



Corteva Agriscience
901 Loveridge Road
Pittsburg, CA 94565

June 13, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

TV Tracking #: 730

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

1. RECEIVED IN
ENFORCEMENT: 06/13/2023

RE: TITLE V MONITORING REPORT
Corteva Agriscience – Pittsburg Operations, Pittsburg, California (Corteva)
Facility Number A0031
Plant Number 24380

Reporting Period: December 1, 2022 – May 31, 2023

Corteva Agriscience hereby submits the following Title V Monitoring Report for its Pittsburg Operations for the period noted above. This report is an update to the report submitted on June 12, 2023 as it also includes 2 additional Title V 30 Day reports that occurred in May 2023.

A Reasonable Inquiry process was followed to review the monitoring requirements of the Title V permit. All required monitoring was performed and after review of the monitoring results all sources were found to be in compliance with the monitoring requirements of Table VII of the Air Permit except the items previously submitted as Title V deviations to the Air District during the reporting period.

Based on information at the completion of the reasonable inquiry process, I certify that the information is true, accurate, and complete to the best of my belief.

If you have any questions regarding this Monitoring Report, please email William Hewlett at william.hewlett@corteva.com.

Sincerely,

James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Page 2: RE: Title V Monitoring Report for Permit #A0031

Attachments: Reporting Period 30-Day Reports and 10-Day Notices of Deviation

January 27, 2023

**Delivered by Email: Compliance@BAAQMD.gov
bkwan@baaqmd.gov**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: 30-Day Report – Major Facility Permit Non-Compliance Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Mr. Gove:

Description of Non-Compliance referencing Permit Condition Number:

Source Number:	S-446 Sym-Tet Plant (Chlorpyridines)
Permit Condition Number:	40 CFR Part 63, Subpart FFFF - Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT)
Describe Non-Compliance:	<p>40CFR 63.2450(c)(1): The Precompliance Report states that caustic strength will be measured every 12 hours when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation.</p> <p>On 12/29/22 and 1/1/23, 12-hour caustic strength sampling of T-90 scrubber was conducted outside the 12-hour required timeframe as specified in the September 12, 2018, precompliance plan. On 12/29/22, sampling was 20 minutes late and on 1/1/23, sampling was 47 minutes late.</p>

As shown in the table below, based on the caustic strengths measured on the late sampling events, the caustic strength was maintained above the minimum level of 3.7% ; therefore, no excess emissions occurred.

Sampling Event Date	Military Time	Caustic Strength (%)	Time Between Samples
12/28/2022	20:32	5.5	
12/29/2022	09:19	10.84	12 hours 47 minutes
12/31/2022	18:47	11.14	
01/01/2023	07:07	9.93	12 hours 20 minutes

Root Cause:

The lab technician that completed the sampling was unaware of the compliance requirement to conduct the sampling every 12 hours. When the technician experienced problems with the lab titrator used to measure the caustic strength, the back-up instrumentation should have been used; however, was not. This delayed the analysis of the samples beyond the 12-hour required time frame specified in the precompliance plan.

Corrective Action:

The following corrective actions were identified from the investigation:

1. Update the operating procedure to specify that a 12-hour grab sample is a regulatory requirement.
2. Train the lab technician(s) on the regulatory requirements related to the testing they perform.

If you have any questions, please contact Suzanne Chaewsky at suzanne.chaewsky@corvea.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Page 3
Mr. Jeff Gove
BAAQMD

Sincerely,

A handwritten signature in black ink, appearing to read 'JLipscomb', with a horizontal line extending from the end of the signature.

James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

January 6, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

- | | | |
|----|--------------------------|---|
| 1. | Source Number: | S-446, Sym-Tet Plant |
| 2. | Permit Condition Number: | 40 CFR 63, Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT) |
| 3. | Describe Non-Compliance: | 40 CFR 63, Subpart FFFF 63.2520(c) and 40 CFR 63.10(b)(2)(vii): As specified by the September 12, 2018, 2015 Precompliance Report, when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation, caustic strength is monitored via grab samples in the scrubber tanks every 12 hours.

On 12/29/22 and 1/1/23, 12-hour caustic strength sampling records were missed by 20 and 47 minutes, respectively, on the T-90 scrubber. |
| 4. | Submitted By: | Suzanne Chaewsky (suzanne.chaewsky@corteva.com) |
| 5. | Discovery Date: | December 29, 2022 |



March 9, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 30-Day Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

Source Number: S-30 (T-608B)

Permit Condition Number: Condition 11276

Describe Non-Compliance: The MS HAF and ST HAF were both offline while T-608B was storing a non-exempt material (carbon tetrachloride). On February 13, 2023, from 6:21 PM to 6:59 PM a power outage caused both units to shut down.

