

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

A404324914

FACILITY: Dow Corning - Midland Plant		SRN / ID: A4043
LOCATION: 3901 S Saginaw Rd, MIDLAND		DISTRICT: Saginaw Bay
CITY: MIDLAND		COUNTY: MIDLAND
CONTACT: Mike Gruber, Air & Water Team Leader		ACTIVITY DATE: 04/10/2014
STAFF: Jennifer Lang	COMPLIANCE STATUS: Compliance	
SUBJECT: EU515-01, EU324-01, EU324-08 & EU325-03 - Scheduled Inspection		
RESOLVED COMPLAINTS:		

Inspection date: 4/10/14
Inspection started: 9:00 am
Inspection ended: 11:40 pm

Dow Corning and MDEQ-AQD staff present during the inspection.

Jenny Lang (MDEQ-AQD, Environment Engineer Specialist)
Steve Moser (Dow Corning, Assistant General Council)
Mike Gruber (Dow Corning, Air & Water Team Leader)

EU515-01

Compliance Status: Compliance

Items noted during the inspection.

1. EU515-01 covers the Grignard process for production of chlorosilanes and related materials including reactors, distillation, filtration, drying, vacuum system, condensers, hoppers, dust collectors, scrubber and related equipment. EU515-01 is equipped with the following air pollution control (APC) equipment: packed tower toluene scrubber (10530), glycol condensers (10453, 10541), service water condenser (HX-10657), bag filters (22979, 22981), THROX (FGTHROX) and site scrubbers (FGSITESCRUBBERS).

I did not inspect FGTHROX and FGSITESCRUBBERS during my inspection as I previously inspected them on 11/13/13 and found them to be in compliance with air quality rules and regulations. The THROX and FGSITESCRUBBERS were operational at the time of my inspection. Operation of this emission unit is covered by the site-wide malfunction abatement plan (MAP).

2. Air Permit to Install (PTI) no. 812-91C covers EU515-01. This permit was issued on 12/21/12. ROP modification application no. 201300027 was received by the MDEQ-AQD on 1/22/13. This application covers the addition of PTI 812-91C to the ROP. To date, the PTI has not been rolled into the ROP. For the purpose of determining compliance during the inspection, PTI 812-91C was used instead of table EU515-01 in the current ROP.
3. Condition no. VI.2.a of table EU515-01 of PTI no. 812-91C states, in part, Dow Corning (DC) shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exit gas temperature of toluene scrubber no. 10530 while the scrubber is operating and the exhaust is not routed to the THROX. Condition no. III.1 of the same table in the PTI states, if the exit air temperature of packed tower scrubber no. 10530 is greater than -5 degrees C while the scrubber exhaust is not routed to the THROX, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At approximately 10:00 am, I observed the following operational parameter data for scrubber no. 10530 in the control room for EU515-01 at Building 508. Bob O'Laughlin (DC Operator), Mike Harding (DC Manufacturing Engineer), and Scott Geyer (DC Team Leader) provided the data. Scrubber no. 1053 controls emissions from tank T-614, the dryers, and distillation column nos. 513, 515 and 516. DC was operating equipment which vents to the scrubber at the time of my inspection. Exhaust from scrubber no. 10530 was being vented to the THROX at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Toluene scrubber no. 10530 exit air temperature	-18 degrees C (instantaneous)	≥ -10 degrees C (This is a secured process alarm (SPA) which cannot be changed by an operator.)

**All alarm set points are instantaneous.

4. Condition no. VI.2.b of table EU515-01 of PTI no. 812-91C states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the main coolant supply temperature for condenser nos. 10453 and 10541 while the condensers are operating and the exhaust is not routed to the THROX. Condition no. III.5 of the same table in the PTI states, if the main coolant supply temperature for condenser nos. 10453 and 10541 exceeds -5 degrees C, respectively, while the condenser exhaust is not routed to the THROX, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At approximately 10:01 am, I observed the following operational parameter data for condenser nos. 10453 and 10541 in the control room for EU515-01 at Building 508. Bob O'Laughlin (DC Operator), Mike Harding (DC Manufacturing Engineer), and Scott Geyer (DC Team Leader) provided the data. Condenser nos. 10453 and 10541 precede toluene scrubber no. 10530. Condenser no. 10453 controls emissions from the dryers and tank no. 10426. Condenser no. 10541 controls emissions from tank no. 10540. DC was operating equipment which vents to the condensers at the time of my inspection. Exhaust from the condensers was being vented to scrubber no. 10530 and the THROX during my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser nos. 10453 and 10541 coolant supply temperature	-27 degrees C (instantaneous)	≥ -10 degrees C (This is a SPA which cannot be changed by an operator.)

