

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B184627076

FACILITY: Occidental Chemical Corporation		SRN / ID: B1846
LOCATION: 1600 S. Madison St., LUDINGTON		DISTRICT: Cadillac
CITY: LUDINGTON		COUNTY: MASON
CONTACT: Michael W. Ryder , Responsible Care Leader		ACTIVITY DATE: 09/23/2014
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: MI-ROP-B1846-2014, 2014 FCE including on-site inspection, records review, reporting review.		
RESOLVED COMPLAINTS:		

2014 Full Compliance Evaluation.

On September 23, 2014 I conducted a compliance inspection of Occidental Chemical Corp., Calcium Chloride Manufacturing Facility including a records review. Prior to the inspection I reviewed the reporting submitted for the previous year. The most recent ROP renewal was issued to SMC on 7/01/14 so to a large degree this inspection focused on each of the requirements of the new ROP and how compliance will be demonstrated going forward. During the inspection I met with Mr. Mike Ryder and Mr. Steve Jones, who will be taking over for Mr. Ryder following his retirement in 2015, and provided them with the Environmental Inspections brochure. At the time of the inspection the weather was clear skies and temperatures around 65 degrees F. with light winds from the southwest. Mr. Ryder, Mr. Jones and I sat down and went through each requirement of the ROP, Mr. Ryder and I also made observations outside the plant of the various emission points and reviewed process operating data in the plant control room. These activities were documented as follows:

Source Wide Requirements

I. NA

II. NA

III. NA

IV. NA

V. NA

VI.1. Continuous Basis monitoring definition; one data point every 15 minutes for 90% of operating time during a calendar day, averaged over 8 hours. Exceedence of operating limits based on this 8 hr. average. Continuous monitoring not required during monitor breakdown, monitor repairs, calibration checks, zero and span adjustment, and periods of non-operation. *Information only, no actions required.*

VI.2. Can operate non-emitting emission unit components during times emitting equip. has been shut down to comply with limit. *Information only.*

VII. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VIII. NA

IX. NA

EUDGDCCFIBC (Dry Calcium Chloride Process, Super Sacks and Drums)

S-300 Spray Tower Scrubber

I. 1. PM 2.3pph. *Tested 7/27/10, in compliance.*

1.2. PM 0.10lb/1000 lbs. *Tested 7/27/10, in compliance.*

II.1. NA

III.1. Scrubber installed and operating properly. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor whenever scrubber is operating. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate = 80 gpm. *Observed flow rate was 111.41 gpm.*

IV.1. Equipped with liquid flow rate monitor. Yes.

V.1. PM stack test every 5 years, 8hr test, 3 runs. *Tested 7/27/10 in compliance.*

VI.1. Continuously monitor and record liquid flow rate. Yes.

VII.1, 2, 3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at time of receipt, in compliance.*

VIII.1. SV06025 max. dia. = 19.7", min ht. 29.9'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUPELLETCBULK (Dry Calcium Chloride process, pellet C bulk railcar and truck loading)

S-1307/S-1308 Venturi Scrubber system

I. 1. PM 0.016lb/1000 lbs. *Tested 8/04/11, in compliance.*

II. NA

III.1. Scrubber installed and operating. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate 25 gpm. *Observed flow rate was 52.016 gpm.*

III.4. Operate differential pressure monitor. Yes.

III.5. Minimum Differential pressure 3". *Observed differential pressure was 8.4962".*

IV.1,2. Flow rate and Dp monitors installed. Yes.

V.1. PM stack test every 5 years, 8hr test, 3 runs. *Tested 8/04/11, in compliance.*

VI.1. Continuously monitor and record liquid flow rate. Yes.

VI.2. Continuously monitor and record differential pressure. Yes.

