Mullins, Robert A <robert.a.mullins@wv.gov>

RE: R30-07300003-2024(Part 3 of 3)

1 message

Jerry Williams <jerry.williams@erm.com> Tue, May 7, 2024 at 8:18 AM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>
Cc: "david.fenton@syensqo.com" <david.fenton@syensqo.com>, "brian.schmidt@syensqo.com" <brian.schmidt@syensqo.com>

Robert,

No worries. Thank you for the review and moving the permit to notice. If you have any additional questions during the continued review, please let us know.

Thank you,

Jerry

ERM
Sustainability is our business

Jerry Williams, P.E.

Principal Consultant, Air Quality

Cincinnati, OH **erm.com**

(O) +1 513-830-9051

(M) +1 304-545-9053

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Tuesday, May 7, 2024 8:03 AM
To: Jerry Williams <jerry.williams@erm.com>
Cc: david.fenton@syensqo.com; brian.schmidt@syensqo.com
Subject: Re: R30-07300003-2024(Part 3 of 3)

Jerry,

I did not realize that I had changed the numbering convention on 6.5.7.a and I went ahead and changed it back. I will be sending the permit to notice shortly.

Thank,

Robert Mullins

On Mon, May 6, 2024 at 3:11 PM Jerry Williams <jerry.williams@erm.com> wrote:

> Robert,
>
> Thank you for the opportunity to review the pre-draft documents. The fact sheet did a nice job outlining the changes that occurred due to updated regulations since the last renewal. The only comment we had was on permit condition 6.5.7.a. We believe that 6.5.7.a.v should be 6.5.7.a.xiv.

Please let us know if you have any questions.

Thank you,

Jerry

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Jerry Williams, P.E.

Principal Consultant, Air Quality

Cincinnati, OH **erm.com**

(O) +1 513-830-9051

(M) +1 304-545-9053

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Thursday, April 25, 2024 1:45 PM
To: david.fenton@syensqo.com; brian.schmidt@syensqo.com; Jerry Williams <jerry.williams@erm.com>
Subject: R30-07300003-2024(Part 3 of 3)

EXTERNAL MESSAGE

Attached is the Pre-Draft Title V Permit Renewal and fact sheet for Cytec Industries, Inc.'s Willow Island Plant - Site Services. Please review and respond with any questions or comments by May 10, 2024 so that I can address any questions/comments before Proposing the renewal permit.

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

601 57th Street, SE

Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

This e-mail and any attachments may contain proprietary, confidential and/or privileged information. No confidentiality or privilege is waived or lost by any transmission errors. This communication is intended solely for the intended recipient, and if you are not the intended recipient, please notify the sender immediately, delete it from your system and do not copy, distribute, disclose, or otherwise act upon any part of this email communication or its attachments. To find out how the ERM Group manages personal data please review our Privacy Policy

Mullins, Robert A <robert.a.mullins@wv.gov>

Re: R30-07300003-2024(Part 3 of 3)

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Mon, May 6, 2024 at 3:40 PM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>

Ok

On Mon, May 6, 2024 at 3:37 PM Mullins, Robert A <robert.a.mullins@wv.gov> wrote:

> I received a very minor comment from the company dealing with numbering conventions on condition 6.5.7. I don't think it matters since both numbering conventions are used in the permit at different places but I think I will make the change since they asked.
>
> -R.A.
> ---------- Forwarded message ---------
> From: **Jerry Williams** <jerry.williams@erm.com>
> Date: Mon, May 6, 2024 at 3:11 PM
> Subject: RE: R30-07300003-2024(Part 3 of 3)
> To: Mullins, Robert A <robert.a.mullins@wv.gov>, david.fenton@syensqo.com <david.fenton@syensqo.com>, brian.schmidt@syensqo.com <brian.schmidt@syensqo.com>
>
> Robert,
>
> Thank you for the opportunity to review the pre-draft documents. The fact sheet did a nice job outlining the changes that occurred due to updated regulations since the last renewal. The only comment we had was on permit condition 6.5.7.a. We believe that 6.5.7.a.v should be 6.5.7.a.xiv.
>
> Please let us know if you have any questions.
>
> Thank you,
>
> Jerry

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Jerry Williams, P.E.

Principal Consultant, Air Quality

Cincinnati, OH **erm.com**

(O) +1 513-830-9051

(M) +1 304-545-9053

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Thursday, April 25, 2024 1:45 PM
To: david.fenton@syensqo.com; brian.schmidt@syensqo.com; Jerry Williams <jerry.williams@erm.com>
Subject: R30-07300003-2024(Part 3 of 3)

Attached is the Pre-Draft Title V Permit Renewal and fact sheet for Cytec Industries, Inc.'s Willow Island Plant - Site Services. Please review and respond with any questions or comments by May 10, 2024 so that I can address any questions/comments before Proposing the renewal permit.

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

601 57th Street, SE

Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

Mullins, Robert A <robert.a.mullins@wv.gov>

R30-07300003-2024(Part 3 of 3)

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Thu, Apr 25, 2024 at 1:44 PM
To: "david.fenton@syensqo.com" <david.fenton@syensqo.com>, "brian.schmidt@syensqo.com" <brian.schmidt@syensqo.com>, Jerry Williams <jerry.williams@erm.com>

Attached is the Pre-Draft Title V Permit Renewal and fact sheet for Cytec Industries, Inc.'s Willow Island Plant - Site Services. Please review and respond with any questions or comments by May 10, 2024 so that I can address any questions/comments before Proposing the renewal permit.

