS	06/11/1991	
0800000001	Hercules, Inc.	Air-State Operating	06/11/1991	06/01/1994
0800000001	Hercules, Inc.	Air-Title V Fee Customer	11/13/1998	
0800000001	Hercules, Inc.	Air-Title V Operating	11/13/1998	11/12/2003
0800000001	Hercules, Inc.	Air-Title V Operating	04/22/2004	03/26/2009
0800000001	Hercules, Inc.	Air-Title V Operating	03/26/2009	03/31/2009
0800000001	Hercules, Inc.	Air-Title V Operating	04/07/2009	03/31/2014
2022 001	Hercules Inc	GARD	04/13/1989	
MSR110153	Hercules, Inc.	GP-Baseline	01/29/2001	12/16/2005
MSR110153	Hercules Inc	GP-Baseline	12/16/2005	03/26/2009
MSR110153	Hercules Inc	GP-Baseline	03/26/2009	09/30/2010
MSR103943	Hercules, Inc.	GP-Construction	01/03/2006	03/26/2009
MSR103943	Hercules, Inc.	GP-Construction	03/26/2009	05/31/2010
MSR110153	Hercules, Inc.	GP-Sara Title III	10/17/1997	01/29/2001
MSD008182081	Hercules, Inc.	Hazardous Waste-EPA ID	01/20/1997	
2022	Hercules Powder Company	Historic Site Name	01/01/1912	09/01/1968
2022	Hercules, Inc.	Official Site Name	09/01/1968	
MS0001830	Hercules, Inc.	Water - NPDES	09/29/1986	09/28/1991
MS0001830	Hercules, Inc.	Water - NPDES	10/22/1991	10/21/1996
MS0001830	Hercules, Inc.	Water - NPDES	09/30/1997	09/29/2002
MS0001830	Hercules, Inc.	Water - NPDES	10/31/2002	05/04/2007
MS0001830	Hercules, Inc.	Water - NPDES	05/04/2007	03/26/2009

MS0001830	Hercules, Inc.	Water - NPDES	03/26/2009	04/30/2012
MSP091286	Hercules, Inc.	Water - Pretreatment	03/12/1999	02/28/2004
MSP091286	Hercules Inc	Water - Pretreatment	11/05/2004	03/26/2009
MSP091286	Hercules Inc	Water - Pretreatment	03/26/2009	10/31/2009

Program	SubProgram	Start Date	End Date
Air	MACT Subpart H	03/08/1998	
Air	MACT Subpart PPP	06/01/1999	12/16/2005
Air	MACT Subpart W	03/08/1998	
Air	NSPS Subpart Dc	09/12/1990	
Air	RMP Program 3	08/02/2007	
Air	Title V - major	06/01/1900	
General Permit	No subprogram specified		
Hazardous Waste	Conditionally Exempt Small Quantity Generator	01/20/1997	11/21/2005
Hazardous Waste	Large Quantity Generator	01/20/1997	
Water	Baseline Stormwater	01/29/2001	
Water	Construction Stormwater	01/03/2006	
Water	NPDES Major Industrial	09/29/1986	03/12/1999
Water	NPDES Minor Industrial	09/29/1986	
Water	PT CIU	03/12/1999	
Water	PT CIU - Organic Chemicals Mfg (Subpart 414)	03/12/1999	
Water	PT SIU	03/12/1999	

Latitude	Longitude	Metadata	S / T / R	Map Links
31 ° 20 ' 9 .02 (031.335839)	89 ° 18 ' 26 .04 (089.307233)	Point Desc: PG- Plant Entrance (General). Data collected by J. Dewayne Headrick on 11/2/2005. Method: GPS Code (Psuedo Range) Standard Position (SA Off) Datum: NAD83 Type: MDEQ	Section: Township: Range:	MGIS Google Maps MapQuest

10/20/2009 10:22:57 AM

MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS 5.A.4

YEAR 2008

GAS USAGE - MCF

EMISSION POINT	DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Totals
AC001	Poly-pale nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AF001	RAD nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AG001	HRA nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AJ001	Rosin dist. nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM001	No. 5 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM002	No. 6 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM003	No. 7 package boiler	3,154	2,888	2,934	2,575	2,748	3,227	0	0	0	0	0	0	0
AN001	Carbon Reg.nat. gas Furnace	0	0	0	0	0	0	0	0	0	0	0	0	0
T5ngas		3,154	2,888	2,934	2,575	2,748	3,227	0	0	0	0	0	0	0

Kymene Process Area

KYMENE PROCESS AREA REPORT SUMMARY

As required by 5.B.7, for the entire facility, calculations and records for the tons of individual hazardous air pollutant (HAP) emitted each month and the total individual HAP emissions for each consecutive 12-month period were performed. Calculations and records for the total combined HAP's emitted for each consecutive 12-month period were performed.

As required by 5.A.4, and 5.C.4, for all hazardous air pollutant (HAP) emissions, monthly individual HAP emissions and the individual and combined HAP emissions for each consecutive 12-month period are included in this section.

Kymene Reactor Scrubber (AA-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Kymene Reactor Scrubber (AA-001).

Adipic Acid Dust Shaker (AA-002)

As required by 5.B.4, weekly operator and mechanic maintenance checks were performed on the Adipic Acid Dust Shaker (AA-002).

As required by 5.B.6, inspections for visible emissions (VE) were performed in accordance with 5.B.6.

As required by 5.A.4, and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Deviations:

LDAR Tag #'s 83501, 83506, 83523, 83502(1st) and 83502(2nd), were identified as leaking on 1/17, 3/4, 6/9, 6/12(1st) and 6/15(2nd), respectively. All five events were monitored within 5 days of repair.

(MONTHLY) and (CONSECUTIVE 12-MONTH) HAP emissions, Individual and Combined

DATE M/Y	ETHYLENE OXIDE		EPOCHLOROHYDRIN		TOTAL	
	MONTHLY	12-MONTH	MONTHLY	12-MONTH	MONTHLY	12-MONTH
Apr-04	0.057	0.057	0.183	0.183	0.240	0.240
May-04	0.057	0.114	0.182	0.365	0.239	0.479
Jun-04	0.057	0.171	0.185	0.550	0.242	0.721
Jul-04	0.057	0.228	0.186	0.736	0.243	0.964
Aug-04	0.057	0.285	0.186	0.922	0.243	1.207
Sep-04	0.057	0.342	0.185	1.107	0.242	1.449
Oct-04	0.057	0.399	0.186	1.293	0.243	1.692
Nov-04	0.587	0.988	0.183	1.478	0.770	2.462
Dec-04	0.524	1.510	0.182	1.658	0.706	3.168
Jan-05	0.211	1.721	0.194	1.852	0.405	3.573
Feb-05	0.187	1.908	0.184	2.036	0.371	3.944
Mar-05	0.136	2.044	0.181	2.217	0.317	4.281
Apr-05	0.242	2.229	0.178	2.212	0.420	4.441
May-05	0.056	2.228	0.179	2.209	0.235	4.437
Jun-05		2.227	0.179	2.203	0.235	4.430
Jul-05	0.000	2.170	0.178	2.195	0.178	4.365
Aug-05		2.113	0.181	2.190	0.181	4.303
Sep-05		2.056	0.178	2.183	0.178	4.239
Oct-05		1.999	0.184	2.181	0.184	4.180
Nov-05		1.412	0.182	2.180	0.182	3.592
Dec-05		0.888	0.183	2.181	0.183	3.069
Jan-06		0.677	0.182	2.169	0.182	2.846
Feb-06		0.490	0.180	2.165	0.180	2.655
Mar-06		0.354	0.179	2.163	0.179	2.517
Apr-06		0.112	0.182	2.167	0.182	2.279
May-06		0.056	0.178	2.166	0.178	2.222
Jun-06		0.000	0.188	2.175	0.188	2.175
Jul-06			0.187	2.184		
Aug-06			0.187	2.190		
Sep-06			0.186	2.198		
Oct-06			0.183	2.197		
Nov-06			0.181	2.196		
Dec-06			0.177	2.190		
Jan-07			0.183	2.191		
Feb-07			0.179	2.190		
Mar-07			0.180	2.191		
Apr-07			0.187	2.196		
May-07			0.180	2.198		
Jun-07			0.184	2.194		
Jul-07			0.179	2.186		
Aug-07			0.181	2.180		
Sep-07			0.181	2.175		
Oct-07			0.178	2.170		
Nov-07			0.185	2.174		
Dec-07			0.188	2.185		
Jan-08			0.188	2.190		
Feb-08			0.189	2.200		
Mar-08			0.184	2.204		
Apr-08			0.185	2.202		
May-08			0.182	2.204		
Jun-08			0.184	2.204		
Jul-08			0.175	2.200		
Aug-08			0.175	2.194		
Sep-08			0.177	2.190		
Oct-08			0.176	2.188		
Nov-08			0.177	2.180		
Dec-08			0.175	2.167		
Jan-09			0.199	2.178		
Feb-09			0.207	2.196		
Mar-09			0.206	2.218		
Apr-09			0.206	2.239		
May-09			0.207	2.264		
Jun-09			0.208	2.288		
Jul-09				2.113		
Aug-09				1.938		
Sep-09				1.761		
Oct-09				1.585		
Nov-09				1.408		
Dec-09				1.233		

ASHLAND. RECEIVED

AUG 3 2009

Dept of Environmental Quality
Office of Pollution Control

Ashland Hercules Water Technologies *JM*

613 West 7th Street
Hattiesburg, MS 39401
Tel (601) 584-3238
Fax (601) 584-3226

July 31, 2009

Mr. Rick Sumrall, Branch Chief
Environmental Compliance & Enforcement Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225-2261

Re: Hercules Incorporated
Facility No. 0800-00001
Title V Semi-Annual Report
1/01/09-6/30/09

Dear Mr. Sumrall:

As required by Title V Operating Permit Conditions 5.A.4. [ref.: APC-S-6, Section III.A.3.c.(1)], 5.C.1.(b) [40 CFR 63.182 (ref.: 40 CFR 63.528(b))], 5.C.3, 5.C.4, and 5.C.5, attached is the required summary data for the semi-annual reporting period ending June 30, 2009. Deviations from the Title V Permit requirements are identified and included in this report. The required summary data is included in the attached semi-annual report from January 1, 2009, to June 30, 2009.