During the 38 minute power outage, all carbon tetrachloride emissions were contained in T-608B and the associated closed vent line. Redundant pressure transmitters on T-608B never exceeded the set pressure of the tank's pressure relief device indicating that no emissions were released to atmosphere. The pressure transmitter on the closed vent line also showed that the line pressure was under vacuum service before and after the event. The negative pressure on the closed vent line confirms that emissions were contained in the vent line. Once the ST HAF came back online and reached the minimum chamber temperature setpoint at 6:59 PM, carbon tetrachloride venting to the ST HAF resumed. All emissions contained in the closed vent line and T-608B were abated by the ST HAF once the ST HAF resumed operation.

Root Cause

A racoon entered an electrical switchgear room through an opening and damaged equipment, which caused a brief power outage. The power outage temporarily shut down various areas of the facility, including the MS HAF and ST HAF units.

Corrective Action

1. The opening that the racoon used to enter the switchgear room was sealed closed.
 2. Maintenance completed visual inspections on every other switchgear room on site to confirm any openings were properly sealed.
 3. Maintenance completed repairs on the damaged switchgear equipment and verified that it is safe for continued operation.
-

If you have any questions, please contact William Hewlett at William.hewlett@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

February 21, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-30 (T-608B)
2. Permit Condition Number: Condition 11267
40 CFR Part 63, Subpart FFFF - Miscellaneous Organic Chemical
Manufacturing (MON MACT)
3. Describe Non-Compliance: S-30 was not abated by the S-336 (MS HAF) or S-389 (ST
HAF) per condition 11267.1 on February 13, 2023, from 6:21
PM to 6:59 PM. During this 38 minute event, the MS HAF and
ST HAF were both offline while S-30 was storing a non exempt
material (carbon tetrachloride). Process transmitter data
indicate that all emissions were contained in the tank and closed
vent line during this event.
4. Submitted By: William Hewlett (William.hewlett@corteva.com)
5. Discovery Date: February 13, 2023

March 23, 2023

**Delivered by Email: Compliance@BAAQMD.gov
bkwan@baaqmd.gov**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: 30-Day Report – Major Facility Permit Non-Compliance Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Mr. Gove:

Description of Non-Compliance referencing Permit Condition Number:

Source Number:	S-446 Sym-Tet Plant (Chlorpyridines)
Permit Condition Number:	Title V Permit, Standard Conditions F – Monitoring Reports
Describe Non-Compliance:	As required by Title V Permit, Standard Condition F, reporting in writing of the non-compliance items must be submitted within 10-days of discovery. Such reporting did not occur for an event that occurred on 7/19/2022. A separate 10-Day Notification, also dated 2/28/2023, has been submitted for the 7/19/2022 non-compliance.
Root Cause:	An internal SSMP (Startup Shutdown and Malfunction Plan) event email notification sent out by Operations on 7/19/2022 was not seen by the environmental staff person responsible for evaluating events for non-compliance. As such, the 10-day reporting process was not initiated causing the late reporting for this event. The

7/19/2022 SSMP event was discovered when preparing the Semiannual MON MACT Compliance Report for the reporting period during which this event occurred (July 1st thru December 31st). A review of this SSMP event confirmed that it should have been reported as a non-compliance within 10-days of discovery.

Corrective Action:

The corrective action is to add a second environmental staff person to serve as back up to receive email notifications of non-compliance to the SSMP event email distribution list. This action was completed 3/3/2023.

If you have any questions, please contact Suzanne Chaewsky at suzanne.chaewsky@corteva.com. I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification



February 28, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-446, Sym-Tet Plant
2. Permit Condition Number: Title V Permit, Standard Conditions F – Monitoring Reports
3. Describe Non-Compliance: As required by Title V Permit, Standard Condition F, reporting in writing of the non-compliance item that occurred on 7/19/2022 was not submitted within 10-days of discovery. A separate 10-Day Notification, also dated 2/28/2023, has been submitted for the 7/19/2022 non-compliance.
4. Submitted By: Suzanne Chaewsky (suzanne.chaewsky@corteva.com)
5. Discovery Date: February 24, 2023



March 23, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 30-Day Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

Source Number: S-30 (T-608B)

Permit Condition Number: Condition 11276

Describe Non-Compliance: On March 6, 2023, the MS HAF (S-336) and the ST HAF (S-389) were both offline for 22 minutes while T-608B was storing a non-exempt material (carbon tetrachloride). On March 6, 2023, an instrument failure caused the MS HAF to temporarily shut down at 10:30 AM. At this time, the ST HAF was already offline for a planned shutdown. At 10:52 AM, the MS HAF was back online and accepting vents.