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

601 57th Street, SE

Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

2 attachments

Pre-DPFactSheet_R30-07300003-2024(3 of 3).pdf
210K

Pre-DPPermit_R30-07300003-2024(3 of 3).pdf
550K

Mullins, Robert A <robert.a.mullins@wv.gov>

Read: Completeness Determination, Willow Island Plant, Application No. R30-07300003-2024(Part 3 of 3)

1 message

Jerry Williams <jerry.williams@erm.com> Thu, Feb 29, 2024 at 10:36 AM
To: "robert.a.mullins@wv.gov" <robert.a.mullins@wv.gov>

---------- Forwarded message ----------
From: Jerry Williams <jerry.williams@erm.com>
To: "robert.a.mullins@wv.gov" <robert.a.mullins@wv.gov>
Cc:
Bcc:
Date: Thu, 29 Feb 2024 15:36:25 +0000
Subject: Read: Completeness Determination, Willow Island Plant, Application No. R30-07300003-2024(Part 3 of 3)

winmail.dat
7K

Mullins, Robert A <robert.a.mullins@wv.gov>

Completeness Determination, Willow Island Plant, Application No. R30-07300003-2024(Part 3 of 3)

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Thu, Feb 29, 2024 at 10:10 AM
To: "david.fenton@syensqo.com" <david.fenton@syensqo.com>, "brian.schmidt@syensqo.com" <brian.schmidt@syensqo.com>, Jerry Williams <jerry.williams@erm.com>

Your Title V renewal application for a permit to operate the above referenced facility was received by this Division on February 19, 2024. After review of said application, it has been determined that the application is administratively complete as submitted. Therefore, the above referenced facility qualifies for an Application Shield.

The applicant has the duty to supplement or correct the application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

The submittal of a complete application shall not affect the requirement that any source have all **preconstruction permits** required under the rules of the Division.

If during the processing of this application it is determined that additional information is necessary to evaluate or take final action on this application, a request for such information will be made in writing with a reasonable deadline for a response. Until which time as your renewal permit is issued or denied, please continue to operate this facility in accordance with 45CSR30, section 6.3.c. which states: *If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.* This protection shall cease to apply if, subsequent to the completeness determination made pursuant to paragraph 6.1.d. of 45CSR30 and as required by paragraph 4.1.b., the applicant fails to submit by the deadline specified in writing any additional information identified as being needed to process the application.

Please remember, **failure of the applicant to timely submit information required or requested to process the application may cause the Application Shield to be revoked.** Should you have any questions regarding this determination, please contact me.

Sincerely,

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

601 57th Street, SE

Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

WV DAQ Title V Permit Application Status for Cytec Industries Inc.; Willow Island Plant

3 messages

Mink, Stephanie R <stephanie.r.mink@wv.gov> Tue, Feb 20, 2024 at 1:23 PM
To: david.fenton@syensqo.com, brian.schmidt@syensqo.com, Jerry.Williams@erm.com
Cc: Carrie McCumbers <carrie.mccumbers@wv.gov>

RE: Application Status

Cytec Industries, Inc.

Willow Island Plant

Facility ID No. 073-00003

Application No. R30-07300003-2021 (Part 3 of 3)

Dear Mr. Fenton,

Your application for a Title V Permit Renewal for Cytec Industries, Inc.'s Willow Island Plant was received by this Division on February 19, 2024, and was assigned to Robert "R.A."Mullins.

Should you have any questions, please contact the assigned permit writer, Robert "R.A."Mullins, at 304-926-0499, extension 41286, or Robert.A.Mullins@wv.gov .

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V & NSR Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

Jerry Williams <jerry.williams@erm.com> Tue, Feb 20, 2024 at 1:30 PM
To: "stephanie.r.mink@wv.gov" <stephanie.r.mink@wv.gov>

---------- Forwarded message ----------
From: Jerry Williams <jerry.williams@erm.com>
To: "stephanie.r.mink@wv.gov" <stephanie.r.mink@wv.gov>
Cc:
Bcc:
Date: Tue, 20 Feb 2024 18:30:09 +0000
Subject: Read: WV DAQ Title V Permit Application Status for Cytec Industries Inc.; Willow Island Plant

winmail.dat
7K

McCumbers, Carrie <carrie.mccumbers@wv.gov> Tue, Feb 20, 2024 at 2:40 PM
To: stephanie.r.mink@wv.gov

Your message

To: McCumbers, Carrie
Subject: WV DAQ Title V Permit Application Status for Cytec Industries Inc.; Willow Island Plant
Sent: 2/20/24, 1:23:48 PM EST

was read on 2/20/24, 2:40:18 PM EST

WV DAQ Title V Reminder Letter for Cytec Industries, Inc., Willow Island

2 messages

Mink, Stephanie R <stephanie.r.mink@wv.gov> Fri, Oct 27, 2023 at 2:40 PM
To: David Fenton <david.fenton@solvay.com>, brian.schmidt@solvay.com
Cc: Carrie McCumbers <carrie.mccumbers@wv.gov>

RE: Title V Permit Renewal Application

Cytec Industries, Inc.

Willow Island

Permit No.: R30-07300003-2019

Plant ID No.: 073-00003

Dear Mr. Fenton:

On August 29, 2019, the WV Department of Environmental Protection Division of Air Quality issued a Title V permit to Cytec Industries, Inc.'s Willow Island facility. Our records indicate that this Title V permit will expire on August 29, 2024, and a Title V permit renewal application is due for submittal on or before February 29, 2024.

In accordance with 45CSR§30-4.1.a.3, a permit renewal application is **timely** if it is submitted at least six (6) months prior to the date of permit expiration. Please bear in mind, the permit application must also be **complete** six (6) months prior to the permit expiration date. Refer to 45CSR§30-4.1.b for what constitutes a complete application. **Please note that as of March 16, 2020, the Division of Air Quality requests that all applications be submitted via email**. Instructions can be found at https://dep.wv.gov/daq/permitting/Pages/TitleVGuidanceandForms.aspx.

Please ensure the **timely** and **complete** submittal of the permit renewal application. An application shield will only be granted for an application which is **timely** and **complete**.

Should you have any questions, please contact me or Carrie McCumbers, Title V Program Manager, at 304-926-0499, ext. 41278.