As Responsible Official for Hercules Incorporated, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the attached document are true, accurate, and complete.

If you have any questions or need further information, please let me know.

Sincerely,

RS Bolton

Rodney S. Bolton
Plant Manager

Attachment(s)

HERCULES

Contents of Report

The Title V Operating Permit requires a semi-annual report by January 31 and July 31 of each year. This report, for the semi-annual reporting period of January 1, 2009 through June 30, 2009, contains the following sections:

1. Fuel Burning Equipment
2. Kymene Process Area
3. AKD Process Area
4. Kymene LDAR Monitoring
5. Deviations from Permit Requirements

Fuel Burning Equipment

FUEL BURNING REPORT SUMMARY

As required by 5.A.4, 5.B.5, and 5.C.3, monthly records of the type and quantity of fuel combusted are provided in this section. Only natural gas was combusted during this semi-annual reporting period.

AKD Process Area

AKD PROCESS AREA REPORT SUMMARY

Paracol Water Scrubber (AB-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Paracol Water Scrubber (AB-001).

As required by 5.A.4 and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Kymene LDAR Monitoring

KYMENE LDAR MONITORING

In Accordance with 40 CFR 63, Subpart W, Subpart H, and Permit Conditions 5.B.1, 5.B.2, 5.B.3, and 5.C.1, Hercules Incorporated is providing the following required information:

- Report required by 40 CFR 63.182(d)(2);
- Summary report of actual monitoring data; and
- Recordkeeping and reporting of Startup, Shutdown, and Malfunctions per SSM Plan.
 - Form A: SSM Plan Conformance
 - Form B: Nonconformance to SSM Plan (no nonconformance incidents)

Deviations: The following problem or deviation from the permit was noted during the semi-annual LDAR monitoring report submittal. The LDAR contractor changed monitoring technicians in June, and the quarterly valve monitoring scheduled for June was inadvertently missed during the routine monthly monitoring of pumps and agitators. When this omission was discovered, the LDAR contractor was scheduled in and monitored 2nd quarter valves on July 8, 2009. Valve monitoring will be conducted during the September monthly monitoring to satisfy this requirement for the 3rd quarter.

PERIODIC LEAK MONITORING REPORT

January 1, 2008 through June 30, 2008

Hercules Incorporated
Hattiesburg, Mississippi

KYMENE PROCESS AREA (AA-000)

1. Number of affected *valves* in HAP service for which leaks were detected as described in § 63.168(b), the percent leakers, and the total number monitored:
 - No affected valve was discovered leaking ($V_L=0$) during the referenced reporting period (>500 ppm);
 - $[V_L/V_T] * 100 = 0.00\%$ of total valves monitored were leaking; and
 - 67 total valves ($V_T=67$) were monitored.
2. Number of *valves* for which leaks were not repaired per § 63.168(f), identifying the number of those that are determined non-repairable:
 - None.
3. Number of affected *pumps* in HAP service for which leaks were detected as described in § 63.163(b), the percent leakers, and the total number monitored:
 - No affected pumps were discovered leaking ($P_L=0$) during the required monthly monitoring ($>1,000$ ppm);
 - $[P_L/P_T] * 100 = 0.00\%$ of total pumps monitored on a monthly basis were leaking as determined by § 63.163(d)(4); and
 - 3 affected pumps monitored 6 times for a total of 18 pumps ($P_T=18$) monitored.
4. Number of *pumps* for which leaks were not repaired per § 63.163(c):
 - None.
5. Number of affected *agitators* in HAP service for which leaks were detected as described in § 63.173(a) & (b):
 - The affected agitator did not leak during the referenced reporting period ($>10,000$ ppm);
6. Number of *agitators* for which leaks were not repaired per § 63.173(c):
 - None.

7. Number of affected *connectors* in HAP service for which leaks were detected as described in § 63.174(a), the percent leaking, and the total number monitored:

- No affected connectors were measured at or above 500 ppm ($C_L=0$) during the referenced reporting period;
- $[C_L/C_T] * 100 = 0.00\%$ of total connectors monitored were leaking; and
- 0 total connectors ($C_T=0$) were monitored.

8. Number of *connectors* for which leaks were not repaired per § 63.174(d), identifying the number of those that are determined non-repairable:

- None.

9. Explain any *delay of repairs*:

- All applicable repairs were made in a timely fashion.

10. Results of all monitoring within semi-annual reporting period to show compliance with § 63.165(a), *pressure relief device* releases:

- None.

11. Notification of a change in *connector monitoring alternatives* as described in §63.174(c)(1):

- As allowed in §63.174(c)(1)(ii), Hercules Incorporated changed connector monitoring alternatives during the July 1 - December 31, 2000, semi-annual reporting period. Instead of monitoring opened or broken connectors for leaks within three (3) months of being returned to organic HAP service, Hercules chooses **not** to monitor connectors that have been opened or had the seal broken. It is realized that nonrepairable connectors can not be counted while complying with this alternative; therefore, in the percent leaking calculations C_{AN} will be set to zero.

12. *Monitoring results and component summary report* during the semi-annual reporting period:

- Summary information from the referenced semi-annual reporting period is attached.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?	Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No		
		11/17/08	8:46 AM	JB	✓			✓		Startup
11/21/08	9:38 PM			JB	✓		✓		✓	Shutdown
		11/24/08	7:20 AM	GRC	✓		✓		✓	Start up Building
11/27/08	10:00 PM			R.B.	✓		✓		✓	SHUT DOWN
		12/01/08	7:20 AM	R.B.	✓		✓		✓	START UP
12/6/08	4:30 AM			JB	✓		✓		✓	Shutdown
		12/8/08	12:07 PM	JB	✓		✓		✓	Start up
12/13/08	12:15 AM			GRC	✓		✓		✓	Shutdown
		12/15/08	4:30 PM	R.B.	✓		✓		✓	START UP
12/19/08	10:00 PM				✓		✓		✓	SHUT DOWN
		12/22/08	7 AM	GRC	✓		✓		✓	Startup
12/25/08	6 AM			GRC	✓		✓		✓	Shutdown
		12/29/08	10:40 AM	JB	✓		✓		✓	Startup
1/1/09	5 AM			JB	✓		✓		✓	Shutdown
		1/04/09	5 PM	JH	✓		✓		✓	Start up
1/6/09	9:27 PM			JB	✓		✓		✓	Shutdown

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		1/17/09	8 AM	GRC	✓			✓		✓	Startup - we had shutdown due to EPT Shutdown
1/16/09	1145 PM			JB	✓			✓		✓	Shutdown
		1/17/09	8:30 AM	R.B.	✓			✓		✓	START UP
1/17/09	8:39 PM				✓			✓		✓	Shutdown
		1/19/09	8:38 AM	JB	✓			✓		✓	Startup
1/24/09	6 AM			GRC	✓			✓		✓	Shutdown
		1/24/09	1 PM	GRC	✓			✓		✓	Startup
2/1/09	1:14 AM			JB	✓			✓		✓	Shutdown
		2/1/09	11 PM	GRC	✓			✓		✓	Startup 15.23 gpm - 1.75 TWC
2/7/09	6:10 AM			GRC	✓			✓		✓	Shutdown
		2/9/09	2 PM	GRC	✓			✓		✓	Startup 14.52 gpm + 1.92 TWC
2/14/09	12:30 AM			GRC	✓			✓		✓	Shutdown
		2/16/09	10:30 AM	GRC	✓			✓		✓	Startup
2/21/09	12:52 AM			JB	✓			✓		✓	Shutdown
		2/23/09	8:00 AM	R.B.	✓			✓		✓	START UP
2/28/09	5:00 PM			GRC	✓			✓		✓	Shutdown

