

General Chemical West LLC

525 Castro Street
Richmond, CA 94801
(510) 232-7193



RECEIVED

January 20, 2012

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Mr. Kelly Wee
Director of Compliance and Enforcement
Attention: Title V Reports
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

**Re: General Chemical West LLC – Richmond Works, Facility #A0023
Title V Semiannual Report**

Dear Mr. Wee:

Please find enclosed the semiannual monitoring report for General Chemical – Richmond Works for the reporting period July 1 through December 31, 2011.

The following instances of non-compliance during the reporting period include:

- We failed to perform a timely tune-up of S-15 (Startup Air Heater) as required by BAAQMD Reg 9, Rule 7, Section 304.

If you should have any questions, please contact me at (973) 515-1885.

Sincerely yours,

A handwritten signature in black ink, appearing to read "M. A. Ware". The signature is fluid and cursive, written over a horizontal line.

Mike Ware
Vice President
General Chemical Corporation

cc: Director of the Air Division
USEPA, Region IX
Attention: Air - 3
75 Hawthorne Street
San Francisco, CA 94105

GENERAL CHEMICAL CORPORATION
Richmond Works - Facility # A0023
Title V - Semi-Annual Monitoring Report
Period: July 2011 through December 2011

Source	Pollutant	Emission Limit Citation	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Monitoring Results		
S-1 Sulfuric Acid Mfg.	SO ₂	SIP 9-1-308.2	Gaseous emissions from any source at an H ₂ SO ₄ plant shall not exceed 300 ppmv @ 12% O ₂	SIP 9-1-502	C	CEM	July 2011 - December 2011 see attached monthly CEM reports		
	SO ₂	BAAQMD Regulation 9-1-309	Gaseous emissions from any source at an H ₂ SO ₄ plant shall not exceed 300 ppmv @ 12% O ₂	SIP 9-1-502	C	CEM	July 2011 - December 2011 see attached monthly CEM reports		
	Acid Mist	BAAQMD Regulation 12-6-301	Gaseous emissions from any source at an H ₂ SO ₄ plant shall not exceed 0.15 g/kg (0.3 lb/ton) of acid produced	BAAQMD Condition # 14980	P/A	Source Test	A source test was conducted on July 20, 2011, and results were submitted to the Source Test and Enforcement Division.		
S-9 Process Air Heater	NO _x , CO, VOC, PM10	BAAQMD Condition # 7934 Part 2	Fuel consumption shall not exceed 61.3 million cubic feet / 12 month period	BAAQMD Condition # 7934 Part 3	P/M	Monthly Records	Jul	3049	mscf
							Aug	3204	mscf
							Sep	3397	mscf
							Oct	3701	mscf
							Nov	3574	mscf
							Dec	3196	mscf
S-15 Startup Air Heater	NO _x , CO, VOC, PM10	BAAQMD Condition # 7606 Part 2	Fuel consumption shall not exceed 5 million cubic feet / 12 month period	BAAQMD Condition # 7606 Part 2	P/M	Monthly Records	Jul	0	scf
							Aug	29977	scf
							Sep	25390	scf
							Oct	70347	Scf
							Nov	114894	Scf
							Dec	53708	Scf

GENERAL CHEMICAL CORPORATION

Richmond Works - Facility # A0023

Title V - Semi-Annual Monitoring Report

Period: July 2011 through December 2011

Source	Pollutant	Emission Limit Citation	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Monitoring Results			
							Jul	Tons		
S-16 Alkylation Storage Tank # 13	VOC, PM10	BAAQMD Condition # 13215 Part 1	Throughput shall not exceed 146,000 ton / 12 month period	BAAQMD Condition # 13215 Part 4	P/M	Monthly Records	Jul	0	Tons	
							Aug	0	Tons	
							Sep	0	Tons	
							Oct	0	Tons	
							Nov	0	Tons	
							Dec	0	Tons	
S-24 Elec. Grade Sulfuric Acid Mfg.	SO ₂	SIP 9-1-308.2	Gaseous emissions from any source at an H ₂ SO ₄ plant shall not exceed 300 ppmv @ 12% O ₂	SIP 9-1-502	C	CEM	July 2011 - December 2011 see attached monthly CEM reports for S-1			
	SO ₂	BAAQMD Regulation 9-1-309	Gaseous emissions from any source at an H ₂ SO ₄ plant shall not exceed 300 ppmv @ 12% O ₂	SIP 9-1-502	C	CEM	July 2011 - December 2011 see attached monthly CEM reports for S-1			
			BAAQMD Condition # 13507 Part 1	Production shall not exceed 15,000 ton / 12 month period	BAAQMD Condition # 13507 Part 3	P/M	Monthly Records	Jul	1036	Tons
								Aug	930	Tons
								Sep	603	Tons
								Oct	800	Tons
Nov								500	Tons	
Dec	665	Tons								