**All alarm set points are instantaneous.

5. Condition no. VI.2.c of table EU515-01 of PTI no. 812-91C states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the liquid flow rate of condenser no. HX-10657 while the THROX is shut down or experiencing a malfunction. Condition no. III.2 of the same table in the PTI states, if the liquid flow rate of condenser no. HX-10657 is less than 100 gallons per minute while the condenser exhaust is not routed to the THROX, DC shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At approximately 10:12 am, I observed the following operational parameter data for condenser no. HX-10657 in the control room for EU515-01 at Building 508. Bob O'Laughlin (DC Operator), Mike Harding (DC Manufacturing Engineer), and Scott Geyer (DC Team Leader) provided the data. Condenser no. HX-10657 was not being used during my inspection as the THROX was up and running. Condenser no. HX-10657 vents directly to the THROX and does not vent to toluene scrubber no. 10530. DC was operating equipment which vents to the condenser at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser no. HX-10657 liquid flow rate	97.2 gpm (instantaneous) – Although the observed value is less than the limit (100 gpm), this is not a non-compliance issue as the THROX was up and running.	≤ 115 gpm (This is a SPA which cannot be changed by an operator.)

**All alarm set points are instantaneous.

6. Condition no. VI.2.d of table EU515-01 of PTI no. 812-91C states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the pressure drop across bag filter nos. 22979 and 22981, respectively. Condition nos. III.3 and 4 of the same table in the PTI states, when venting to the atmosphere, if the pressure drop across bag filter nos. 22979 and 22981 is less than 0.5 inches of water gauge or greater than 75 inches of water gauge, respectively, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At approximately 10:13 am, I observed the following operational parameter data for bag filter nos. 22979 and 22981 in the control room for EU515-01 at Building 508. Bob O'Laughlin (DC Operator), Mike Harding (DC Manufacturing Engineer), and Scott Geyer (DC Team Leader) provided the data. Bag filter no. 22979 controls emissions from dryer no. 22978, and bag filter no. 22981 controls emissions from dryer no. 22980. Under normal operating conditions, the bag filters vent to toluene scrubber no. 10530 and to the THROX. DC was operating equipment which vents to the bag

filters at the time of my inspection. Exhaust from the bag filters was being vented to scrubber no. 10530 and to the THROX at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Bag filter no. 22979 pressure drop	23.6 inches of water (instantaneous)	≤ 0.6 inches of water ≥ 65 inches of water
Bag filter no. 22981 pressure drop	20.8 inches of water (instantaneous)	≤ 0.6 inches of water ≥ 65 inches of water