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
02/14/09	7:00 AM			R.B.	✓		✓		✓		SHUT DOWN
3/1/09		3/1/09	8 AM	J.P.	✓		✓		✓		Start up
3/7/09	4:30 PM			GRC	✓		✓		✓		Shut down
3/9/09		3/9/09	7 AM	GRC	✓		✓		✓		Start up
3/14/09	4:31 AM			J.P.	✓		✓		✓		Shut down
3/16/09		3/16/09	11:55 AM	R.B.	✓		✓		✓		START UP
3/31/09	5:15 AM			J.H.	✓		✓		✓		Shut down
3/23/09		3/23/09	11:51 AM	J.P.	✓		✓		✓		Start up
3/28/09	4:15 AM			GRC	✓		✓		✓		Shut down
3/30/09		3/30/09	9:30 AM	GRC	✓		✓		✓		Start up
4/23/09	1:00 AM			R.B.	✓		✓		✓		SHUT DOWN
4/6/09		4/6/09	8:30 AM	R.B.	✓		✓		✓		START UP
4/10/09	6 AM			GRC	✓		✓		✓		Shut down
4/13/09		4/13/09	11:00 AM	J.P.	✓		✓		✓		Start up
4/18/09	2:15 AM			GRC	✓		✓		✓		Shut down
4/20/09		4/20/09	10 AM	GRC	✓		✓		✓		Start up

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
4/25/09	2:57 PM			JB	✓		✓				Shutdown
4/27/09		4/27/09	10:40 AM	R.B.	✓		✓				START UP
5/2/09	5:45 AM			ARC	✓		✓				Shutdown
5/4/09		5/4/09	7:30 PM	JB	✓		✓				Startup
5/10/09	1:00 AM			R.B.	✓		✓				SHUTDOWN
5/11/09		5/11/09	7:30 PM	RB	✓		✓				Startup
5/16/09	5:45 AM			JB	✓		✓				Shutdown
5/18/09		5/18/09	3:20 PM	ARC	✓		✓				Startup
5/23/09	10 PM			ARC	✓		✓				Shutdown
5/27/09		5/27/09	12:40 PM	JB	✓		✓				Startup
5/28/09	6 AM			ARC	✓		✓				Shutdown
6/1/09		6/1/09	6:30 AM	ARC	✓		✓				Startup 15.01 gpm
6/6/09	7:20 AM			JB	✓		✓				Shutdown
6/17/09		6/17/09	10:30 AM	R.B.	✓		✓				START UP
6/19/09	5:00 PM			JB	✓		✓				Shutdown - out of Epi
6/16/09		6/16/09	7:00 AM	R.B.	✓		✓				START UP

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Deviations from Permit Requirements

DEVIATIONS FROM PERMIT REQUIREMENTS

January 1, 2009 through June 30, 2009

Hercules Incorporated Hattiesburg, Mississippi

1. As required by 5.A.4 of the Title V Operating Permit, deviations from permit requirements must be clearly identified and reported. Deviations from permit requirements are detailed below:

Kymene Process Area LDAR Tag #'s 83501, 83506, 83523, 83502(1st) and 83502(2nd), were identified as leaking on 1/17, 3/4, 6/9, 6/12(1st) and 6/15(2nd), respectively. All five events were monitored within 5 days of repair.

The following problem or deviation from the permit was noted during the semi-annual LDAR monitoring report submittal. The LDAR contractor changed monitoring technicians in June, and the quarterly valve monitoring scheduled for June was inadvertently missed during the routine monthly monitoring of pumps and agitators. When this omission was discovered, the LDAR contractor was scheduled in and monitored 2nd quarter valves on July 8, 2009. Valve monitoring will be conducted during the September monthly monitoring to satisfy this requirement for the 3rd quarter.

ASHLAND

Hercules
Forrest Co
Air 0800-000
4/16

Ashland Hercules Water Technologies

613 West 7th Street
Hattiesburg, MS 39401
Tel (601) 584-3238
Fax (601) 584-3226

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
CERTIFICATION # 7005 0390 0000 1703 9004

January 31, 2009

RECEIVED
JAN 21 2009
Dept of Environmental Quality
Office of Pollution Control

Mr. Rick Sumrall, Branch Chief
Environmental Compliance & Enforcement Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225-2261

Re: Hercules Incorporated
Facility No. 0800-00001
Title V Semi-Annual Report
07/01/08-12/31/08

Dear Mr. Sumrall:

As required by Title V Operating Permit Conditions 5.A.4. [ref.: APC-S-6, Section III.A.3.c.(1)], 5.C.1.(b) [40 CFR 63.182 (ref.: 40 CFR 63.528(b))], 5.C.3, 5.C.4, and 5.C.5, attached is the required summary data for the semi-annual reporting period ending December 31, 2008. Deviations from the Title V Permit requirements are identified and included in this report. The required summary data is included in the attached semi-annual report from July 1, 2008, to December 31, 2008.

As Responsible Official for Ashland Hercules Water Technologies, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the attached document are true, accurate, and complete.

If you have any questions or need further information, please let me know.

Sincerely,

RS Bolton

Rodney S. Bolton
Plant Manager

Attachments:

HERCULES

Contents of Report

The Title V Operating Permit requires a semi-annual report by January 31 and July 31 of each year. This report, for the semi-annual reporting period of July 1, 2008 through December 31, 2008, contains the following sections:

1. Fuel Burning Equipment
2. Kymene Process Area
3. AKD Process Area
4. Kymene LDAR Monitoring
5. Deviations from Permit Requirements

Fuel Burning Equipment

FUEL BURNING REPORT SUMMARY

As required by 5.A.4, 5.B5, and 5.C.3, monthly records of the type and quantity of fuel combusted are provided in this section. Only natural gas was combusted during this semi-annual reporting period.

MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS 5.A.4

YEAR 2008

GAS USAGE - MCF

EMISSION POINT	DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Totals
AC001	Poly-pale nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AF001	RAD nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AG001	HRA nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AJ001	Rosin dist. nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM001	No. 5 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM002	No. 6 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM003	No. 7 package boiler	3,233	2,941	2,705	2,461	2,620	1,914	2,292	2,546	2,363	2,402	2,067	2,820	30,364
AN001	Carbon Reg. nat. gas Furnace	0	0	0	0	0	0	0	0	0	0	0	0	0
T5ngas		3,233	2,941	2,705	2,461	2,620	1,914	2,292	2,546	2,363	2,402	2,067	2,820	30,364

Kymene Process Area

KYMENE PROCESS AREA REPORT SUMMARY

As required by 5.B.7, for the entire facility, calculations and records for the tons of individual hazardous air pollutant (HAP) emitted each month and the total individual HAP emissions for each consecutive 12-month period were performed. Calculations and records for the total combined HAP's emitted for each consecutive 12-month period were performed.

As required by 5.A.4, and 5.C.4, for all hazardous air pollutant (HAP) emissions, monthly individual HAP emissions and the individual and combined HAP emissions for each consecutive 12-month period are included in this section.

Kymene Reactor Scrubber (AA-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Kymene Reactor Scrubber (AA-001).

Adipic Acid Dust Shaker (AA-002)

As required by 5.B.4, weekly operator and mechanic maintenance checks were performed on the Adipic Acid Dust Shaker (AA-002).

As required by 5.B.6, inspections for visible emissions (VE) were performed in accordance with 5.B.6.

As required by 5.A.4, and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Deviations:

No deviations were noted during this reporting period.

(MONTHLY) and (CONSECUTIVE 12-MONTH) HAP emissions, Individual and Combined

DATE M/Y	ETHYLENE OXIDE		EPOCHLOROHYDRIN		TOTAL	
	MONTHLY	12-MONTH	MONTHLY	12-MONTH	MONTHLY	12-MONTH
Apr-04	0.057	0.057	0.183	0.183	0.240	0.240
May-04	0.057	0.114	0.182	0.365	0.239	0.479
Jun-04	0.057	0.171	0.185	0.550	0.242	0.721
Jul-04	0.057	0.228	0.186	0.736	0.243	0.964
Aug-04	0.057	0.285	0.186	0.922	0.243	1.207
Sep-04	0.057	0.342	0.185	1.107	0.242	1.449
Oct-04	0.057	0.399	0.186	1.293	0.243	1.692
Nov-04	0.587	0.986	0.183	1.478	0.770	2.462
Dec-04	0.524	1.510	0.182	1.658	0.708	3.168
Jan-05	0.211	1.721	0.194	1.852	0.405	3.573
Feb-05	0.187	1.908	0.184	2.036	0.371	3.944
Mar-05	0.138	2.044	0.181	2.217	0.317	4.261
Apr-05	0.242	2.229	0.178	2.212	0.420	4.441
May-05	0.056	2.228	0.179	2.209	0.235	4.437
Jun-05	0.056	2.227	0.179	2.203	0.235	4.430
Jul-05	0.000	2.170	0.178	2.195	0.178	4.365
Aug-05		2.113	0.181	2.190	0.181	4.303
Sep-05		2.056	0.178	2.183	0.178	4.239
Oct-05		1.999	0.184	2.181	0.184	4.180
Nov-05		1.412	0.182	2.180	0.182	3.592
Dec-05		0.888	0.183	2.181	0.183	3.089
Jan-06		0.877	0.182	2.169	0.182	2.846
Feb-06		0.490	0.180	2.165	0.180	2.655
Mar-06		0.354	0.179	2.163	0.179	2.517
Apr-06		0.112	0.182	2.167	0.182	2.279
May-06		0.056	0.178	2.166	0.178	2.222
Jun-06		0.000	0.188	2.175	0.188	2.175
Jul-06		0.000	0.187	2.184	0.187	2.184
Aug-06		0.000	0.187	2.190	0.187	2.190
Sep-06		0.000	0.186	2.198	0.186	2.198
Oct-06		0.000	0.183	2.197	0.183	2.197
Nov-06		0.000	0.181	2.198	0.181	2.198
Dec-06		0.000	0.177	2.190	0.177	2.190
Jan-07		0.000	0.183	2.191	0.183	2.191
Feb-07		0.000	0.179	2.190	0.179	2.190
Mar-07		0.000	0.180	2.191	0.180	2.191
Apr-07		0.000	0.187	2.198	0.187	2.198
May-07		0.000	0.180	2.198	0.180	2.198
Jun-07		0.000	0.184	2.194	0.184	2.194
Jul-07		0.000	0.179	2.188	0.179	2.188
Aug-07		0.000	0.181	2.180	0.181	2.180
Sep-07		0.000	0.181	2.175	0.181	2.175
Oct-07		0.000	0.178	2.170	0.178	2.170
Nov-07		0.000	0.185	2.174	0.185	2.174
Dec-07		0.000	0.188	2.185	0.188	2.185
Jan-08		0.000	0.188	2.190		2.002
Feb-08		0.000	0.189	2.200		1.823
Mar-08		0.000	0.184	2.204		1.643
Apr-08		0.000	0.185	2.202		1.456
May-08		0.000	0.182	2.204		1.276
Jun-08		0.000	0.184	2.204		1.092
Jul-08		0.000	0.175	2.200		0.913
Aug-08		0.000	0.175	2.194		0.732
Sep-08		0.000	0.177	2.190		0.551
Oct-08		0.000	0.176	2.188		0.373
Nov-08		0.000	0.177	2.180		0.188
Dec-08		0.000	0.175	2.187		0.000