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V & NSR Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

McCumbers, Carrie <carrie.mccumbers@wv.gov> Mon, Oct 30, 2023 at 7:47 AM
To: stephanie.r.mink@wv.gov

Your message

To: McCumbers, Carrie
Subject: WV DAQ Title V Reminder Letter for Cytec Industries, Inc., Willow Island
Sent: 10/27/23, 2:40:59 PM EDT

was read on 10/30/23, 7:47:53 AM EDT

Received
February 19, 2024
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for : Cytec Industries Inc.; Willow Island Plant
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only): 073-00003
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only): R13-0936B,R13-2560F; R30-073000003-2019 (Part 3 of 3)

- Type of NSR Application (check all that apply):
  - ☐ Construction
  - ☐ Modification
  - ☐ Class I Administrative Update
  - ☐ Class II Administrative Update
  - ☐ Relocation
  - ☐ Temporary
  - ☐ Permit Determination

- Type of 45CSR30 (TITLE V) Application:
  - ☐ Title V Initial
  - ☑ Title V Renewal
  - ☐ Administrative Amendment**
  - ☐ Minor Modification**
  - ☐ Significant Modification**
  - ☐ Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

- Payment Type:
  - ☐ Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
  - ☐ Check (Make checks payable to: WVDEP – Division of Air Quality)
    Mail checks to:
    WVDEP – DAQ – Permitting
    Attn: NSR Permitting Secretary
    601 57th Street, SE
    Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):
  - ☑ Responsible Official/Authorized Representative
    - Name: David C. Fenton
    - Email: david.fenton@syensqo.com
    - Phone Number: 304-665-3702
  - ☑ Company Contact
    - Name: Brian Schmidt
    - Email: brian.schmidt@syensqo.com
    - Phone Number: 304-665-3439
  - ☑ Consultant
    - Name: Jerry Williams
    - Email: jerry.williams@erm.com
    - Phone Number: 513-830-9051

#1 Heilman Avenue
Willow Island, WV 26134
(304) 665-2422

February 20, 2023

Ms. Laura M. Crowder, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street
Charleston, WV 25304

SUBJECT: Permit Renewal Application for Title V Permit
REFERENCE: Permit R30-07300003-2019 (Part 3 of 3), Issued 08/09/2019

Dear Ms. Crowder:

In accordance with 45 CSR 30 Sections 4,5 and 6, CYTEC Industries Inc. (Cytec) hereby applies for a renewal of the Site Services Title V permit (R30-07300003-2019) (Part 3 of 3) at the Willow Island Site. There are no changes to the Site Services operations with this application. This application is submitted before the renewal date of February 29, 2024, and contains the appropriate elements as indicated by the DAQ's "Title V Permit Application Checklist for Administrative Completeness."

The application enclosed has been submitted electronically for the Title V renewal processing. Attachment provided in this application package include:

- Renewal Title V Permit Application – General Forms
- Attachment A – Area Map
- Attachment B – Plot Plan
- Attachment C – Process Flow Diagrams
- Attachment D – Equipment Table
- Attachment E – Emission Unit Forms
- Attachment F – Schedule of Compliance Form
- Attachment G – Air pollution Control Device Forms
- Attachment H – CAM Plan Form

Cytec will appreciate the opportunity to review a draft permit at the appropriate point in the update process. We also request an electronic final draft version in Microsoft Word format as submitte4d to the Director for signature, representing the as-issued permit.

Should you have additional questions regarding this submittal please contact me at 304-665-3439 or Brian.Schmidt@syensqo.com.

Sincerely yours,

Brian Schmidt

Brian Schmidt
Environmental Engineer

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** Cytec Industries Inc.	**2. Facility Name or Location:** Willow Island Plant
3. DAQ Plant ID No.: 073-00003	**4. Federal Employer ID No. (FEIN):** 223268660

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence?
☑ Permit Renewal — What is the expiration date of the existing permit?
☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☑ Corporation ☐ Governmental Agency ☐ LLC
☐ Partnership ☐ Limited Partnership

7. Is the Applicant the:

☐ Owner ☐ • Operator ☑ • Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.

8. Number of onsite employees:

~ 200 employees

9. Governmental Code:

☑ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☐ • Yes ☑ • No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: #1 Heilman Avenue		
City: Willow Island	**State:** WV	**Zip:** 26134-9801
Telephone Number: (304) 665-3439	**Fax Number:** (304) 665-3674	

12. Facility Location (Physical Address)		
Street: State Route 2	**City:** Willow Island	**County:** Pleasants
UTM Easting: 474.00 km	**UTM Northing:** 4,356.00 km	**Zone:** ☑ 17 or ☐ 18
Directions: From I-77 Exit 179, take State Route 2 north approximately 10 miles. Plant site on left (river side) of State Route 2, two miles south of Belmont, WV.		
Portable Source? ☐ Yes ☑ No		
Is facility located within a nonattainment area? ☐ Yes ☑ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☑ Yes ☐ No		**If yes, name the affected state(s).** Ohio, Pennsylvania
Is facility located within 100 km of a Class I Area[1]? ☐ Yes ☑ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☑ No		**If yes, name the area(s).**

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: David C. Fenton		**Title:** Site Manager
Street or P.O. Box: #1 Heilman Avenue		
City: Willow Island	**State:** WV	**Zip:** 26134-9801
Telephone Number: (304) 665-3702	**Cell Number:**	
E-mail address: david.fenton@syensqo.com		
Environmental Contact: Brian Schmidt		**Title:** Environmental Engineer
Street or P.O. Box: #1 Heilman Avenue		
City: Willow Island	**State:** WV	**Zip:** 26134-9801
Telephone Number: (304) 665-3439	**Cell Number:**	
E-mail address: brian.schmidt@syensqo.com		
Application Preparer: Jerry Williams		**Title:** Principal Consultant
Company: Environmental Resources Management, Inc.		
Street or P.O. Box: 8044 Montgomery Road, Suite 700-7336		
City: Cincinnati	**State:** OH	**Zip:** 45236
Telephone Number: (513) 830-9051	**Cell Number:**	
E-mail address: jerry.williams@erm.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Poylmer Additives	Ultraviolet light absorbers, antioxidants	325199	2869
	and anti-static agents		
Surfactants	Surfactants for use where surface tension	325613	2843
	is critical including mining flotation		
	processes, oil dispersions, water		
	treating chemicals, paints, carpet		
	backing and pharmaceuticals		
Site Services	Steam generation, wastewater	(multiple)	(multiple)
	treatment, emergency engines		

Provide a general description of operations.