GENERAL CHEMICAL CORPORATION
Richmond Works - Facility # A0023
Title V - Semi-Annual Monitoring Report
Period: July 2011 through December 2011

Source	Pollutant	Emission Limit Citation	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Monitoring Results		
							Jul	0	Tons
S-32 Alkylation Storage Tank # 14	VOC, PM10	BAAQMD Condition # 13889 Part 2	Throughput shall not exceed 219,000 ton / 12 month period	BAAQMD Condition # 13889 Part 3	P/M	Monthly Records	Aug	0	Tons
							Sep	0	Tons
							Oct	0	Tons
							Nov	0	Tons
							Dec	0	Tons
							Jul	0	Tons

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

SOURCE MONITORED: SULFURIC EXIT

DATE: July-11

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	321	180	196	0.80
2	358	200	240	0.95
3	353	198	226	0.87
4	350	196	211	0.86
5	364	204	222	0.89
6	335	188	201	0.83
7	352	196	223	0.89
8	326	184	197	0.79
9	325	184	203	0.79
10	333	189	210	0.80
11	339	192	202	0.83
12	336	190	210	0.83
13	375	210	227	0.90
14	285	166	208	0.64
15	265	158	209	0.56
16	319	178	192	0.75
17	305	171	171	0.71
18	296	167	264	0.70
19	280	159	175	0.64
20	265	151	163	0.58
21	250	145	208	0.54
22	355	199	215	0.88
23	276	157	189	0.64
24	318	180	189	0.77
25	351	195	213	0.86
26	351	195	209	0.86
27	359	199	221	0.87
28	373	206	224	0.90
29	339	191	204	0.82
30	344	194	203	0.85
31	353	198	214	0.86

Day	Alky (bbls)
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$\text{SCFM} \times 1440 \text{ min/day} \times \text{parts}/1\text{e}6 \text{ parts} \times \text{lbmol}/359 \text{ lbmol} \times 64 \text{ lb/lbmol} \times \text{ton}/2000 \text{ lb} = \text{TPD}$

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

DATE: August-11

SOURCE MONITORED: SULFURIC EXIT

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	333	187	259	0.76
2	245	138	170	0.43
3	242	134	154	0.31
4	260	146	222	0.55
5	309	175	206	0.75
6	311	176	182	0.74
7	336	188	197	0.85
8	348	195	228	0.87
9	346	194	213	0.86
10	298	169	178	0.71
11	306	173	184	0.74
12	314	176	180	0.76
13	335	186	193	0.83
14	194	147	181	0.29
15	175	108	173	0.34
16	282	159	175	0.65
17	302	169	182	0.71
18	287	162	172	0.70
19	261	149	173	0.60
20	259	146	151	0.60
21	252	142	150	0.59
22	274	153	161	0.63
23	259	145	154	0.60
24	253	142	150	0.58
25	257	144	149	0.58
26	262	147	155	0.60
27	254	143	149	0.56
28	247	140	148	0.55
29	237	134	149	0.50
30	234	131	135	0.50
31	238	134	142	0.49

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

SOURCE MONITORED: SULFURIC EXIT

DATE: September-11

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	122	126	139	0.18
2	135	84	153	0.18
3	215	122	132	0.45
4	238	133	142	0.51
5	261	147	164	0.57
6	241	137	145	0.53
7	228	129	134	0.48
8	231	132	159	0.48
9	271	151	157	0.59
10	263	145	152	0.55
11	260	145	158	0.55
12	205	117	141	0.40
13	221	125	145	0.45
14	205	117	124	0.41
15	178	104	111	0.37
16	179	103	107	0.35
17	210	119	132	0.42
18	253	141	158	0.55
19	245	137	144	0.53
20	233	131	135	0.46
21	240	134	142	0.50
22	230	129	134	0.46
23	266	145	159	0.51
24	229	126	144	0.42
25	221	121	152	0.40
26	259	143	166	0.44
27	245	136	147	0.45
28	243	135	143	0.47
29	247	137	146	0.49
30	252	140	146	0.50
31	0	0	0	0.00