During this incident, all carbon tetrachloride emissions were contained in T-608B and the associated closed vent line. Redundant pressure transmitters on T-608B never exceeded the set pressure of the tank's pressure relief device indicating that no emissions were released to atmosphere. The pressure transmitter on the closed vent line also showed similar vacuum reading before and after the event. Similar pressure readings on the closed vent line before and after the event supports our determination that emissions were contained in the closed vent line during the event. Carbon tetrachloride venting to the MS HAF from T-608B and the associated closed vent system resumed at 10:52 AM after the MS HAF came back online and reached the minimum chamber temperature setpoint. Emissions contained in the closed vent line and T-608B

were abated by the MS HAF once the MS HAF resumed normal operation.

Root Cause

A failure of the CO low range analyzer for the MS HAF Continuous Emissions Monitoring System (CEMS) caused a temporary shutdown of the MS HAF. The ST HAF was already down for a planned shutdown.

Corrective Action

1. Replace the failed CO low range analyzer.
 2. Evaluate if the MS HAF process control logic needs to be modified to reflect variable operating conditions.
-

If you have any questions, please contact William Hewlett at William.hewlett@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

March 8, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-30 (T-608B)
2. Permit Condition Number: Condition 11267
3. Describe Non-Compliance: On March 6, 2023, the MS HAF (S-336) and the ST HAF (S-389) were both offline for 20 minutes while T-608B was storing a non-exempt material (carbon tetrachloride). On March 6, 2023, an instrument failure caused the MS HAF to unexpectedly shut down at 9:31 AM. The ST HAF was already offline for a planned shutdown. At 9:51 AM, the MS HAF was back online. Process transmitter data indicate that all emissions were contained in T-608B and the associated closed vent line during this event.
4. Submitted By: William Hewlett (William.hewlett@corteva.com)
5. Discovery Date: March 6, 2023

April 10, 2023

**Delivered by Email: Compliance@BAAQMD.gov
bkwan@baaqmd.gov
kcordes@baaqmd**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: 30-Day Report – Major Facility Permit Non-Compliance Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Mr. Gove:

Description of Non-Compliance referencing Permit Condition Number:

Source Number:	S-446 Sym-Tet Plant (Chlorpyridines)
Permit Condition Number:	40 CFR Part 63, Subpart FFFF - Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT)
Describe Non-Compliance:	40 CFR 63, Subpart FFFF 63.2520(c) and 40 CFR 63.10(b) (2)(vii): As specified by the September 12, 2018, 2015 Precompliance Report, when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation, caustic strength is monitored via grab samples in the scrubber tanks every 12 hours.

The Beta plant was shut down for a turnaround starting 2/28/23. The Alpha plant was finishing shutting down for a turnaround on 3/11/23. On 3/11/23, a 12-hour caustic strength sampling record

was missed by one hour and 26 minutes on the T-90 scrubber. The table below contains sample dates, analysis times and caustic strength test results. The data in the table shows that the T-90 caustic strength was 11.4% at 3:54 AM and 11.08% at 5:20 PM. The minimum operating limit for caustic strength in T-90 is 3.7%. There were no excess emissions from this event.

Sample Date	Time of Analysis	T-90 NaOH Strength %
03/10/23	13:30	11.4
03/10/23	18:31	11.4
03/10/23	21:31	11.41
03/11/23	03:54	11.4
03/11/23	17:20	11.08
03/11/23	18:31	11.17
03/11/23	21:31	11.18
03/12/23	01:30	11.28
03/12/23	06:31	11.17

Root Cause: Due to staffing issues, the sampling for the T 90 caustic testing was inadvertently late.

Corrective Action: The following corrective action was identified from the investigation:

1. Individual training of each Utilities Operator by the Utilities Engineer to review the reason T-90 caustic strength is sampled and the consequences of deviating from the sampling frequency requirement. Anticipated completion date - 5/1/23.
2. Evaluate and implement an online analyzer to eliminate the need for taking grab samples. Anticipated completion date – 8/1/23.