Cytec Industries is a global, research-based specialty chemical company. The company operates a multi-product, multi-process chemical plant at Willow Island. The Pleasants County facility covers nearly 1,000 acres, 250 of which are used for plant operations. Approximately 200 people are employed at the plant to support the operations that are divided in the following three business units: Polymer Additives, Surfactants, and Site Services.

Polymer Additives, the largest business unit, manufactures ultraviolet light absorbers, antioxidants and anti-static agents. The light absorbers are used in all types of plastics (bottles, telephones, lawn furniture, auto parts), in coatings, and in sunscreens. Antioxidants are used in man-made fibers, rubber products, plastics and in medical applications. Anti-static agents are used in the electronic industry, in copy machine toner and in textile applications.

The Surfactants unit manufactures surfactants for use where surface tension is critical. The multi-purpose applications include mining flotation processes, oil dispersion, water treating chemicals, paints, carpet backing, and pharmaceuticals.

Site Services is responsible for providing the shared services that support the site's manufacturing processes: steam generated by two natural gas-fired boilers, an on-site wastewater treatment plant, emergency generators, fire protection, site security, etc.

All aqueous process wastes from the manufacturing units and all stormwater from the manufacturing areas are treated on-site in a biological wastewater treatment plant. The discharge from the wastewater treatment plant, which is permitted by the WVDEP Division of Water and Waste Management and which is subject to strict discharge limitations, is to the Ohio River. The sanitary wastes are collected and treated in a separate system.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☑ SIP	☐ FIP
☑ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☑ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☑ Section 111 NSPS	☑ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☑ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☑ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☑ 45CSR27 State enforceable only rule
☑ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☑ Emissions Trading and Banking (45CSR28)	☐ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ Cross-State Air Pollution Rule (45CSR43)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

a. 40 C.F.R. 60 Subpart K - "Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978." There are no petroleum liquid storage tanks in the Site Services area constructed within the applicable dates with a design capacity greater than 40,000 gallons.

b. 40 C.F.R. 60, Subpart Ka – "Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984." There are no petroleum liquid storage tanks in the Site Services area constructed within the applicable dates with a design capacity greater than 40,000 gallons.

c. 40 C.F.R. 60, Subpart Kb – "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984." There are no volatile organic liquid storage tanks in the Site Services are constructed after July 23, 1984 with a design capacity equal to or greater than 75 cubic meters.

d. 40 C,F,R, 60, Subpart VV - "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry." The Site Services area does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.

e. 40 C.F.R. 60, Subpart DDD – "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry." The Site Services area does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.

☑ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

f. 40 C.F.R. 60, Subpart III – "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes." The Site Services area does not produce any of the chemicals listed in 40 C.F.R. §60.617 as a product, co-product, by-product, or intermediate.

g. 40 C.F.R. 60, Subpart NNN – "Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations." The Site Services are does not produce any of the chemicals listed in 40 C.F.R. §60.667 as a product, co-product, by-product, or intermediate.

h. 40 C.F.R. 60, Subpart RRR - "Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes." The Site Services area does not produce any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.

i. 40 C.F.R. 61, Subpart V – "National Emission Standards for Equipment Leaks (Fugitive Emissions Sources)." Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Site services area.

j. 40 C.F.R. 63, Subparts F, G, and H– "National Emission standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (HON)." 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§63.100(b)(1), (b)(2), and (b)(3). The equipment subject to this permit is not an "affected facility", because such equipment does not manufacture as a primary product any chemical listed in Table 1 of 40 C.F.R. 63, Subpart F.

k. 40 C.F.R. 63, Subpart DD – "National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations." The Site Services area does not receive off-site materials as specified in paragraph 40 C.F.R. §63.680(b) and the operations are not one of the waste management operations or recovery operations as specified in 40 C.F.R. §§63.680(a)(2)(i) through (a)(2)(vi).

l. 40 C.F.R. 63, Subpart JJ - "National Emission Standards for Wood Furniture Manufacturing Operations." The Site Services area does not include any "wood furniture manufacturing operations", as defined in 40 C.F.R. §63.802.

m. 40 C.F.R. 63, Subpart JJJ – "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins." The Site Services area does not produce the materials listed in 40 C.F.R. §63.1310.

n. 40 C.F.R. 63, Subpart PPPP – "National Emission standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products." The Site Services area does not produce an intermediate or final product that meets the definition of "surface coated" plastic part.

o. 40 C.F.R. 63, Subpart WWWW – "National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production." The Site Services area does not engage in reinforced plastics composites production as defined in 40 C.F.R. §63.5785 and does not manufacture composite material as defined in 40 C.F.R. §63.5935.

p. 40 C.F.R. 64 – "Compliance Assurance Monitoring." Per 40 C.F.R. §64.2(a)(3), emission point 226E is not subject to the CAM rule because pre-control device emissions are less than 10 tons per year of a single HAP.

q. 45CSR17 – "To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter." Per 45CSR§17-6.1, CYTEC is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.

r. 45CSR27 - "To Prevent and Control the Emissions of Toxic Air Pollutants." Since the potential emissions to the atmosphere from all sources (point, fugitive, secondary) at CYTEC's Willow Island Plant are less than 1,000 lb/yr of formaldehyde, 1,000 lb/yr of benzene, and less than 500 lb/yr of acrylonitrile, emission units at the plant are no longer subject to the BAT requirements under 45CSR27, per section 45CSR§27-3.1. Also, per 45CSR§-3.1, emission units at the plant that emit formaldehyde and benzene would not longer be subject to the BAT requirements of 45CSR27 because the formaldehyde emitting sources are now subject to the requirements of 40 C.F.R. 63, Subpart FFFF and the benzene emitting sources are now subject to the requirements of 40 C.F.R. 63, Subpart GGGGG. Site-wide potential to emit for acylonitrile is zero because the single process which formerly utilized acrylonitrile was shut down and all equipment was dismantled in 2008.

For the above reasons, the benzene and formaldehyde emission limitations and requirements of R30-107000003-2015 (Site Services, Part 3 of 3) and R30-073000003-2016 (Polymer Additives, Part 2 of 3) shall supersede and replace the requirements of Consent Order CO-R27-C-2000-27.