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at time of receipt.*

VIII.1. SV06043 max. dia. = 20.4", min ht. 110'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUPELLETHNDL (Dry Calcium Chloride process, pellet material handling)

S-1302 Venturi Scrubber

I. 1. PM 0.03lb/1000 lbs. *Tested 7/27/10.*

II. NA

III.1. Scrubber installed and operating. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate 150 gpm. *Observed flow rate was 177.59 gpm.*

III.4. Operate differential pressure monitor. *Yes.*

III.5. Minimum Differential pressure 14". *Observed differential pressure was 8.4962".*

IV.1,2. Flow rate and Dp monitors installed. *Yes.*

V.1. PM stack test every 5 years, 8hr test, 3 runs. *Tested 7/27/10, in compliance.*

VI.1. Continuously monitor and record liquid flow rate. *Yes.*

VI.2. Continuously monitor and record differential pressure. *Yes.*

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at time of receipt.*

VIII.1. SV06043 max. dia. = 36", min ht. 130'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUPELLETC DRY (Dry Calcium Chloride process, pellet C dryer)**S-501/S-701 Venturi Scrubber with spray tower**

I. 1. PM 0.03lb/1000 lbs. *Tested 3/02/10.*

II. NA

III.1. Scrubber installed and operating. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate 1200 gpm. *Observed flow rate was 1756.6 gpm.*

III.4. Operate differential pressure monitor. *Yes.*

III.5. Minimum Differential pressure 20". *Observed differential pressure was 24.991".*

III.6. Maximum heat input 140 MMBtu/hr. *Fuel use is monitored, burner is rated for less than 140 MMBtu.*

III.7. Natural gas only. *Dryer is only equipped to burn Natural gas.*

IV.1,2. Flow rate and Dp monitors installed. *Yes.*

V.1. PM stack test every 5 years, 8hr test, 3 runs. *Tested 3/02/10.*

VI.1. Continuously monitor and record liquid flow rate. *Yes.*

VI.2. Continuously monitor and record differential pressure. Yes.

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at time of receipt.*

VIII.1. SV06052 max. dia. = 96", min ht. 130'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUFLAKEDBULK (D bulk loading, dry calcium chloride material handling, and truck, and railcar loading process with pneumatic conveyor)

S-50 Venturi Scrubber

I. 1. PM 0.1lb/1000 lbs., *Tested 8/15/13.*

II. NA

III.1. Scrubber installed and operating. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate 50 gpm. *Observed flow rate was 91.109 gpm.*

III.4. Operate differential pressure monitor. Yes.

III.5. Minimum Differential pressure 10". *Observed differential pressure was 11.522".*

IV.1,2. Flow rate and Dp monitors installed. Yes.

V.1. PM stack test every 5 years, 8hr test, 3 runs. *Tested 8/15/13.*

VI.1. Continuously monitor and record liquid flow rate. Yes.

VI.2. Continuously monitor and record differential pressure. Yes.

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at the time of receipt.*

VIII.1. SV06066 max. dia. = 24", min ht. 35'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUFLAKEDRY (Dry calcium chloride process, 30 MMBtu furnace, flaker drums, D-Dryer, cooler, crusher, and screen)

S-405 Venturi Scrubber (except flaker drums)

I. 1. PM 0.05lb/1000 lbs. (Flaker Drum), *Tested 8/14/13*

I.2. PM 0.03 lb/1000 lbs. (Flake D-Dryer), *Tested 8/13/13*

II. NA

III.1. Scrubber installed and operating. *At the time of the inspection the scrubber was installed and operating properly.*

III.2. Operate flow rate monitor. *At the time of the inspection the flow rate monitor was operating.*

III.3. Minimum flow rate 550 gpm. *Observed flow rate was 741.17 gpm.*

III.4. Operate differential pressure monitor. *Yes.*

III.5. Minimum Differential pressure 12". *Observed differential pressure was 13.556".*

IV.1,2. Flow rate and Dp monitors installed. *Yes.*

V.1. PM stack tests every 5 years, 8hr test, 3 runs. *Tested 8/13 and 14/13.*

VI.1. Continuously monitor and record liquid flow rate. *Yes.*

VI.2. Continuously monitor and record differential pressure. *Yes.*

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VII.4,5,6. Test protocol and reporting requirements. *Reviewed at time of receipt.*

VIII.1. SV06072 max. dia. = 60", min ht. 90'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

VIII.2. SVFLAKERDRUMS Max. dia. = 24", Min. Ht. = 90'. *Stack heights were verified by Occidental Chemical during ROP application, no changes to stacks.*

XI.1. NA

EUGARAGE (Service garage with on 5,000 gallon gas tank and one 5,000 gallon diesel tank)