Page 3
Mr. Jeff Gove
BAAQMD

If you have any questions, please contact Suzanne Chaewsky at suzanne.chaewsky@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,

A handwritten signature in black ink, appearing to read "JLipscomb", with a stylized flourish at the end.

James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

March 20, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

- | | | |
|----|--------------------------|--|
| 1. | Source Number: | S-446, Sym-Tet Plant |
| 2. | Permit Condition Number: | 40 CFR 63, Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT) |
| 3. | Describe Non-Compliance: | 40 CFR 63, Subpart FFFF 63.2520(c) and 40 CFR 63.10(b)(2)(vii): As specified by the September 12, 2018, 2015 Precompliance Report, when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation, caustic strength is monitored via grab samples in the scrubber tanks every 12 hours.

On 3/11/23, a 12-hour caustic strength sampling record was missed by one hour and 26 minutes on the T-90 scrubber. |
| 4. | Submitted By: | Suzanne Chaewsky (suzanne.chaewsky@corteva.com) |
| 5. | Discovery Date: | March 11, 2023 |



April 19, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 30-Day Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

Source Number: S-30 (T-608B)

Permit Condition Number: Condition 11276

Describe Non-Compliance: On March 22, 2023, the MS HAF (S-336) and the ST HAF (S-389) were both offline for 186 minutes while T-608B was storing a non-exempt material (carbon tetrachloride). On March 22, 2023, a pump failure caused the MS HAF to temporarily shut down at 8:05 PM. At this time, the ST HAF was already offline for planned maintenance. At 11:11 PM, the MS HAF was back online and accepting vents.

During this incident, all carbon tetrachloride emissions were contained in T-608B and the associated closed vent line. Redundant pressure transmitters on T-608B never exceeded the set pressure of the tank's pressure relief device indicating that no emissions were released to atmosphere. The pressure transmitter on the closed vent line also showed similar vacuum reading before and after the event. Similar pressure readings on the closed vent line before and after the event supports our determination that emissions were contained in the closed vent line during the event. Carbon tetrachloride venting to the MS HAF from T-608B and the associated closed vent system resumed at 11:11 PM after the MS HAF came back online and reached the minimum chamber temperature setpoint. Emissions contained in the closed vent line and T-608B

were abated by the MS HAF once the MS HAF resumed normal operation.

Root Cause

A failure of the MS HAF quench pump caused a temporary shutdown of the MS HAF. The ST HAF was already down for planned maintenance.

Corrective Action

During the next planned outage, inspect and repair electrical equipment of failed pump. Ensure the failed pump is ready to be put back in service.

If you have any questions, please contact William Hewlett at William.hewlett@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification



March 27, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-30 (T-608B)
2. Permit Condition Number: Condition 11267
3. Describe Non-Compliance: On March 22, 2023, the MS HAF (S-336) and the ST HAF (S-389) were both offline for two hours and 55 minutes while T-608B was storing a non-exempt material (carbon tetrachloride). On March 22, 2023, the MS HAF shut down at 8:05 PM and was back up and fully running at 11:00 PM. The ST HAF was already offline for a planned shutdown. Process transmitter data indicate that all emissions were contained in T-608B and the associated closed vent line during this event.
4. Submitted By: Suzanne Chaewsky (Suzanne.chaewsky@corteva.com)
5. Discovery Date: March 22, 2023

April 17, 2023

Delivered by Email: Compliance@BAAQMD.gov
bkwan@baaqmd.gov
kcordes@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: 30-Day Report – Major Facility Permit Non-Compliance Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Mr. Gove:

Description of Non-Compliance referencing Permit Condition Number:

Source Number:	S-446 Sym-Tet Plant (Chlorpyridines)
Permit Condition Number:	40 CFR 63.2450(a)(1) and Table 1 Condition 2, Subpart FFFF - Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT)
Describe Non-Compliance:	On March 25, 2023, the caustic strength in scrubber T-90 fell below the operating limit of 3.7% based on four samples that were collected between 6:31 AM and 12:18 PM. The sample results show that the caustic strength recovered quickly and remained above 3.7% after the processes were operational (post startup). The caustic strength dropped below the required limit during the time that the Alpha and Beta plants were in the process of a start-up. The plant startup, shut-down, malfunction plan (SSMP) was followed. A summary of sample results dates, times, and respective caustic strengths (as T-90 NaOH%) is provided below.