☑ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

45CSR6-3.1. & 3.2. Open burning & open burning exemptions.
40CFR61 Subpart M - 61.145, 61.148, and 61.150 and 45CSR§34 Asbestos.
45CSR4-3.1. [State-Enforceable only.] Odors.
45CSR11-5.2. Standby plan for reducing emissions.
WV Code § 22-5-4(a)(14) Emission inventory.
40 CFR Part 82, Subpart F Ozone-depleting substances.
40 CFR Part 68 Risk management plan.
WV Code § 22-5-4(a)(15) and 45CSR13 Stack testing.
45CSR§30-5.1.c.2.A.; 45CSR13, R13-2120I, 4.4.1. Monitoring information.
45CSR§30-5.1.c.2.B. Retention of records.
45CSR§§30-4.4. and 5.1.c.3.D. Responsible official.
45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information.
45CSR§30-8. Certified emissions statement.
45CSR§30-5.3.e. Compliance certification.
45CSR§30-5.1.c.3.A. Semi-annual monitoring reports.
45CSR§30-5.7 Emergencies.
45CSR§30-5.1.c.3. Deviations.
45CSR30-4.3.h.1.B. New applicable requirement.

☑ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45CSR6-3.1. & 3.2. Open burning & open burning exemptions – Compliance is demonstrated by Condition Numbers 3.1.1 & 3.1.2.
40CFR61 Subpart M - 61.145, 61.148, and 61.150 and 45CSR§34 Asbestos – Compliance is demonstrated by Condition Number 3.1.3.
45CSR4-3.1.; 45CSR§30-5.1.c. Odors – Compliance is demonstrated by Condition Numbers 3.1.4 & 3.4.3.
45CSR11-5.2. Standby plan for reducing emissions – Compliance is demonstrated by Condition Number 3.1.5.
WV Code § 22-5-4(a)(14) Emission inventory – Compliance is demonstrated by Condition Number 3.1.6.
40 CFR Part 82, Subpart F Ozone-depleting substances – Compliance is demonstrated by Condition Number 3.1.7.
40 CFR Part 68 Risk management plan – Compliance is demonstrated by Condition Number 3.1.8.
WV Code § 22-5-4(a)(15) and 45CSR13 Stack testing – Compliance is demonstrated by Condition Number 3.3.1.
45CSR§30-5.1.c.2.A.; 45CSR13, R13-0936, 3.4.1; 45CSR13-2560F, 4.4.1. Monitoring information – Compliance is demonstrated by Condition Number 3.4.1.
45CSR§30-5.1.c.2.B. Retention of records – Compliance is demonstrated by Condition Number 3.4.2.
45CSR§§30-4.4. and 5.1.c.3.D. Responsible official – Compliance is demonstrated by Condition Number 3.5.1.
45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information – Compliance is demonstrated by Condition Number 3.5.2.
45CSR§30-8. Certified emissions statement – Compliance is demonstrated by Condition Number 3.5.4.
45CSR§30-5.3.e. Compliance certification – Compliance is demonstrated by Condition Number 3.5.5.
45CSR§30-5.1.c.3.A. Semi-annual monitoring reports – Compliance is demonstrated by Condition Number 3.5.6.
45CSR§30-5.7 Emergencies – Compliance is demonstrated by Condition Number 3.5.7.
45CSR§30-5.1.c.3.C. Deviations – Compliance is demonstrated by Condition Number 3.5.8.
45CSR30-4.3.h.1.B. New applicable requirement – Compliance is demonstrated by Condition Number 3.5.9.

Are you in compliance with all facility-wide applicable requirements? ☑ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Completed above.

☑ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/ reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Completed above.

Are you in compliance with all facility-wide applicable requirements? ☑ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
Surfactants		
R30-073000003-2022 (Part 1 OF 3)		12/20/2022
R13-2120I		04/07/2015
Polymer Additives		
R30-07300003-2021 (Part 2 of 3), MM04		03/23/2021
R13-2156AL		03/14/2023
Site Services		
R30-07300003-2019 (Part 3 of 3)		08/29/2019
R13-0936B		06/11/2009
R13-2560F		02/12/2016

22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance MM/DD/YYYY	Permit Condition Number
Surfactants		
R13-2120H and prior versions		06/27/2012
Polymer Additives		
R13-2156K and prior versions		08/22/2022
R13-0190		10/02/1975
R13-0671		08/25/1982
R13-0794		05/23/1985
R13-1006		05/27/1988
R13-1018		06/24/1988
R13-1082B		07/13/2000
R13-1114B		12/20/2002
R13-1535C		03/06/2000
R13-1735		07/15/1994
Site Services		
R13-0936A		10/22/2004
R13-2560E and prior versions		09/18/2006

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	72.83
Nitrogen Oxides (NO_X)	81.97
Lead (Pb)	---
Particulate Matter ($PM_{2.5}$)[1]	17.74
Particulate Matter (PM_{10})[1]	21.00
Total Particulate Matter (TSP)	22.75
Sulfur Dioxide (SO_2)	42.04
Volatile Organic Compounds (VOC)	210.43
Hazardous Air Pollutants[2]	Potential Emissions
Attached next page	
Regulated Pollutants other than Criteria and HAP	Potential Emissions
Attached next page	

[1]$PM_{2.5}$ and PM_{10} are components of TSP.
[2]For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Attachment: Section 3-23. Facility-Wide Emissions Summary [Tons per Year]

Hazardous Air Pollutants	
Pollutant	**Potential Emissions**
Acetonitrile	0.33
Acrylamide	0.02
Acrylic Acid	0.20
Benzene	0.25
Chloroform	0.38
Dimethyl Formamide	0.83
Ethylbenzene	0.04
Formaldehyde	0.48
Hexane	1.94
Hydrochloric Acid	<0.01
Maleic Anhydride	0.18
Methanol	13.34
Methyl Isobutyl Ketone	44.43
Methylene Chloride	0.25
Toluene	82.31
Toluene-2,4-Diisocyanate	<0.01
Triethylamine	6.71
Xylenes (isomers and mixtures)	0.56
Total HAPs	152.24
Regulated Pollutants other than Criteria and HAP	
Pollutant	**Potential Emissions**
Non-Exempt CFCs	0.03
Greenhouse Gases (GHGs)	
Pollutant	Potential Emissions
Carbon Dioxide (CO_2)	137,009.2
Nitrous Oxide (N_2O)	1.05
Methane (CH_4)	149.46
Hydrofluorocarbons (HFCs)	0.30
Perfluorocarbons (PFCs)	-
Sulfur hexafluoride (SF_6)	-
CO2 equivalent (CO_2e)	141,489