I. NA

II. NA

III. NA

IV.1. Gas tank equipped with submerged fill pipe. *Yes.*

IV.2. Gas tank constructed in a manner to be retrofitted according to R703(2) and (3). Vapor balance system (returns 90% of displaced gasoline vapor) required if in area listed in Table 61 (Detroit, Flint, Grand Rapids, Lansing). Interlocking system or procedure to ensure vaportight collection line is connected before any gasoline can be loaded. *This requirement is not applicable due to location in Mason County*

V. NA

VI.1. Records of compliance with R703(1) and (5). Submerged fill pipe, If not subject to 703(2) and (3) constructed to be retrofitted. *The tanks are equipped with submerged fill pipe, R 703(5) NA.*

VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VIII. NA

XI.1. NA

FGCAM (EUDGDCCFIBC, EUPELLETHNDL, EUPELLETCDRY, EUFLAKEDBULK, EUFLAKEDDRY)

I. NA

II. NA

III.1. Excursion defined. *Informational.*

IV. NA

V. NA

VI.1. Response to excursion. *Informational.*

VI.2. Applicable operating parameters:

Emission Unit ID	Control Equipment	Reading A Minimum Liquid Flow Rate (gal/min)	Reading B Minimum Differential Pressure (inches of water column)
EUDGCCCFIBC	Spray Tower Scrubber S-300	80	NA
EUPELLETHNDL	Venturi Scrubber S-1302	150	14
EUPELLETCDRY	Venturi Scrubber with Spray Tower S-501/ S-701	1200	20
EUFLAKEDBULK	Venturi Scrubber S-50	50	10
EUFLAKEDRY	Venturi Scrubber S-405	550	12

VI.3. Conduct all monitoring in continuous operation. *Yes, redundant with EU requirements.*VI.4. Conduct flow rate and Dp readings continuously. *Yes, redundant with EU requirements.*VI.5. Properly maintain monitoring system including keeping repair parts. *Not reviewed at this time.*VII.1,2,3. Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*VII.4 and 5. Semiannual CAM reports of excursions and monitor downtime. *CAM reports have been received on a timely basis and were certified. Reports are reviewed as they are received.*

VIII.NA

XI.1. Comply with Part 64.

FGMACTEMERGENCY (Emergency pump, Nissan emergency generator, Ford emergency generator)

I. NA

II. NA

III.1. No time limit on emergency operation. *No emergency operation in last year.*III.2. Operate up to 100 hrs./yr. for maintenance checks and readiness testing. *Generator engines are operated 15 min./month for maintenance, Pump engine operated less.*III.3. Operating up to 50 hrs./yr. for non-emergency situations (counts towards 100 hrs. from III.2). *No non emergency operation in last year.*III.4. Operate in accordance with OMP or facility maintenance plan. *Not reviewed at this time.*

III.5. MACT operating requirements:

- a. Oil change 500 hrs or annually.
- b. Air cleaner inspect 1000 hrs or annually.
- c. Hoses and belts inspect 500 hrs or annually.
- d. Minimize start-up operation, limit 30 minutes.

Maintenance operating requirements are performed annually from work orders generated by SAP.

III.6. Oil analysis program. NA

III.7. Minimize idle during startup to 30 minutes or less. *Small engines, start up is brief.*

III.8. *There are no emission limits associated with this equipment.*

III.9. Operate and maintain in a manner to minimize emissions. Yes.

IV.1. Engines equipped with non-resettable hours meter. *Each engine was equipped with a non-resettable hours meter.*

V. NA

VI.1. Records:

- a. Notifications and reports.
- b. Malfunctions.
- c. Maintenance of monitoring equip.
- d. Emissions.
- e. Maintenance of engines.
- F. Hours of operation, emergency/non-emergency.

At the time of the inspection the required records were being maintained. Occidental Chemical has developed a system to ensure operating time limits are not exceeded. Maintenance is performed by a sub-contractor and these records are readily available.

VI.2. Oil analysis program records. NA.

VII.1-3 Deviation/Semiannual/annual reporting. *All ROP reporting has been received on a timely basis and was certified. Reports are reviewed as they are received.*

VIII. NA

IX. Comply with Subpart ZZZZ.

As a result of the reporting review, on-site inspection and records review, it appears this source is currently in compliance with MI-ROP-B1846-2014 and has programs and recordkeeping in place to maintain compliance.

NAME



DATE

9-25-14

SUPERVISOR