**All alarm set points are instantaneous. All alarms are SPAs which cannot be changed by an operator.

7. Condition no. VI.3 of table EU515-01 of PTI no. 812-91C requires DC to comply with 40 CFR Part 60, Subpart Kb, Section 60.116b(a) and (b) for tank 612. Condition no. VI.3 of the same table in the PTI also states that tank no. 612 is exempt from the General Provisions of 40 CFR Part 60 and from the provisions of Subpart Kb except for 60.116b(a) and (b) of Subpart Kb. During the inspection, I requested the design capacity, material stored and vapor pressure for tank 612. On 4/16/14, I received the requested information (see attached).
8. Condition no. VI.4 of table EU515-01 of PTI no. 812-91C states, in part, DC shall maintain a 12-month rolling time period record, as determined at the end of each calendar month, for the drying of magnesium chloride in EU515-01 without toluene scrubber no. 10530 and the THROX in order to demonstrate compliance with condition no. IV.2 of the same table in the PTI. Condition no. IV.2 of the same table in the PTI states, DC may dry magnesium chloride in EU515-01 for up to 336 hours per 12-month rolling time period, as determined at the end of each calendar month, while toluene scrubber no. 10530 is not installed and operating properly and the THROX is shutdown or experiencing a malfunction. During operation without toluene scrubber no. 10530 and the THROX, the permittee shall not dry magnesium chloride unless condenser nos. 10453 and 10541 are installed, maintained, and operated in a satisfactory manner. During the inspection, I asked for the 12-month rolling total through February 2014 for the operational scenarios described in the aforementioned conditions. During an unrelated inspection on 4/17/14, I received the requested information. According to data provided by DC, the 12-month rolling total through February 2014 for the operational scenario described above was 0.1 hours.
9. Condition no. VI.5 of table EU515-01 of PTI no. 812-91C states, in part, DC shall maintain a 12-month rolling time period record, as determined at the end of each calendar month, for operation of the reactors, filters 421, 422, and 423, all distillation columns, and all raw/crude material tanks without toluene scrubber no. 10530 and the THROX in order to demonstrate compliance with condition no. IV.3 of the same table in the PTI. Condition no. IV.3 of the same table in the PTI states, DC may operate the reactors, filters 421, 422, and 423, all distillation columns, and all raw/crude material tanks in EU515-01 for up to 336 hours per 12-month rolling time period, as determined at the end of each calendar month, while toluene scrubber no. 10530 is not installed and operating properly and the THROX is shutdown or experiencing a malfunction. During operation without toluene scrubber no. 10530 and the THROX, the permittee shall not operate the equipment described above unless condenser nos. 10453 and 10541 and the site scrubbers (FGSITESCRUBBERS) are installed, maintained, and operated in a satisfactory manner. During the inspection, I asked for the 12-month rolling total through February 2014 for the operational scenarios described in the aforementioned conditions. During an unrelated inspection on 4/17/14, I received the requested information. According to data provided by DC, the 12-month rolling total through February 2014 for the operational scenario described above was 0.0 hours.
10. Condition no. VI.6 of table EU515-01 of PTI no. 812-91C states, in part, DC shall maintain a 12-month rolling time period record, as determined at the end of each calendar month, for operation of the reactors, filters 421, 422, and 423, all distillation columns, all raw/crude material tanks, and all dryers without the THROX in order to demonstrate compliance with condition no. IV.4 of the same table in the PTI. Condition no. IV.4 of the same table in the PTI states, DC may operate the reactors, filters 421, 422, and 423, all distillation columns, all raw/crude material tanks, and all dryers in EU515-01 for up to 1,600 hours per 12-month rolling time period, as determined at the end of each calendar month, while the THROX is shutdown or experiencing a malfunction. During operation without the THROX, DC shall not operate the equipment described above unless condenser nos. 10453 and 10541, toluene scrubber no. 10530, and the site scrubbers (FGSITESCRUBBERS) are installed, maintained, and operated in a satisfactory manner. During the inspection, I asked for the 12-month rolling total through February 2014 for the operational scenarios described in the aforementioned conditions. During an unrelated inspection on 4/17/14, I received the

requested information. According to data provided by DC, the 12-month rolling total through February 2014 for the operational scenario described above was 131.5 hours.

11. Condition no. VI.7 of table EU515-01 of PTI no. 812-91C states, within 30 days following the end of each calendar month, DC shall calculate the VOC emission rate from EU515-01 monthly, for the preceding 12-month rolling time period. Condition no. I.2 of the same table in the PTI limits VOC emissions from EU515-01 to 61.23 tpy (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC emissions through February 2014 for EU515-01. On 4/16/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC emissions through February 2014 for EU515-01 was 1.3 tpy.
12. Condition no. VI.8 of table EU515-01 of PTI no. 812-91C states, DC shall keep, in a satisfactory manner, production records for EU515-01. I did not request a copy of this information during my inspection as it's confidential, and it's my assumption that this information is included in the 12-month rolling time period emission calculation discussed in item no. 11 above.
13. Condition no. IX.2 of table EU515-01 of PTI no. 812-91C states, DC shall comply with all requirements of 40 CFR Part 64 (CAM). According to the latest ROP deviation report received on 3/14/14 for reporting period 1/1/13 through 12/31/13, the following two incidents were reported on the CAM excursion/exceedance report. DC did not report any monitor downtime incidents for EU515-01.
 - 11/7/13 (1 hour) & 12/14/13 (15 minutes) – The liquid flow rate of HX-10657 was below 100 gpm while the building was venting to atmosphere. An overpressure event caused the building to divert emissions from THROX to the atmosphere before the liquid flow rate was above permit requirements on HX-10657. It is believed that a plug formed in one of the nitrogen purge lines going to 978 dryer, causing pressure to build in the system. A secure process alarm was added to the DCS system to notify operators when the vent to atmosphere is open and action is required. As a long term corrective action, an interlock was created and verified to automatically put full cooling on HX-10657 if the valve to the atmosphere is opened.