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☑	1.	Air compressors and pneumatically operated equipment, including hand tools.
☑	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☑	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☑	4.	Bathroom/toilet vent emissions.
☑	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☑	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☑	8.	Boiler water treatment operations, not including cooling towers.
☑	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☑	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☑	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☑	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☑	14.	Demineralized water tanks and demineralizer vents.
☑	15.	Drop hammers or hydraulic presses for forging or metalworking.
☑	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☑	18.	Emergency road flares.
☐	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☑	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☑	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☐	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☑	26.	Fire suppression systems.
☑	27.	Firefighting equipment and the equipment used to train firefighters.
☑	28.	Flares used solely to indicate danger to the public.
☑	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☑	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☑	33.	Hydraulic and hydrostatic testing equipment.
☑	34.	Indoor or outdoor kerosene heaters.
☑	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☑	37.	Laundry activities, except for dry-cleaning and steam boilers.
☑	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☑	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☑	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☑	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☑	43.	Process water filtration systems and demineralizers.
☑	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☑	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☑	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☑	50.	Space heaters operating by direct heat transfer.
☑	51.	Steam cleaning operations.
☑	52.	Steam leaks.
☐	53.	Steam sterilizers.
☑	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☑	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☑	58.	Tobacco smoking rooms and areas.
☑	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.
26. Emission Units
For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.
For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.
27. Control Devices
For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name:	Title:
David C. Fenton	Site Manager

Responsible official's signature:

Signature: _____ Signature Date: 2/20/24

(Must be signed and dated in blue ink or have a valid electronic signature)

Note: Please check all applicable attachments included with this permit application:

☑	ATTACHMENT A: Area Map
☑	ATTACHMENT B: Plot Plan(s)
☑	ATTACHMENT C: Process Flow Diagram(s)
☑	ATTACHMENT D: Equipment Table
☑	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☑	ATTACHMENT G: Air Pollution Control Device Form(s)
☑	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

Attachments

Attachment A	**Area Map**
Attachment B	**Plot Plan**
Attachment C	**Process Flow Diagram**
Attachment D	**Equipment Table**
Attachment E	**Emission Unit Forms**
Attachment F	**Schedule of Compliance Form**
Attachment G	**Air Pollution Control Device Forms**
Attachment H	**Compliance Assurance Monitoring (CAM) Form**