Per MON regulations (40 CFR 63.2450(a)(1)), this event is a deviation and not a violation of the MON standard.

SAMPLE DATE AND TIME	T-90 NaOH %
03/24/2023 22:31	8.63
03/25/2023 02:30	6.42
03/25/2023 06:31	1.96
03/25/2023 07:35	1.96
03/25/2023 08:45	3.98
03/25/2023 09:32	4.76
03/25/2023 11:26	2.76
03/25/2023 12:18	2.38
03/25/2023 13:56	7.01
03/25/2023 19:31	5.02

Root Cause:

The cause of the drop in caustic strength in T-90 below the required operating limit resulted from not adding excess caustic to the scrubber in anticipation of excess emissions vented while both the Alpha and Beta processes were starting up at the same time.

Corrective Action:

The corrective action is:

1. Ensure operating process is updated to increase caustic strength of T-90 to 15% before starting up both the Alpha and Beta plants at the same time. This will reduce the risk of a low caustic scenario in the scrubbers during a plant startup.

If you have any questions, please contact Suzanne Chaewsky at suzanne.chaewsky@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

March 30, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-446, Sym-Tet Plant
2. Permit Condition Number: 40 CFR 63.2450(a)(1) and Table 1 Condition 2, Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT)
3. Describe Non-Compliance:

On March 25, 2023, during the Alpha and Beta plant start-ups, the caustic strength in T-90 fell below the operating limit of 3.7% on four samples collected between 6:31 AM and 12:18 PM. The results of a sample collected at 1:56 PM indicated that the caustic strength recovered. It remained above 3.7% once the Beta plant fully started and Alpha plant stopped trying to restart. The SSMP was followed, and we do not believe that there were excess emissions because the strength in T-91/B-91 remained above the operating limit during this operating period.

Per MON regulations (40 CFR 63.2450(a)(1)), this event is a deviation and not a violation of the MON standard.
4. Submitted By: Suzanne Chaewsky (suzanne.chaewsky@corteva.com)
5. Discovery Date: March 25, 2023



June 13, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov

**cc: Betty Kwan
Kevin Cordes**

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 30-Day Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

Source Number:	S-30 (T-608B)
Permit Condition Number:	40 CFR Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT) 63.2470(a); BAAQMD 8-5-306.1; BAAQMD 8-5-306.2
Describe Non-Compliance:	<p>On May 18, 2023, a small hole at the T-608B tank roof seal weld was discovered which resulted in a release of carbon tetrachloride and nitrogen emissions to the atmosphere. Further investigation concluded that this T-608B hole was caused by corrosion failure of a seal weld between the roof edge and the cylindrical support ring. Plant operating data indicates that this tank hole likely developed on May 1, 2023.</p> <p>T-608B remained in service until the hole was discovered with a drone inspection on May 18. After the leak was identified on May 18, operations immediately started transferring the T-608B tank contents into T-614 (S-151). The carbon tetrachloride transfer from T-608B into T-614 was completed on May 21.</p> <p>During this time from May 1 to May 21, the MS HAF was abating and pulling a vacuum on T-608B. Release calculations confirmed that 136 pounds of carbon tetrachloride emissions were released from T-608B to atmosphere over the 20 day period.</p>

T-608B has been subject to recurring comprehensive inspections, including a full API 653 inspection in 2016, which were unable to see the localized weld corrosion failure and pinhole developing at this location.

Root Cause

Leak was caused by corrosion failure of a seal weld between the roof edge and cylindrical support ring of T-608B.

Corrective Action

1. Empty and prepare T-608B tank for a maintenance inspection. This action is complete. Leave T-608B out of service until repairs are completed and verification is made that tank is fit for continued service.
 2. Install new process control code designed to alert operations when the vent valves on T-608B or T-614 are not opening for normal operations. This corrective action will bring in an alarm to alert operations of another potential tank failure and help ensure future potential failures are detected immediately.
-

If you have any questions, please contact William Hewlett at William.hewlett@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification



May 25, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

1. Source Number: S-30 (T-608B)
2. Permit Condition Number: 40 CFR Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT) 63.2470(a); BAAQMD 8-5-306.1; BAAQMD 8-5-306.2
3. Describe Non-Compliance:

On May 18, 2023, a small hole at the T-608B tank roof seam was discovered which resulted in a release of carbon tetrachloride and nitrogen emissions to the atmosphere. The preliminary investigation indicates that this T-608B hole was likely caused by external corrosion and that the opening likely developed on May 1, 2023.