In my opinion, the incidents have been sufficiently resolved. Therefore, no further action regarding enforcement will be taken by me at this time.

14. EU515-01 is subject to the requirements of 40 CFR Part 61, Subparts A, J and V (FGLEAKDETECTION). The latest semi-annual report for FGLEAKDETECTION was received by the MDEQ -AQD on 2/18/14. This report covers reporting period 8/1/13 through 1/31/14. Based upon this report, no leaks were found during the reporting period.

EU324-01

Compliance Status: Compliance

Items noted during the inspection.

1. EU324-01 covers the 4820 batch kettle process producing silane and siloxane products. EU324-01 is equipped with the following APC equipment: service water condenser 4818 and chilled condensers 4804 and 4807. Only one chilled condenser operates at a time while the other condenser acts as backup. The chilled condensers also service EU324-08 (i.e., 5617 batch kettle).
2. Air Permit to Install (PTI) No. 15-13 covers EU324-01. This permit was issued on 2/26/13. ROP modification application no. 201300048 was received by the MDEQ-AQD on 3/7/13. This application covers the addition of PTI 15-13 to the ROP. To date, the PTI has not been rolled into the ROP. For the purpose of determining compliance during the inspection, PTI 15-13 was used instead of table EU324-01 in the current ROP.
3. Condition no. VI.2 of table EU324-01 of PTI no. 15-13 states, in part, DC shall monitor and record the coolant exit temperatures for chilled condenser nos. 4804 and 4807 on a continuous basis (i.e., at least once every 15-minutes). Condition nos. III.1 and 2 of the same table in the PTI states, DC shall not vent EU324-01 to the atmosphere through chilled condenser nos. 4804 or 4807 unless the coolant exit temperature of the condensers is -8 degrees C or less, respectively. At approximately 10:54 am, I observed the following operational parameter data for condenser nos. 4804 and 4807 in the control room for EU324-01 at Building

324. Tim Vandermale (DC Manufacturing Engineer) provided the data. Condenser nos. 4804 and 4807 control emissions from 4820 batch kettle during the vacuum step. DC was not pulling vacuum on the kettle at the time of my inspection. Therefore, the condensers were not receiving emissions from batch kettle 4820.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser nos. 4804 and 4807 coolant exit temperature	-23.3 degrees C (Instantaneous)	Hi-Hi \geq -8 degrees C Hi \geq -10 degrees C

**All alarm set points are instantaneous.

4. Condition no. VI.2 of table EU324-01 of PTI no. 15-13 states, in part, DC shall monitor and record the coolant exit temperature for service water condenser 4818 on a continuous basis (i.e., at least once every 15 -minutes). Condition no. III.3 of the same table in the PTI states, DC shall not vent EU324-01 to the atmosphere through service water condenser 4818 unless the coolant exit temperature of the condenser is 40 degrees C or less. At approximately 10:59 am, I observed the following operational parameter data for condenser 4818 in the control room for EU324-01 at Building 324. Tim Vandermale (DC Manufacturing Engineer) provided the data. Condenser 4818 controls emissions from 4820 batch kettle. 4820 batch kettle was in a "C-12 hold step" and was venting to the condenser at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 4818 coolant exit temperature	24.4 degrees C (instantaneous)	Hi-Hi \geq 35 degrees C Hi \geq 33 degrees C

**All alarm set points are instantaneous.

5. Condition no. VI.3 of table EU324-01 of PTI no. 15-13 states, DC shall calculate the VOC emission rate from EU324-01 monthly, for the preceding 12-month rolling time period. Condition no. I.1 of the same table in the PTI limits VOC emissions from EU324-01 to 4.61 tpy (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC emissions through February 2014 for EU324-01. On 4/16/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC emissions through February 2014 for EU324-01 was 1.8 tpy.
6. Condition no. VII.1 of table EU324-01 of PTI no. 15-13 states, each semiannual report of deviations shall include summary information on the number, duration and cause of CAM excursions and/or exceedances and the corrective actions taken. Condition no. VII.2 of the same table in the PTI states, each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for CAM monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). According to the latest ROP deviation report received on 3/14/14 for reporting period 1/1/13 through 12/31/13, there were no CAM excursions and/or exceedances or monitor downtime incidents for EU324-01.