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$$\text{SCFM} \times 1440 \text{ min/day} \times \text{parts}/10^6 \text{ parts} \times \text{lbmol}/359 \text{ lbmol} \times 64 \text{ lb/lbmol} \times \text{ton}/2000 \text{ lb} = \text{TPD}$$

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

SOURCE MONITORED: SULFURIC EXIT

DATE: October-11

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	244	136	143	0.52
2	238	133	138	0.42
3	245	137	155	0.49
4	162	101	139	0.31
5	103	70	77	0.17
6	144	92	131	0.27
7	256	142	162	0.54
8	271	150	171	0.60
9	284	157	177	0.63
10	272	151	161	0.60
11	288	160	181	0.65
12	308	171	183	0.70
13	248	147	170	0.47
14	264	145	153	0.54
15	177	117	150	0.29
16	254	140	162	0.54
17	311	170	207	0.72
18	318	174	182	0.74
19	271	150	182	0.61
20	138	93	145	0.23
21	100	72	85	0.19
22	125	80	87	0.21
23	119	76	82	0.19
24	113	74	81	0.17
25	0	0	0	0.00
26	0	0	0	0.00
27	80	90	114	0.06
28	178	104	132	0.29
29	214	119	130	0.38
30	186	107	152	0.29
31	237	133	140	0.44

Day	Alky (bbls)
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SCFM x 1440 min/day x parts/1e6 parts x lbmol/359 lbmol x 64 lb/lbmol x 1ton/2000 lb = TPD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

SOURCE MONITORED: SULFURIC EXIT

DATE: November-11

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	188	109	118	0.35
2	244	136	156	0.42
3	183	116	131	0.25
4	186	104	124	0.30
5	196	109	128	0.33
6	152	102	109	0.20
7	59	177	92	0.01
8	170	97	109	0.28
9	175	101	108	0.28
10	172	100	131	0.29
11	197	112	135	0.37
12	234	130	139	0.47
13	198	112	125	0.40
14	192	110	126	0.37
15	224	125	134	0.46
16	229	136	137	0.45
17	221	125	139	0.46
18	64	119	114	0.02
19	108	71	84	0.16
20	104	73	86	0.13
21	126	81	118	0.19
22	133	80	94	0.21
23	137	83	113	0.22
24	153	90	96	0.26
25	143	85	90	0.24
26	144	86	90	0.24
27	131	79	93	0.21
28	130	79	90	0.17
29	158	92	102	0.27
30	180	103	124	0.31
31	0	0	0	0.00

Day	Alky (bbls)
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SCFM x 1440 min/day x parts/1e6 parts x lbmol/359 lbmol x 64 lb/lbmol x ton/2000 lb = TPD

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
MONTHLY CONTINUOUS EMISSION MONITORING REPORT**

PLANT #23

COMPANY: GENERAL CHEMICAL

SOURCE MONITORED: SULFURIC EXIT

DATE: December-11

POLLUTANT: SO₂

DAY OF MONTH	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , AS IS	AVERAGE 24 HOUR CONCENTRATION, PPM SO ₂ , CORRECTED TO 12% O ₂	MAXIMUM 1 HOUR CONCENTRATION PPM SO ₂ , CORRECTED TO 12% O ₂	DAILY MASS EMISSION, TONS
1	192	109	118	0.39
2	198	111	125	0.35
3	198	111	128	0.36
4	181	103	111	0.32
5	203	113	128	0.35
6	206	115	123	0.38
7	217	121	127	0.40
8	178	103	119	0.32
9	149	89	97	0.24
10	156	91	98	0.26
11	143	85	92	0.23
12	144	85	94	0.23
13	104	81	90	0.11
14	153	91	111	0.24
15	169	99	127	0.29
16	174	99	107	0.30
17	174	100	107	0.31
18	171	98	102	0.30
19	96	102	111	0.07
20	211	118	136	0.38
21	224	123	141	0.42
22	201	116	127	0.36
23	191	107	115	0.37
24	167	94	103	0.31
25	165	93	109	0.28
26	188	104	110	0.33
27	176	98	106	0.30
28	187	104	119	0.31
29	200	111	133	0.31
30	227	126	146	0.37
31	145	84	123	0.20

Day	Alky (bbls)
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SCFM x 1440 min/day x parts/1e6 parts x lbmol/359 lbmol x 64 lb/lbmol x ton/2000 lb = TPD