T-608B operations continued as normal until the hole was discovered with a drone inspection on May 18. After the leak was identified on May 18, operations immediately started transferring the T-608B tank contents into T-614 (S-151). The carbon tetrachloride transfer from T-608B into T-614 was completed on May 21.

During this time from May 1 to May 21, the MS HAF was abating and pulling a vacuum on T-608B. Release calculations confirmed that 136 pounds of carbon tetrachloride emissions were released from T-608B to atmosphere over the 20 day incident.

4. Submitted By:

William Hewlett (william.hewlett@corvea.com)

5. Discovery Date:

May 18, 2023

June 13, 2023

Delivered by Email: Compliance@BAAQMD.gov
bkwan@baaqmd.gov
kcordes@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: 30-Day Report – Major Facility Permit Non-Compliance Report
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Mr. Gove:

Description of Non-Compliance referencing Permit Condition Number:

Source Number:	S-446 Sym-Tet Plant (Chlorpyridines)
Permit Condition Number:	40 CFR Part 63, Subpart FFFF - Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT)
Describe Non-Compliance:	<p>40 CFR 63, Subpart FFFF 63.2520(c) and 40 CFR 63.10(b) (2)(vii): As specified by the September 12, 2018, 2015 Precompliance Report, when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation, caustic strength is monitored via grab samples in the scrubber tanks every 12 hours.</p> <p>12-hour caustic strength sampling records on the T-90 scrubber were missed by eight minutes on 5/16/23 and by two hours 28 minutes on 5/17/23.</p> <p>The minimum operating limit for caustic strength in T-90 is 3.7%. There were no excess emissions from this event.</p>

Sample Date	Time of Analysis	T-90 NaOH Strength %
05/15/23	7:12 PM	7.03
05/16/23	7:20 AM	6.54
05/16/23	10:46 AM	6.29
05/16/23	2:27 PM	6.63
05/16/23	4:52 PM	6.48
05/17/23	7:20 AM	6.02
05/17/23	10:56 AM	6.11

Root Cause: The root cause of the missed sampling events was determined to be operator error. Day shift operators working on 5/16 and 5/17 did not collect a sample near the start of their shift (5 AM), as they were instructed.

Corrective Action: The following corrective action was identified from the investigation:

1. Reminder notice to each Utilities Operator by the Utilities Engineer the need to grab sample near the start of their shift to ensure samples are collected every 12 hours – Completed 6/8/23
2. Evaluate and implement an online analyzer to eliminate the need for taking grab samples. Anticipated completion date – 8/1/23.

If you have any questions, please contact Suzanne Chaewsky at suzanne.chaewsky@corteva.com.

I certify that the above information is true, accurate, and complete to the best of my information and belief.

Sincerely,



James Lipscomb
Pittsburg Site Director
Corteva Agriscience

Attachment: 10-Day Initial Notification

June 5, 2023

DELIVERED BY EMAIL: Compliance@BAAQMD.gov
bkwan@baaqmd.gov

Jeff Gove
Director of Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

**RE: Major Facility Permit Non-Compliance Report, 10-Day Notification
Corteva Agriscience – Pittsburg Operations, Pittsburg, California
Facility Number A0031
Plant Number 24380**

Description of Non-Compliance referencing Permit Condition Number

- | | | |
|----|--------------------------|--|
| 1. | Source Number: | S-446, Sym-Tet Plant |
| 2. | Permit Condition Number: | 40 CFR 63, Subpart FFFF – Miscellaneous Organic Chemical Manufacturing National Emission Standard for Hazardous Air Pollutants (MON MACT) |
| 3. | Describe Non-Compliance: | 40 CFR 63, Subpart FFFF 63.2520(c) and 40 CFR 63.10(b)(2)(vii): As specified by the September 12, 2018, 2015 Precompliance Report, when the caustic analyzers associated with caustic scrubbers T-90 and T-91 are out of operation, caustic strength is monitored via grab samples in the scrubber tanks every 12 hours.

12-hour caustic strength sampling records on the T-90 scrubber were missed by eight minutes on 5/16/23 and by two hours 28 minutes on 5/17/23. |
| 4. | Submitted By: | Suzanne Chaewsky (suzanne.chaewsky@corteva.com) |
| 5. | Discovery Date: | June 1, 2023 |