Attachment A

Area Map

Attachment A

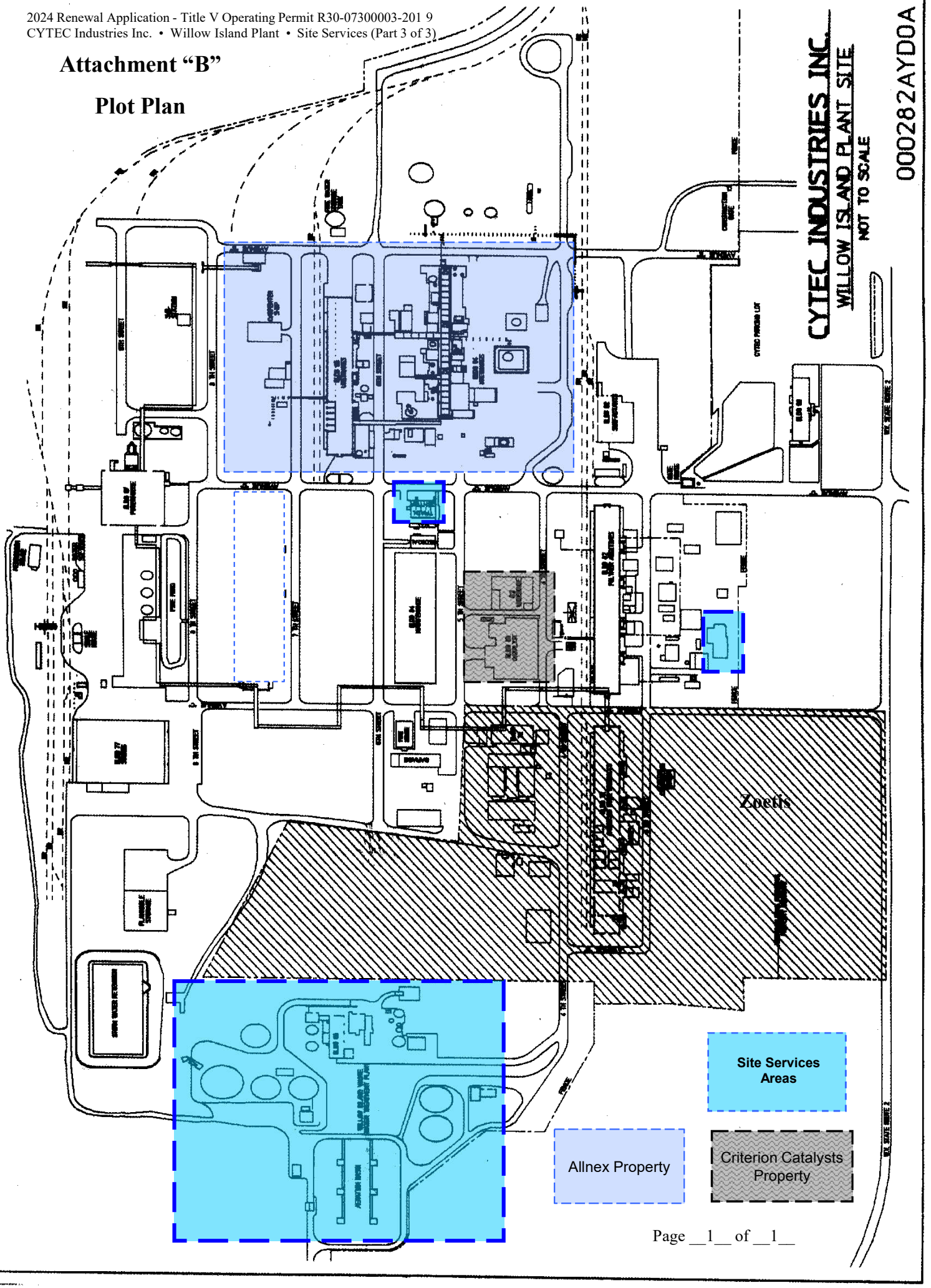
Area Map

Attachment B

Plot Plan

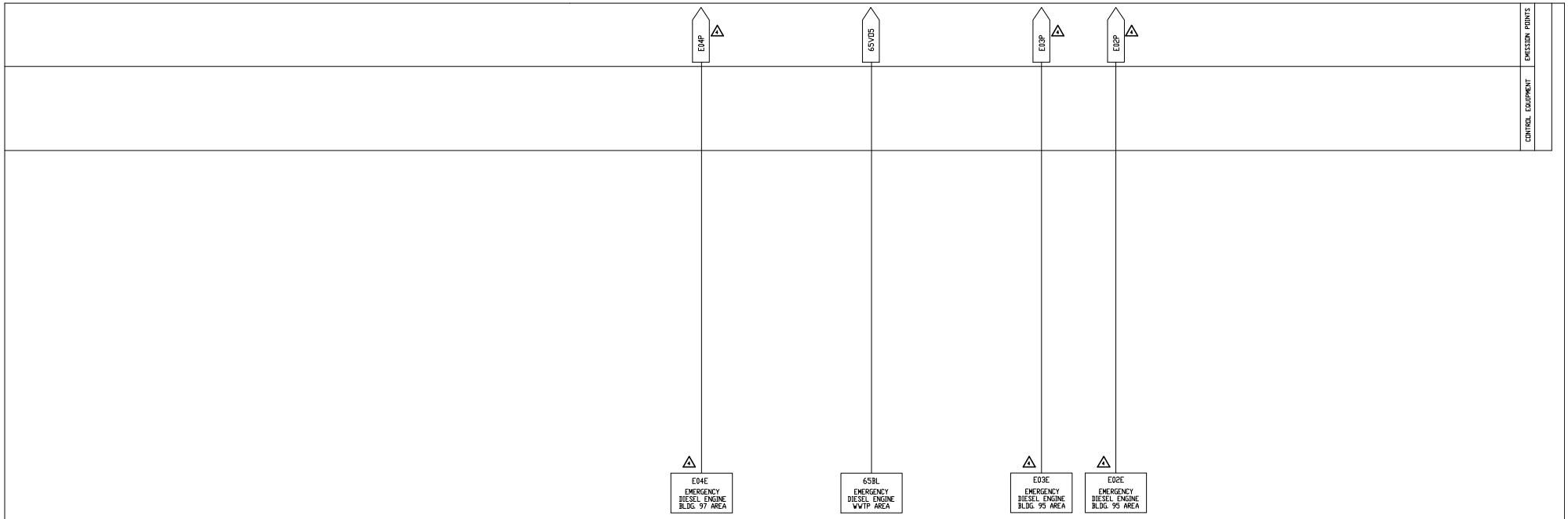
Attachment "B"

Plot Plan



Attachment C

Process Flow Diagrams



NO.	DESCRIPTION	BY / DATE	CHK / DATE
4			
3			
2			
1			
4	EDITED EMERGENCY DIESEL ENGINE EMISSION POINT	RLA 12/28/10	JKP 12/28/10
3	ENVR. REVIEW	RLA 05/13/09	JKP 05/13/09
2	ADD E0P3	TMS 11/01	JKP 11/01
1	AFTER AGENCY REVIEW	egl/961101	jkp/961101

CYTEC

CYTEC INDUSTRIES INC.
P.O. BOX 300
BELMONT, WV 26134-0300

SCALE NONE

DRAFTSMAN
egl 960814

ENGINEER
JKP
960814

PROJECT NUMBER

WORK ORDER NUMBER
096215

MISCELLANEOUS
GROUP

DRAWING NUMBER

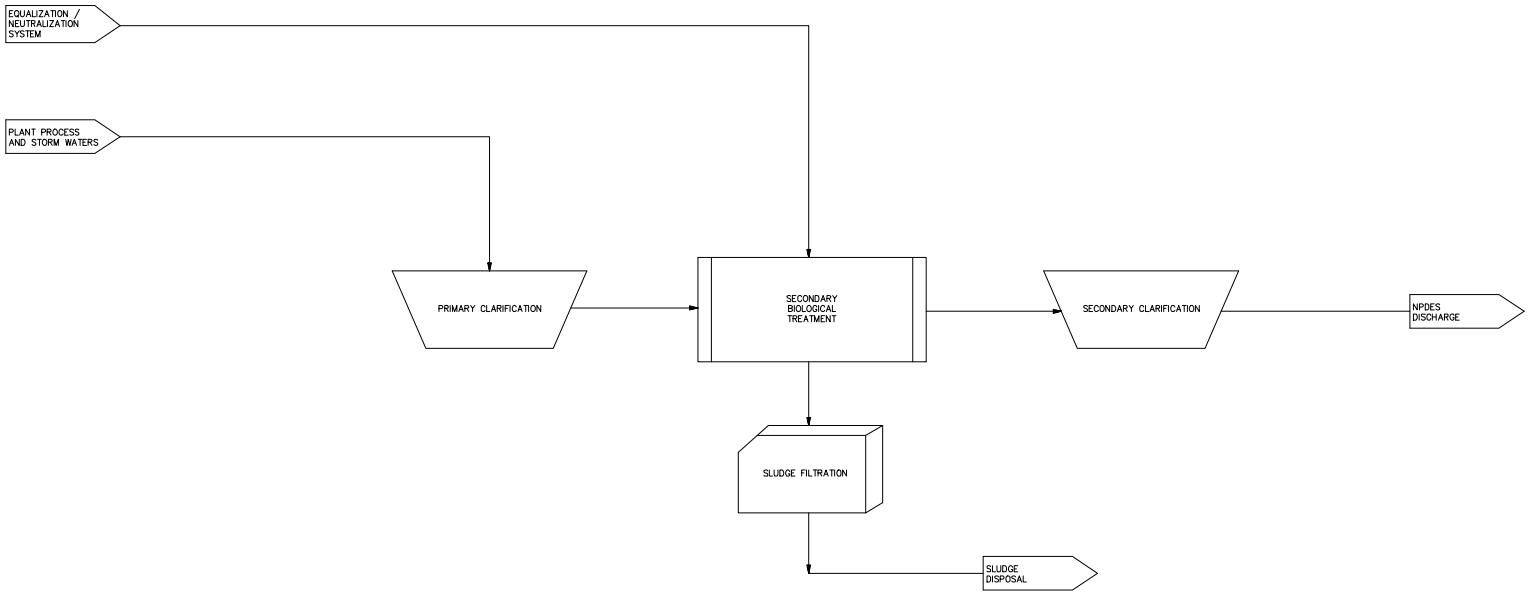
REV.