EU324-08

Compliance Status: Compliance

Items noted during the inspection.

- EU324-08 covers the 5617 batch kettle process producing silane and siloxane products. EU324-08 is equipped with the following APC equipment: service water condenser 5618 and chilled condensers 4804 and 4807. Only one chilled condenser operates at a time while the other condenser acts as backup. The chilled condensers also service EU324-01 (i.e., 4820 batch kettle).
- Air Permit to Install (PTI) No. 14-13 covers EU324-08. This permit was issued on 2/26/13. ROP modification application no. 201300048 was received by the MDEQ-AQD on 3/7/13. This application covers the addition of PTI 14-13 to the ROP. To date, the PTI has not been rolled into the ROP. For the purpose of determining compliance during the inspection, PTI 14-13 was used instead of table EU324-08 in the current ROP.
- Condition no. VI.2 of table EU324-08 of PTI no. 14-13 states, in part, DC shall monitor and record the coolant exit temperatures for chilled condenser nos. 4804 and 4807 on a continuous basis (i.e., at least once

every 15-minutes). Condition nos. III.1 and 2 of the same table in the PTI states, DC shall not vent EU324-08 to the atmosphere through chilled condenser nos. 4804 or 4807 unless the coolant exit temperature of the condensers is -8 degrees C or less, respectively. At approximately 10:54 am, I observed the following operational parameter data for condenser nos. 4804 and 4807 in the control room for EU324-08 at Building 324. Tim Vandermale (DC Manufacturing Engineer) provided the data. Condenser nos. 4804 and 4807 control emissions from 5617 batch kettle during the vacuum step. DC was not pulling vacuum on the kettle at the time of my inspection. Therefore, the condensers were not receiving emissions from batch kettle 5617.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser nos. 4804 and 4807 coolant exit temperature	-23.3 degrees C (Instantaneous)	Hi-Hi ≥ -8 degrees C Hi ≥ -10 degrees C

**All alarm set points are instantaneous.

- Condition no. VI.2 of table EU324-08 of PTI no. 14-13 states, in part, DC shall monitor and record the coolant exit temperature for service water condenser 5618 on a continuous basis (i.e., at least once every 15 -minutes). Condition no. III.3 of the same table in the PTI states, DC shall not vent EU324-08 to the atmosphere through service water condenser 5618 unless the coolant exit temperature of the condenser is 40 degrees C or less. At approximately 11:02 am, I observed the following operational parameter data for condenser 5618 in the control room for EU324-08 at Building 324. Tim Vandermale (DC Manufacturing Engineer) provided the data. Condenser 5618 controls emissions from 5617 batch kettle. 5617 batch kettle was in a reaction step and was venting to the condenser at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 5618 coolant exit temperature	24.4 degrees C (instantaneous)	Hi-Hi ≥ 35 degrees C Hi ≥ 33 degrees C

**All alarm set points are instantaneous.

- Condition no. VI.3 of table EU324-08 of PTI no. 14-13 states, DC shall calculate the VOC emission rate from EU324-08 monthly, for the preceding 12-month rolling time period. Condition no. I.1 of the same table in the PTI limits VOC emissions from EU324-08 to 4.71 tpy (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC emissions through February 2014 for EU324-08. On 4/16/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC emissions through February 2014 for EU324-08 was 2.7 tpy.
- Condition no. VII.1 of table EU324-08 of PTI no. 14-13 states, each semiannual report of deviations shall include summary information on the number, duration and cause of CAM excursions and/or exceedances and the corrective actions taken. Condition no. VII.2 of the same table in the PTI states, each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for CAM monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). According to the latest ROP deviation report received on 3/14/14 for reporting period 1/1/13 through 12/31/13, there were no CAM excursions and/or exceedances or monitor downtime incidents for EU324-08.