AKD Process Area

AKD PROCESS AREA REPORT SUMMARY

Paracol Water Scrubber (AB-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Paracol Water Scrubber (AB-001).

As required by 5.A.4 and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Kymene LDAR Monitoring

KYMENE LDAR MONITORING

In Accordance with 40 CFR 63, Subpart W, Subpart H, and Permit Conditions 5.B.1, 5.B.2, 5.B.3, and 5.C.1, Hercules Incorporated is providing the following required information:

- Report required by 40 CFR 63.182(d)(2);
- Summary report of actual monitoring data; and
- Recordkeeping and reporting of Startup, Shutdown, and Malfunctions per SSM Plan.
 - Form A: SSM Plan Conformance
 - Form B: Nonconformance to SSM Plan (no nonconformance incidents)

No problems or deviations from the permit were noted during the routine monthly LDAR monitoring.

PERIODIC LEAK MONITORING REPORT

July 1, 2008 through December 31, 2008

Hercules Incorporated
Hattiesburg, Mississippi

KYMENE PROCESS AREA (AA-000)

1. Number of affected *valves* in HAP service for which leaks were detected as described in § 63.168(b), the percent leakers, and the total number monitored:
 - No affected valve was discovered leaking ($V_L=0$) during the referenced reporting period (>500 ppm);
 - $[V_L/V_T] * 100 = 0.00\%$ of total valves monitored were leaking; and
 - 98 total valves ($V_T=98$) were monitored.
2. Number of *valves* for which leaks were not repaired per § 63.168(f), identifying the number of those that are determined non-repairable:
 - None.
3. Number of affected *pumps* in HAP service for which leaks were detected as described in § 63.163(b), the percent leakers, and the total number monitored:
 - No affected pumps were discovered leaking ($P_L=0$) during the required monthly monitoring ($>1,000$ ppm);
 - $[P_L/P_T] * 100 = 0.00\%$ of total pumps monitored on a monthly basis were leaking as determined by § 63.163(d)(4); and
 - 3 affected pumps monitored 6 times for a total of 18 pumps ($P_T=18$) monitored.
4. Number of *pumps* for which leaks were not repaired per § 63.163(c):
 - None.
5. Number of affected *agitators* in HAP service for which leaks were detected as described in § 63.173(a) & (b):
 - The affected agitator did not leak during the referenced reporting period ($>10,000$ ppm);
6. Number of *agitators* for which leaks were not repaired per § 63.173(c):
 - None.

7. Number of affected *connectors* in HAP service for which leaks were detected as described in § 63.174(a), the percent leaking, and the total number monitored:

- No affected connectors were measured at or above 500 ppm ($C_L=0$) during the referenced reporting period;
- $[C_L/C_T] * 100 = 0.00\%$ of total connectors monitored were leaking; and
- 310 total connectors ($C_T=0$) were monitored.

8. Number of *connectors* for which leaks were not repaired per § 63.174(d), identifying the number of those that are determined non-repairable:

- None.

9. Explain any *delay of repairs*:

- All applicable repairs were made in a timely fashion.

10. Results of all monitoring within semi-annual reporting period to show compliance with § 63.165(a), *pressure relief device releases*:

- None.

11. Notification of a change in *connector monitoring alternatives* as described in §63.174(c)(1):

- As allowed in §63.174(c)(1)(ii), Hercules Incorporated changed connector monitoring alternatives during the July 1 - December 31, 2000, semi-annual reporting period. Instead of monitoring opened or broken connectors for leaks within three (3) months of being returned to organic HAP service, Hercules chooses **not** to monitor connectors that have been opened or had the seal broken. It is realized that nonrepairable connectors can not be counted while complying with this alternative; therefore, in the percent leaking calculations C_{AN} will be set to zero.

12. *Monitoring results and component summary report* during the semi-annual reporting period:

- Summary information from the referenced semi-annual reporting period is attached.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A											
Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		11/17/08	8:46 AM	JB	✓			✓			Startup
11/21/08	9:38 PM			JB	✓			✓			Shutdown
		11/24/08	7:20 AM	GRC	✓			✓			Start up Building
11/27/08	10:00 PM			R.B.	✓			✓			SHUT DOWN
		12/01/08	7:20 AM	R.B.	✓			✓			START UP
12/6/08	4:30 AM			JB	✓			✓			Shutdown
		12/8/08	12:07 PM	JB	✓			✓			Start up
12/13/08	12:15 AM			GRC	✓			✓			Shutdown
		12/15/08	4:30 PM	R.B.	✓			✓			START UP
12/19/08	10:00 PM				✓			✓			SHUT DOWN
		12/22/08	7 AM	GRC	✓			✓			Startup
12/25/08	6 AM			GRC	✓			✓			Shutdown
		12/29/08	10:40 AM	JB	✓			✓			Startup
1/1/09	5 AM			JB	✓			✓			Shutdown
		1/4/09	5 PM	JH	✓			✓			Start up
1/6/09	9:27 PM			JB	✓			✓			Shutdown

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		09/22/08	11:00 AM	R.B.	✓			✓		✓	START UP
9/27/08	9:41 PM			JB	✓			✓		✓	Shut Down
		09/28/08	11 AM	R.B.	✓			✓		✓	START UP
10/4/08	5:03 AM			JB	✓			✓		✓	Shut Down
		10/6/08	6:20 AM	JB	✓			✓		✓	Startup
10/14/08	6:00 AM			R.B.	✓			✓		✓	SHUT DOWN
		10/13/08	7 AM	GRC	✓			✓		✓	Startup
10/18/08	12:30 AM			R.B.	✓			✓		✓	SHUT DOWN
		10/18/08	1:30 PM	R.B.	✓			✓		✓	START UP
10/25/08	9:30 AM			R.B.	✓			✓		✓	SHUT DOWN
		10/27/08	11:37 AM	JB	✓			✓		✓	Startup
10/31/08	5:45 AM			GRC	✓			✓		✓	Shutdown
		11/3/08		GRC	✓			✓		✓	Startup
11/8/08	5:07 AM				✓			✓		✓	Shutdown
		11/10/08	12:00 AM	R.B.	✓			✓		✓	START UP
11/15/08	8:00 AM			GRC	✓			✓		✓	Shutdown Building for Weekend

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
8/2/08	9:55 PM	7/28/08	9:00 AM	JB	✓		✓		✓		Startup
8/2/08	9:55 PM			JB	✓		✓		✓		Shut down
8/4/08	8:30 AM	8/4/08	8:30 AM	JB	✓		✓		✓		Startup
8/11/08	9:05 PM	8/11/08	9:05 PM	GRC	✓		✓		✓		SHUT DOWN
8/16/08	12:01 PM			JB	✓		✓		✓		Startup
8/16/08	12:01 PM	8/16/08	4:15 PM	JB	✓		✓		✓		Shut down
8/23/08	8 AM			GRC	✓		✓		✓		Startup
8/31/08	9:30 PM	8/31/08	6:30 PM	GRC	✓		✓		✓		Shut down
9/1/08	11:40 PM	9/1/08	11 AM	GRC	✓		✓		✓		Startup
9/13/08	8 AM	9/13/08	12:37 PM	JB	✓		✓		✓		Shut down (before the storm)
9/24/08	1:00 AM	9/24/08	1 PM	Riz	✓		✓		✓		Startup
					✓		✓		✓		SHUT DOWN

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A											
Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		5/19/08	9:45 pm	JB	✓			✓		✓	Monday Startup after boiler was worked on
5/24/08	4:16 AM			JB	✓			✓		✓	Shutdown Memorial Day weekend
		5/27/08	9 AM	RB	✓			✓		✓	Tuesday Start up after Monday
5/31/08	3:15 AM			GRC	✓			✓		✓	Shutdown for weekend
		6/2/08	6:40 AM	JB	✓			✓		✓	Startup
6/12/08	11:00 PM			JB	✓			✓		✓	Plant shutdown weekend of 7TH + 8TH
		6/23/08	9:40 AM	JB	✓			✓		✓	Startup after 1-week plant shutdown
6/28/08	3:25 AM			GRC	✓			✓		✓	Shutdown building
		6/30/08	2 PM	GRC	✓			✓		✓	Startup of Building
7/4/08	2 PM			GRC	✓			✓		✓	Shutdown Building
		7/7/08	9:00 AM	R.B.	✓			✓		✓	START OP
7/12/08	5 AM			GRC	✓			✓		✓	Shutdown Building
		7/14/08	2 PM	GRC	✓			✓		✓	Startup of Building on Monday
07/19/08	12:30 AM			R.B.	✓			✓		✓	SHUT DOWN
		07/21/08	11 AM	R.B.	✓			✓		✓	START UP
7/24/08	4 PM			JB	✓			✓		✓	Shutdown for weekend

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Deviations from Permit Requirements

DEVIATIONS FROM PERMIT REQUIREMENTS

July 1, 2008 through December 31, 2008

**Hercules Incorporated
Hattiesburg, Mississippi**

1. As required by 5.A.4 of the Title V Operating Permit, deviations from permit requirements must be clearly identified and reported. Deviations from permit requirements are detailed below:

No deviations were noted during this reporting period.



Hercules
Forrest Co.
Air 0800-0000

Hercules Incorporated
613 West 7th Street
Hattiesburg, MS 39401
(601) 545-3450
Fax: (601) 584-3226
www.herc.com

just

July 31, 2008

Mr. Rick Sumrall, Branch Chief
Environmental Compliance & Enforcement Division
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385

Re: Hercules Incorporated
Facility No. 0800-00001
Title V Semi-Annual Report
1/01/08-6/30/08

Dear Mr. Sumrall:

As required by Title V Operating Permit Conditions 5.A.4. [ref.: APC-S-6, Section III.A.3.c.(1)], 5.C.1.(b) [40 CFR 63.182 (ref.: 40 CFR 63.528(b))], 5.C.3, 5.C.4, and 5.C.5, attached is the required summary data for the semi-annual reporting period ending June 30, 2008. Deviations from the Title V Permit requirements are identified and included in this report. The required summary data is included in the attached semi-annual report from January 1, 2008, to June 30, 2008.

The following notation is the result of our on-going plant demolition activities. The Neuphor Process Area, for which a 502B10 notification was filed on January 28, 2008, has been removed from the Contents of Report section.

As Responsible Official for Hercules Incorporated, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the attached document are true, accurate, and complete.

If you have any questions or need further information, please let me know.

Sincerely,

RS Bolton

Rodney S. Bolton
Plant Manager

Attachment(s)

Contents of Report

The Title V Operating Permit requires a semi-annual report by January 31 and July 31 of each year. This report, for the semi-annual reporting period of January 1, 2008 through June 30, 2008, contains the following sections:

1. Fuel Burning Equipment
2. Kymene Process Area
3. AKD Process Area
4. Kymene LDAR Monitoring
5. Deviations from Permit Requirements

Fuel Burning Equipment

FUEL BURNING REPORT SUMMARY

As required by 5.A.4, 5.B.5, and 5.C.3, monthly records of the type and quantity of fuel combusted are provided in this section. Only natural gas was combusted during this semi-annual reporting period.

MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS 5.A.4

YEAR 2008

GAS USAGE - MCF

EMISSION POINT	DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Totals
AC001	Poly-pale nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AF001	RAD nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AG001	HRA nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AJ001	Rosin dist. nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM001	No. 5 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM002	No. 6 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM003	No. 7 package boiler	3,233	2,941	2,705	2,461	2,620	1,914	0	0	0	0	0	0	0
AN001	Carbon Reg.nat. gas Furnace	0	0	0	0	0	0	0	0	0	0	0	0	15,874
T5ngas		3,233	2,941	2,705	2,461	2,620	1,914	0	0	0	0	0	0	15,874

Kymene Process Area

KYMENE PROCESS AREA REPORT SUMMARY

As required by 5.B.7, for the entire facility, calculations and records for the tons of individual hazardous air pollutant (HAP) emitted each month and the total individual HAP emissions for each consecutive 12-month period were performed. Calculations and records for the total combined HAP's emitted for each consecutive 12-month period were performed.

As required by 5.A.4, and 5.C.4, for all hazardous air pollutant (HAP) emissions, monthly individual HAP emissions and the individual and combined HAP emissions for each consecutive 12-month period are included in this section.

Kymene Reactor Scrubber (AA-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Kymene Reactor Scrubber (AA-001).

Adipic Acid Dust Shaker (AA-002)

As required by 5.B.4, weekly operator and mechanic maintenance checks were performed on the Adipic Acid Dust Shaker (AA-002).

As required by 5.B.6, inspections for visible emissions (VE) were performed in accordance with 5.B.6.

As required by 5.A.4, and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Deviations:

LDAR Tag #'s 6015, 6015, 6010, 7854, 7856, and 6015, were identified as leaking on 2/4, 2/15, 3/28, 4/9, 4/18, and 4/23, respectively. All six events were monitored within 5 days of repair.

(MONTHLY) and (CONSECUTIVE 12-MONTH) HAP emissions, Individual and Combined

DATE M/Y	ETHYLENE OXIDE		EPOCHLOROHYDRIN		TOTAL	
	MONTHLY	12-MONTH	MONTHLY	12-MONTH	MONTHLY	12-MONTH
Apr-04	0.057	0.057	0.183	0.183	0.240	0.240
May-04	0.057	0.114	0.182	0.365	0.239	0.479
Jun-04	0.057	0.171	0.185	0.550	0.242	0.721
Jul-04	0.057	0.228	0.186	0.736	0.243	0.964
Aug-04	0.057	0.285	0.186	0.922	0.243	1.207
Sep-04	0.057	0.342	0.185	1.107	0.242	1.449
Oct-04	0.057	0.399	0.186	1.293	0.243	1.692
Nov-04	0.587	0.986	0.183	1.478	0.770	2.462
Dec-04	0.524	1.510	0.182	1.658	0.706	3.168
Jan-05	0.211	1.721	0.194	1.852	0.405	3.573
Feb-05	0.187	1.903	0.184	2.036	0.371	3.944
Mar-05	0.136	2.044	0.181	2.217	0.317	4.261
Apr-05	0.242	2.229	0.178	2.212	0.420	4.441
May-05	0.056	2.228	0.179	2.209	0.235	4.437
Jun-05	0.056	2.227	0.179	2.203	0.235	4.430
Jul-05	0.000	2.170	0.178	2.195	0.178	4.365
Aug-05		2.113	0.181	2.190	0.181	4.303
Sep-05		2.056	0.178	2.183	0.178	4.239
Oct-05		1.999	0.184	2.181	0.184	4.180
Nov-05		1.412	0.182	2.180	0.182	3.592
Dec-05		0.888	0.183	2.181	0.183	3.069
Jan-06		0.677	0.182	2.169	0.182	2.846
Feb-06		0.490	0.180	2.165	0.180	2.655
Mar-06		0.354	0.179	2.163	0.179	2.517
Apr-06		0.112	0.182	2.167	0.182	2.279
May-06		0.056	0.178	2.166	0.178	2.222
Jun-06		0.000	0.188	2.175	0.188	2.175
Jul-06		0.000	0.187	2.184	0.187	2.184
Aug-06		0.000	0.187	2.190	0.187	2.190
Sep-06		0.000	0.186	2.198	0.186	2.198
Oct-06		0.000	0.183	2.197	0.183	2.197
Nov-06		0.000	0.181	2.196	0.181	2.196
Dec-06		0.000	0.177	2.190	0.177	2.190
Jan-07		0.000	0.183	2.191	0.183	2.191
Feb-07		0.000	0.179	2.190	0.179	2.190
Mar-07		0.000	0.180	2.191	0.180	2.191
Apr-07		0.000	0.187	2.196	0.187	2.196
May-07		0.000	0.180	2.198	0.180	2.198
Jun-07		0.000	0.184	2.194	0.184	2.194
Jul-07		0.000	0.179	2.186	0.179	2.186
Aug-07		0.000	0.181	2.180	0.181	2.180
Sep-07		0.000	0.181	2.175	0.181	2.175
Oct-07		0.000	0.178	2.170	0.178	2.170
Nov-07		0.000	0.185	2.174	0.185	2.174
Dec-07		0.000	0.188	2.185	0.188	2.185
Jan-08		0.000	0.188	2.190		2.002
Feb-08		0.000	0.189	2.200		1.823
Mar-08		0.000	0.184	2.204		1.643
Apr-08		0.000	0.185	2.202		1.456
May-08		0.000	0.182	2.204		1.278
Jun-08		0.000	0.183	2.203		1.092

AKD Process Area

AKD PROCESS AREA REPORT SUMMARY

Paracol Water Scrubber (AB-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Paracol Water Scrubber (AB-001).