EU325-03

Compliance Status: Compliance

Items noted during the inspection.

- EU325-03 covers the solids recovery system. EU325-03 receives vents from different processes to recover silicon. EU325-03 is located in 348 building. EU325-03 is equipped with the following APC equipment: venturi scrubbers in series (16810, 16811) and FG337SCRUBBER (backup to the venturi scrubbers). During my inspection, EU325-03 was venting to the venturi scrubbers. I did not inspect FG337SCRUBBER during my inspection as I inspected it on 11/26/13 and found it to be in compliance with air quality rules and regulations.

2. Condition no. VI.1 of table EU325-03 of ROP No. MI-ROP-A4043-2008 (hereinafter "ROP") states, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the liquid flow rate of venturi scrubber no. 16810 and the liquid level of the scrubber tank (no. 16813). Condition no. III.1 of the same table in the ROP states, if the liquid flow rate of venturi scrubber no. 16810 is less than 40 gpm, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. Table EU325-03 in the ROP does not limit the liquid level in the scrubber tank. At approximately 10:34 am, I observed the following operational parameter data for venturi scrubber no. 16810 and the scrubber tank (no. 16813) in the control room for EU325-03 at Building 325. Ambrose Lessard (DC Manufacturing Engineer) and Matt Weber (DC Bldg. Operations Leader) provided the data. Venturi scrubber nos. 16810 and 16811 control emissions from spent beds and dump tanks. DC was operating equipment which vents to the scrubbers at the time of my inspection. The venturi scrubbers do not vent directly to atmosphere. Instead, emissions are vented from scrubber tank no. 16813. EU325-03 was not venting to FG337SCRUBBER at the time of my inspection. DC staff said they rarely vent to FG337SCRUBBER.

Operational Parameter	Observed Value	Alarm Set Point**
Venturi scrubber no. 16810 liquid flow rate	96.8 gpm (instantaneous)	No alarm set point. Instead, a hard interlock has been set. In the event the liquid flow rate drops below 40 gpm, the feed line from the metal tanks closes.
Liquid level of scrubber tank no. 16813	29.8% full	≥ 50% full

**All alarm set points are instantaneous.

NAME *J. Jung*

DATE *4/17/14*

SUPERVISOR *C. Moore*

Lang, Jennifer (DEQ)

From: steve.moser@dowcorning.com
Sent: Wednesday, April 16, 2014 2:12 PM
To: Lang, Jennifer (DEQ)
Cc: mike.gruber@dowcorning.com
Subject: Information Requested During April 10 Inspection
Attachments: DC006103 - Follow up on EUs 515-01, 324-01 and 324-08.pdf

Jennifer,

Attached is the follow up data you requested during your inspection last week. See you tomorrow.

Stephen V. Moser
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9 of 9

Data Requested During 04/10/2014 Inspection

A. **EU515-01 (ROP Mark-up Condition VI.3.) - Subpart Kb Information**

Tank #	Tank Capacities (Gals.)	Chemicals Stored	Volatile Organic Liquid Vapor Pressure (PSIA)
DV612	20,000	Monochlorobenzene	0.3

B. **EU515-01 (ROP Mark-up Condition VI.4.)**

Hours drying without toluene scrubber and Throx (12-month total thru December 2013) 0.1 hours

C. **EU515-01 (ROP Mark-up Condition VI.5.)**

Hours operating listed equipment without toluene scrubber and Throx (12-month total thru December 2013) 1.5 hours

D. **EU515-01 (ROP Mark-up Condition VI.6.)**

Hours operating listed equipment without Throx (12-month total thru December 2013) 134.5 hours

E. **EU515-01 (ROP Mark-up Condition VI.7.)**

VOC Emissions (12-month rolling total as of end of February 2014): 1.3 TPY (2,515.8 lbs/yr)

F. **EU324-01 (ROP Mark-up Condition VI.3.)**

VOC Emissions (12-month rolling total as of end of February 2014): 1.8 TPY (3,639.3 lbs/yr)

G. **EU324-08 (ROP Mark-up Condition VI.3.)**

VOC Emissions (12-month rolling total as of end of February 2014): 2.7 TPY (5,371.7 lbs/yr)

Requested 12-month rolling total thru Feb. 2014 in an email dated 4/16/17.
[Signature]