As required by 5.A.4 and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Kymene LDAR Monitoring

KYMENE LDAR MONITORING

In Accordance with 40 CFR 63, Subpart W, Subpart H, and Permit Conditions 5.B.1, 5.B.2, 5.B.3, and 5.C.1, Hercules Incorporated is providing the following required information:

- Report required by 40 CFR 63.182(d)(2);
- Summary report of actual monitoring data; and
- Recordkeeping and reporting of Startup, Shutdown, and Malfunctions per SSM Plan.
 - Form A: SSM Plan Conformance
 - Form B: Nonconformance to SSM Plan (no nonconformance incidents)

No problems or deviations from the permit were noted during the routine monthly LDAR monitoring.

PERIODIC LEAK MONITORING REPORT

January 1, 2008 through June 30, 2008

Hercules Incorporated
Hattiesburg, Mississippi

KYMENE PROCESS AREA (AA-000)

1. Number of affected *valves* in HAP service for which leaks were detected as described in § 63.168(b), the percent leakers, and the total number monitored:
 - No affected valve was discovered leaking ($V_L=0$) during the referenced reporting period (>500 ppm);
 - $[V_L/V_T] * 100 = 0.00\%$ of total valves monitored were leaking; and
 - 98 total valves ($V_T=98$) were monitored.
2. Number of *valves* for which leaks were not repaired per § 63.168(f), identifying the number of those that are determined non-repairable:
 - None.
3. Number of affected *pumps* in HAP service for which leaks were detected as described in § 63.163(b), the percent leakers, and the total number monitored:
 - No affected pumps were discovered leaking ($P_L=0$) during the required monthly monitoring ($>1,000$ ppm);
 - $[P_L/P_T] * 100 = 0.00\%$ of total pumps monitored on a monthly basis were leaking as determined by § 63.163(d)(4); and
 - 3 affected pumps monitored 6 times for a total of 18 pumps ($P_T=18$) monitored.
4. Number of *pumps* for which leaks were not repaired per § 63.163(c):
 - None.
5. Number of affected *agitators* in HAP service for which leaks were detected as described in § 63.173(a) & (b):
 - The affected agitator did not leak during the referenced reporting period ($>10,000$ ppm);
6. Number of *agitators* for which leaks were not repaired per § 63.173(c):
 - None.

7. Number of affected *connectors* in HAP service for which leaks were detected as described in § 63.174(a), the percent leaking, and the total number monitored:
- No affected connectors were measured at or above 500 ppm ($C_L=0$) during the referenced reporting period;
 - $[C_L/C_T] * 100 = 0.00\%$ of total connectors monitored were leaking; and
 - 0 total connectors ($C_T=0$) were monitored.
8. Number of *connectors* for which leaks were not repaired per § 63.174(d), identifying the number of those that are determined non-repairable:
- None.
9. Explain any *delay of repairs*:
- All applicable repairs were made in a timely fashion.
10. Results of all monitoring within semi-annual reporting period to show compliance with § 63.165(a), *pressure relief device releases*:
- None.
11. Notification of a change in *connector monitoring alternatives* as described in §63.174(c)(1):
- As allowed in §63.174(c)(1)(ii), Hercules Incorporated changed connector monitoring alternatives during the July 1 - December 31, 2000, semi-annual reporting period. Instead of monitoring opened or broken connectors for leaks within three (3) months of being returned to organic HAP service, Hercules chooses **not** to monitor connectors that have been opened or had the seal broken. It is realized that nonrepairable connectors can not be counted while complying with this alternative; therefore, in the percent leaking calculations C_{AN} will be set to zero.
12. *Monitoring results and component summary report* during the semi-annual reporting period:
- Summary information from the referenced semi-annual reporting period is attached.

SEMI-ANNUAL REPORT MONITORING RESULTS

[illegible][illegible][illegible][illegible]

SEMI-ANNUAL REPORT MONITORING RESULTS

[illegible][illegible]

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		12/12/07	7:45am	R.B.	✓		✓		✓		START UP
12/20/07	5:15pm			JB	✓		✓		✓		Weekend Shut down
		1/2/08	6:57am	JB	✓		✓		✓		start up
1/4/07	10:30pm			GR	✓		✓		✓		Shutdown for weekend
		1/7/08	9:11am	TH	✓		✓		✓		Start up
1/12/08	5:45am			R.B.	✓		✓		✓		SHUT DOWN
		1/14/08	12noon	GR	✓		✓		✓		Start up
											SHUT Left water on all weekend because of freeze
		1/14/08	9am	R.B.	✓		✓		✓		START UP
1/26/08	7:10am			GR	✓		✓		✓		Shutdown Building for weekend
		1/28/08	6:35	GR	✓		✓		✓		Start up building
2/2/08	8:10pm			JB	✓		✓		✓		Shut down for Saturday night
		2/4/08		GR	✓		✓		✓		Start up building after weekend
2/9/08	11:45pm			JB	✓		✓		✓		Shutdown for Weekend
		2/21/08		R.B.	✓		✓		✓		START UP

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
2/16/08	6:15am			GRC	✓		✓		✓		Shutdown for weekend
2/17/08		2/18/08	10am	MG	✓		✓		✓		Monday startup after meeting
2/22/08	4:30am				✓		✓		✓		Shutdown for Week and
02/23/08	5:00am	2/24/08	3:15pm	R.B.	✓		✓		✓		SHUT DOWN
3/1/08	5:18 AM	3/2/08	7:35 AM	R.B.	✓		✓		✓		START UP
				JB	✓		✓		✓		Shut down
3/8/08	8:30 AM	3/23/08	7:35 AM	R.B.	✓		✓		✓		Start up
		3/8/08	8:30 AM	JH	✓		✓		✓		Shut down
		3/10/08	7:00 AM	JB	✓		✓		✓		Startup
3/10/08	1:45 PM	3/10/08	7:00 AM	JB	✓		✓		✓		Shut down, Mechanic repair waterline
		3/11/08	12:10 PM	JB	✓		✓		✓		Start up after mechanic fixed sin
3/12/08	3:41 PM	3/12/08	4:47 PM	JB	✓		✓		✓		Shut Down for Mechanics to tie in layne new
		3/12/08	4:47 PM	JB	✓		✓		✓		Startup Layne well back in service.
03/17/08	03:30 AM			R.B.	✓		✓		✓		SHUT DOWN
		03/17/08	4:45 PM	R.B.	✓		✓		✓		START UP
03/21/08	03:30 PM			R.B.	✓		✓		✓		SHUT DOWN

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
		03/29/08	8:16am	R.B.	✓		✓		✓		START UP
3/29/08	8:16 AM				✓		✓		✓		Shut down
	03/30/08	03/31/08	2:30pm	GRC	✓		✓		✓		Startup
04/01/08	04/01/08			R.B.	✓		✓		✓		SHUT DOWN
		4/7/08	12:10	GRC	✓		✓		✓		Startup
4/12/08	5:42 AM			JB	✓		✓		✓		Shut down
4/15/08	12:15 PM	4/15/08	12:15 PM	TR	✓		✓		✓		start up
4/19/08	7:30			GRC	✓		✓		✓		Shutdown
		4/24/08	10:20 AM	JB	✓		✓		✓		Startup
04/26/08	1:00 AM			R.B.	✓		✓		✓		SHUT DOWN
		4/28/08	9:45 AM	GRC	✓		✓		✓		Startup
5/3/08	2 AM			GRC	✓		✓		✓		Shutdown
		05/05/08	7:45 AM	R.B.	✓		✓		✓		START UP
5/9/08	7:49 PM			JB	✓		✓		✓		Weekend Shutdown
		5/12/08	12:10 PM	JB	✓		✓		✓		Monday Startup
05/12/08	3:00 AM			R.B.	✓		✓		✓		SHUT DOWN

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup. and provide
					Yes	No	Yes	No	Yes	No	
		5/19/08	945	JB	✓		✓				Monday Startup after boiler was worked on
5/24/08	4:16 AM			JB	✓		✓				Shutdown Memorial day weekend
		5/27/08	9am	RB	✓		✓				Tuesday Start up after Monday Shutdown
5/31/08	3:15 AM			ARC	✓		✓				Shutdown Sat weekend
		6/2/08	6:40 AM	JB	✓		✓				Startup
6/12/08	11:00 PM			JB	✓		✓				Plant Shutdown weekend of 7TH + 8TH
		6/23/08	9:40 AM	JB	✓		✓				Startup after 1-week plant shutdown
6/28/08	3:25 AM			ARC	✓		✓				Shutdown building
		6/30/08	2 PM	ARC	✓		✓				Startup of Building
7/14/08	2 PM			ARC	✓		✓				Shutdown Building
		7/16/08	9:00 AM	R.B.	✓		✓				START OP

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Deviations from Permit Requirements

DEVIATIONS FROM PERMIT REQUIREMENTS

January 1, 2008 through June 30, 2008

**Hercules Incorporated
Hattiesburg, Mississippi**

1. As required by 5.A.4 of the Title V Operating Permit, deviations from permit requirements must be clearly identified and reported. Deviations from permit requirements are detailed below:

Kymene Process Area LDAR Tag #'s 6015, 6015, 6010, 7854, 7856, and 6015, were identified as leaking on 2/4, 2/15, 3/28, 4/9, 4/18, and 4/23, respectively. All six events were monitored within 5 days of repair.



January 31, 2008

Hercules Incorporated
613 West 7th Street
Hattiesburg, MS 39401
(601) 545-3450
Fax: (601) 584-3226
www.herc.com

RECEIVED
FEB - 4 2008
Dept of Environmental Quality
Office of Pollution Control

Mr. Rick Sumrall, Branch Chief
Environmental Compliance & Enforcement Division
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385

Re: Hercules Incorporated
Facility No. 0800-00001
Title V Semi-Annual Report
07/01/07-12/31/07

Dear Mr. Sumrall:

As required by Title V Operating Permit Conditions 5.A.4. [ref.: APC-S-6, Section III.A.3.c.(1)], 5.C.1.(b) [40 CFR 63.182 (ref.: 40 CFR 63.528(b))], 5.C.3, 5.C.4, and 5.C.5, attached is the required summary data for the semi-annual reporting period ending December 31, 2007. Deviations from the Title V Permit requirements are identified and included in this report. The required summary data is included in the attached semi-annual report from July 1, 2007, to December 31, 2007.

The following notations are the result of our on-going plant demolition activities. The HRA Process Area, for which a 502B10 notification was filed on June 18, 2007, has been removed from the Contents of Report section. On November 12, 2007, a 502B10 notification was submitted to remove numerous plant-wide storage tanks. The Neuphor process area was shut down on December 18, 2007, and a 502B10 notification will be submitted in 2008 to address the Neuphor process area shut down.

As Responsible Official for Hercules Incorporated, I certify that based on information and belief formed after reasonable inquiry, the statements and information in the attached document are true, accurate, and complete.

If you have any questions or need further information, please let me know.

Sincerely,

RS Bolton

Rodney S. Bolton
Plant Manager

Attachment(s)

Contents of Report

The Title V Operating Permit requires a semi-annual report by January 31 and July 31 of each year. This report, for the semi-annual reporting period of July 1, 2007 through December 31, 2007, contains the following sections:

1. Fuel Burning Equipment
2. Kymene Process Area
3. AKD Process Area
4. Neuphor Process Area
5. Kymene LDAR Monitoring
6. Deviations from Permit Requirements

Fuel Burning Equipment

FUEL BURNING REPORT SUMMARY

As required by 5.A.4, 5.B5, and 5.C.3, monthly records of the type and quantity of fuel combusted are provided in this section. Only natural gas was combusted during this semi-annual reporting period.

MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS 5.A.4

YEAR 2007

GAS USAGE - MCF

<u>EMISSION POINT</u>	<u>DESCRIPTION</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG</u>	<u>SEPT</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>Totals</u>
AC001	Poly-pale nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AF001	RAD nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AG001	HRA nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AJ001	Rosin dist. nat. gas Dowtherm boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM001	No. 5 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM002	No. 6 package boiler	0	0	0	0	0	0	0	0	0	0	0	0	0
AM003	No. 7 package boiler	11,410	9,691	11,157	9,795	9,568	8,259	9,948	10,395	9,105	7,961	3,315	2,650	103,253
AN001	Carbon Reg nat. gas Furnace	0	0	0	0	0	0	0	0	0	0	0	0	0
T5ngas		11,410	9,691	11,157	9,795	9,568	8,259	9,948	10,395	9,105	7,961	3,315	2,650	103,253

Kymene Process Area

KYMENE PROCESS AREA REPORT SUMMARY

As required by 5.B.7, for the entire facility, calculations and records for the tons of individual hazardous air pollutant (HAP) emitted each month and the total individual HAP emissions for each consecutive 12-month period were performed. Calculations and records for the total combined HAP's emitted for each consecutive 12-month period were performed.

As required by 5.A.4, and 5.C.4, for all hazardous air pollutant (HAP) emissions, monthly individual HAP emissions and the individual and combined HAP emissions for each consecutive 12-month period are included in this section.

Kymene Reactor Scrubber (AA-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Kymene Reactor Scrubber (AA-001).

Adipic Acid Dust Shaker (AA-002)

As required by 5.B.4, weekly operator and mechanic maintenance checks were performed on the Adipic Acid Dust Shaker (AA-002).

As required by 5.B.6, inspections for visible emissions (VE) were performed in accordance with 5.B.6.

As required by 5.A.4, and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Deviations:

On 9/21/07, two open ended lines (no longer in use) were identified without caps. Quick connect hoses were removed and blind flanges were installed on both lines thus eliminating both open ended lines.

(MONTHLY) and (CONSECUTIVE 12-MONTH) HAP emissions, Individual and Combined

DATE	ETHYLENE OXIDE		EPICHLOROHYDRIN		TOTAL	
	MONTHLY	12-MONTH	MONTHLY	12-MONTH	MONTHLY	12-MONTH
MAY						
Apr-04	0.057	0.057	0.183	0.183	0.240	0.240
May-04	0.057	0.114	0.182	0.385	0.239	0.479
Jun-04	0.057	0.171	0.185	0.550	0.242	0.721
Jul-04	0.057	0.228	0.186	0.736	0.243	0.984
Aug-04	0.057	0.285	0.186	0.922	0.243	1.207
Sep-04	0.057	0.342	0.185	1.107	0.242	1.449
Oct-04	0.057	0.399	0.186	1.293	0.243	1.692
Nov-04	0.587	0.986	0.183	1.478	0.770	2.462
Dec-04	0.524	1.510	0.182	1.658	0.708	3.168
Jan-05	0.211	1.721	0.194	1.852	0.405	3.573
Feb-05	0.187	1.908	0.184	2.038	0.371	3.944
Mar-05	0.136	2.044	0.181	2.217	0.317	4.261
Apr-05	0.242	2.229	0.178	2.212	0.420	4.441
May-05	0.056	2.228	0.179	2.209	0.235	4.437
Jun-05	0.056	2.227	0.179	2.203	0.235	4.430
Jul-05	0.000	2.170	0.178	2.195	0.178	4.365
Aug-05		2.113	0.181	2.190	0.181	4.303
Sep-05		2.056	0.178	2.183	0.178	4.239
Oct-05		1.999	0.184	2.181	0.184	4.180
Nov-05		1.412	0.182	2.180	0.182	3.592
Dec-05		0.888	0.183	2.181	0.183	3.099
Jan-06		0.677	0.182	2.169	0.182	2.846
Feb-06		0.490	0.180	2.165	0.180	2.655
Mar-06		0.354	0.179	2.163	0.179	2.517
Apr-06		0.112	0.182	2.167	0.182	2.279
May-06		0.056	0.178	2.166	0.178	2.222
Jun-06		0.000	0.188	2.175	0.188	2.175
Jul-06		0.000	0.187	2.184	0.187	2.184
Aug-06		0.000	0.187	2.190	0.187	2.190
Sep-06		0.000	0.186	2.198	0.186	2.198
Oct-06		0.000	0.183	2.197	0.183	2.197
Nov-06		0.000	0.181	2.196	0.181	2.196
Dec-06		0.000	0.177	2.190	0.177	2.190
Jan-07		0.000	0.183	2.191	0.183	2.191
Feb-07		0.000	0.179	2.190	0.179	2.190
Mar-07		0.000	0.180	2.191	0.180	2.191
Apr-07		0.000	0.187	2.198	0.187	2.198
May-07		0.000	0.180	2.198	0.180	2.198
Jun-07		0.000	0.184	2.194	0.184	2.194
Jul-07		0.000	0.179	2.186	0.179	2.186
Aug-07		0.000	0.181	2.180	0.181	2.180
Sep-07		0.000	0.181	2.175	0.181	2.175
Oct-07		0.000	0.178	2.170	0.178	2.170
Nov-07		0.000	0.185	2.174	0.185	2.174
Dec-07		0.000	0.188	2.185	0.188	2.185
				2.002		2.002

AKD Process Area

AKD PROCESS AREA REPORT SUMMARY

Paracol Water Scrubber (AB-001)

As required by 5.B.4, weekly operator maintenance checks were performed on the Paracol Water Scrubber (AB-001).

As required by 5.A.4 and 5.C.5, there were no abnormal visible emissions recorded during this reporting period.

Neuphor Process Area

NEUPHOR PROCESS AREA REPORT SUMMARY

Adduct Reactor Scrubber (AD-001)

Operator and mechanic maintenance checks were performed on the Adduct reactor scrubber.

On 12/18/07, the process area was shut down and is scheduled for future demolition. A 502B10 notification will be submitted in 2008.

Kymene LDAR Monitoring

KYMENE LDAR MONITORING

In Accordance with 40 CFR 63, Subpart W, Subpart H, and Permit Conditions 5.B.1, 5.B.2, 5.B.3, and 5.C.1, Hercules Incorporated is providing the following required information:

- Report required by 40 CFR 63.182(d)(2);
- Summary report of actual monitoring data; and
- Recordkeeping and reporting of Startup, Shutdown, and Malfunctions per SSM Plan.
 - Form A: SSM Plan Conformance
 - Form B: Nonconformance to SSM Plan (no nonconformance incidents)

No problems or deviations from the permit were noted during the routine monthly LDAR monitoring.

PERIODIC LEAK MONITORING REPORT

July 1, 2007 through December 31, 2007

Hercules Incorporated
Hattiesburg, Mississippi

KYMENE PROCESS AREA (AA-000)

1. **Number of affected *valves* in HAP service for which leaks were detected as described in § 63.168(b), the percent leakers, and the total number monitored:**
 - No affected valve was discovered leaking ($V_L=0$) during the referenced reporting period (>500 ppm);
 - $[V_L/V_T] * 100 = 0.00\%$ of total valves monitored were leaking; and
 - 103 total valves ($V_T=103$) were monitored.
2. **Number of *valves* for which leaks were not repaired per § 63.168(f), identifying the number of those that are determined non-repairable:**
 - None.
3. **Number of affected *pumps* in HAP service for which leaks were detected as described in § 63.163(b), the percent leakers, and the total number monitored:**
 - No affected pumps were discovered leaking ($P_L=0$) during the required monthly monitoring ($>1,000$ ppm);
 - $[P_L/P_T] * 100 = 0.00\%$ of total pumps monitored on a monthly basis were leaking as determined by § 63.163(d)(4); and
 - 3 affected pumps monitored 6 times for a total of 18 pumps ($P_T=18$) monitored.
4. **Number of *pumps* for which leaks were not repaired per § 63.163(c):**
 - None.
5. **Number of affected *agitators* in HAP service for which leaks were detected as described in § 63.173(a) & (b):**
 - The affected agitator did not leak during the referenced reporting period ($>10,000$ ppm);
6. **Number of *agitators* for which leaks were not repaired per § 63.173(c):**
 - None.

7. Number of affected *connectors* in HAP service for which leaks were detected as described in § 63.174(a), the percent leaking, and the total number monitored:

- No affected connectors were measured at or above 500 ppm ($C_L=0$) during the referenced reporting period;
- $[C_L/C_T] * 100 = 0.00\%$ of total connectors monitored were leaking; and
- 0 total connectors ($C_T=0$) were monitored.

8. Number of *connectors* for which leaks were not repaired per § 63.174(d), identifying the number of those that are determined non-repairable:

- None.

9. Explain any *delay of repairs*:

- All applicable repairs were made in a timely fashion.

10. Results of all monitoring within semi-annual reporting period to show compliance with § 63.165(a), *pressure relief device* releases:

- None.

11. Notification of a change in *connector monitoring alternatives* as described in §63.174(c)(1):

- As allowed in §63.174(c)(1)(ii), Hercules Incorporated changed connector monitoring alternatives during the July 1 - December 31, 2000, semi-annual reporting period. Instead of monitoring opened or broken connectors for leaks within three (3) months of being returned to organic HAP service, Hercules chooses **not** to monitor connectors that have been opened or had the seal broken. It is realized that nonrepairable connectors can not be counted while complying with this alternative; therefore, in the percent leaking calculations C_{AN} will be set to zero.

12. *Monitoring results and component summary report* during the semi-annual reporting period:

- Summary information from the referenced semi-annual reporting period is attached.

SEMI-ANNUAL REPORT MONITORING RESULTS

[illegible][illegible]

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?	Identify the event as a startup, shutdown, or malfunction, and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No
5/12/07	1:30 AM			GRC	✓			✓		Startup during SSM
5/12/07		5/14/07	5:10	GRC	✓			✓		Startup during SSM (H2O)
5/19/07	5 AM		5:20 AM	MS	✓			✓		PLAN START DOWD
5/19/07		5/24/07	9:20 PM	MS	✓			✓		START UP BUILDING HX 14:34
5/26/07	4: AM			JH	✓			✓		Plan shut down
		5/28/07	7:00 AM	MS	✓			✓		START UP BUILDING HX 14:18
6/02/07	1:00 AM			EP	✓			✓		Plan Shut Down
		6/14/07	11:30 PM	DB	✓			✓		Started up scrubber, water flow 13:24
6/19/07	1:30 AM			DB	✓			✓		Planned shut down
		6/19/07	1:00 PM	EP	✓			✓		Started up scrubber, water flow 13:24
6/16/07	4:20 AM			JB	✓			✓		Water and Adjust Ke
		6/18/07	6:30 AM	DB	✓			✓		Started up scrubber, water flow
6/22/07	6:30 PM			TR	✓			✓		Planned shut down
		6/27/07	9:00 PM	GRC	✓			✓		Startup during SSM
7/1/07	7 AM			GRC	✓			✓		Planned shut down
		7/2/07	9 AM	TR	✓			✓		Startup during SSM

For a _____, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
7/18/07	7:35 AM			EP	✓			✓		✓	Plan Shut down
		7/19/07	9:30 AM	CR	✓			✓		✓	Startup Kerosene 17.35
7/14/07	4:15 AM				✓			✓		✓	Plan Shut down
		7/14/07	6:45 AM	MC	✓			✓		✓	START UP Kerosene 10.70
7/12/07	1 PM				✓			✓		✓	Planned Shut down
		7/13/07	1:15 AM	SH	✓			✓		✓	Plan Startup 2.00
7/12/07	12:13 AM			DB	✓			✓		✓	Planned shut down
		7/13/07	4:38 AM	FL	✓			✓		✓	Scrubber water flowrate 20.00
8/4/07	3:30 PM			DB	✓			✓		✓	Planned shut down
		08/06/07	12:45 PM	R.B.	✓			✓		✓	Startup Kerosene 10.50
08/01/07	11:26 PM			R.B.	✓			✓		✓	Pump (R401) LEAK SEAL
		8/1/07	05:05 PM	JB	✓			✓		✓	Repaired Air Pump
8/1/07	7:30 AM			JB	✓			✓		✓	Planned shutdown
		8/1/07	9:09 AM	JB	✓			✓		✓	Startup 14.5 GPM
8/18/07	7:38 PM			DB	✓			✓			Planned shut down
		8/20/07	1:18 PM	DB	✓			✓		✓	Startup Kerosene 10.50

For a _____, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
8/31/07	11 ²³ AM			DB	✓			✓			Planned Shut down
9/1/07		9/4/07	7 ²⁰ AM	JB	✓			✓			Start up
9/8/07	5 AM			GRC	✓			✓			Planned Shutdown
		9/10/07	9:45 AM	GRC	✓			✓			Start up - Planned
9/15/07	12 ³⁰ AM			JB	✓			✓			Planned Shutdown
		9/17/07	10:00 AM	JB	✓			✓			Start up
9/23/07	10 ²⁷ PM			JB	✓			✓			Planned Shutdown
		9/24/07	7 ³¹ AM	JB	✓			✓			Start up
9/29/07	2 ³⁶ PM				✓			✓			Planned Shutdown
		10/6/07	3:30	JB	✓			✓			Start up
10/6/07	7 ¹⁵ AM			JB	✓			✓			Shut down
		10/8/07	8:30 AM	JB	✓			✓			Start up
10/13/07	12 ⁰¹ AM			JB	✓			✓			Shut down
		10/15/07	2 ⁴⁵ PM	TR	✓			✓			Planned Start up
10/20/07	3:00 AM				✓			✓			Shut down
		10/22/07	11 AM	GRC	✓			✓			Planned Start up

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Startup, Shutdown, and Malfunction Plan (SSM) Checklist -- Form A

Shutdown Date	Shutdown Time (AM or PM)	Startup Date	Startup Time (AM or PM)	Initials	SSM Plan Properly Followed?		Was Form B Completed?		Was There A Malfunction?		Identify the event as a startup, shutdown, or malfunction and provide comments or Action(s) taken during SSM. Include scrubber water flowrate (gpm) at Startup.
					Yes	No	Yes	No	Yes	No	
10/26/07	6:00 PM			JB	✓		✓				Planned Shutdown completed
10/26/07	4:30 PM	10/3/07	12:45 PM	GRC	✓		✓				Kymene Startup after maintenance
10/3/07	4:30 AM			GRC	✓		✓				Planned Shutdown
		10/5/07	3:50 PM	GRC	✓		✓				Kymene Startup after maintenance
11/6/07	9:30 AM			R.B.	✓		✓				Planned Shutdown
		11/26/07	2 PM	GRC	✓		✓				Kymene Startup
11/23/07	7:43 PM			JB	✓		✓				Watered Acidline
		11/26/07	6:30 PM	GRC	✓		✓				Kymene Startup
12/1/07	3 AM			R.B.							
12/2/07	3 AM			R.B.	✓		✓				SHUT DOWN
12/3/07	7 AM			GRC	✓		✓				Kymene Startup
12/3/07	2 AM			GRC	✓		✓				Shutdown
		12/10/07	4 PM	GRC	✓		✓				Shutdown
12/15/07	4:43 PM			JB	✓		✓				Shutdown
		12/17/07	4:55 PM	JB	✓		✓				Startup
12/22/07	6:20 PM			JB	✓		✓				Shutdown

For a malfunction, use the startup/shutdown date and time columns to record the duration of the event.

Deviations from Permit Requirements

DEVIATIONS FROM PERMIT REQUIREMENTS

July 1, 2007 through December 31, 2007

**Hercules Incorporated
Hattiesburg, Mississippi**

1. As required by 5.A.4 of the Title V Operating Permit, deviations from permit requirements must be clearly identified and reported. Deviations from permit requirements are detailed below:

On 9/21/07, two open ended lines (no longer in use) were identified without caps. Quick connect hoses were removed and blind flanges were installed on both lines thus eliminating both open ended lines.