SEQ. NUMBER | BAY | SIZE

000292VYD0E | 4

BLDG. | DISCPLINE | FLDER

CONTROL EQUIPMENT	EMISSION POINTS

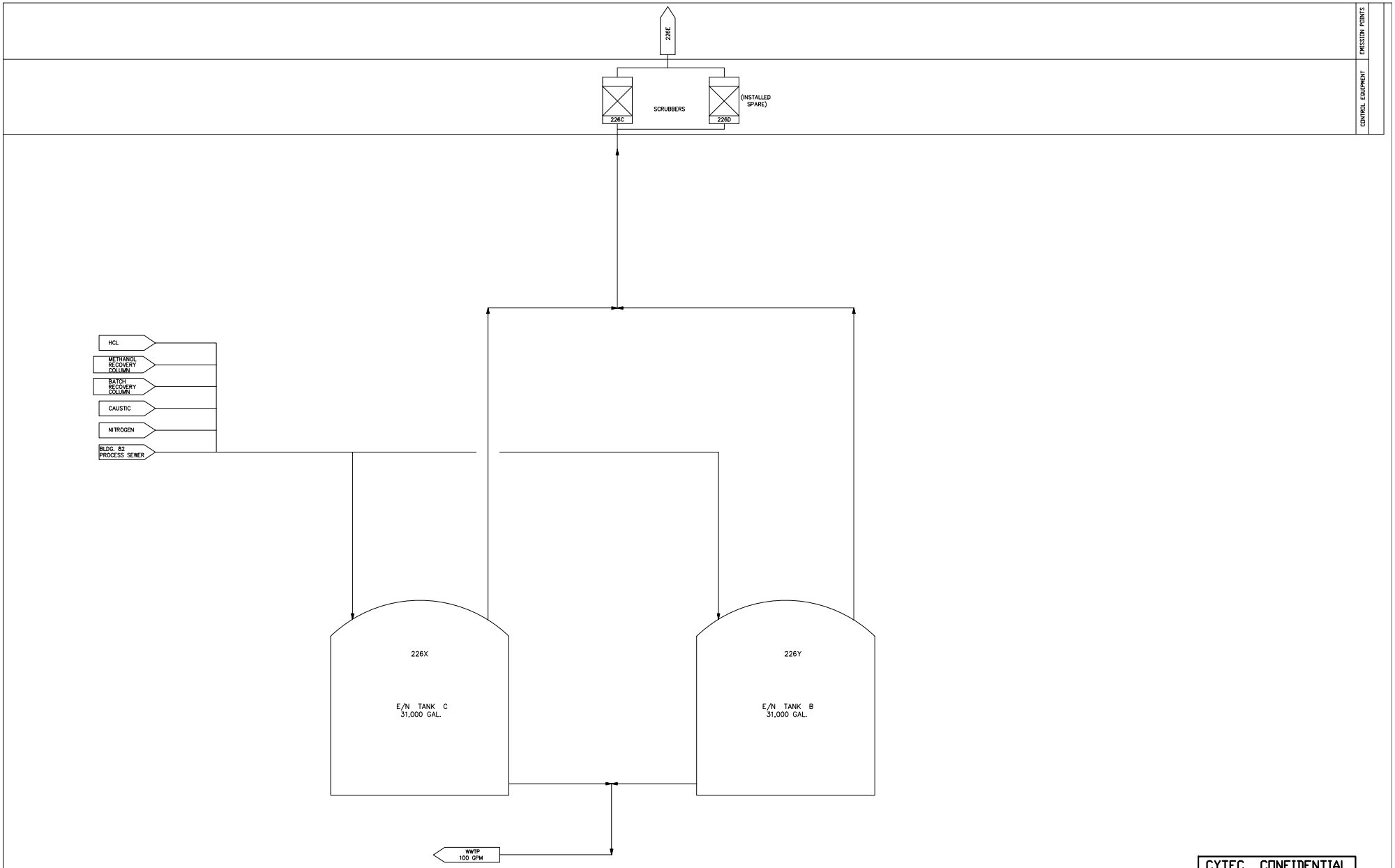


NO.	DESCRIPTION	BY / DATE	CHK / DATE
4			
3			
2			
1			
5	ENVR. REVIEW	RLA 05/13/09	JKP 05/13/09
4	UPDATE NO. 1	MER 3/3/97	JKP 3/3/97
3	AFTER AGENCY REVIEW	egl/961101	jkp/961101

CYTEC

CYTEC INDUSTRIES INC.
P.O. BOX 300
BELMONT, WV 26134-0300

SCALE NONE	WASTEWATER TREATMENT
DRAFTSMAN egl 960814	
ENGINEER JKP 960814	
PROJECT NUMBER	DRAWING NUMBER: SEQ. NUMBER / BAY / SIZE: 650407V000E; REV.: 3
WORK ORDER NUMBER 096023	BLDG. / DISCIPLINE / FLOOR



CYTEC CONFIDENTIAL

NO.	DESCRIPTION	BY / DATE	CHK / DATE
3	ENVR. REVIEW	RLA 05/13/09	JKP 05/13/09
2	ENVR. REVIEW	TMS 4-30-04	JNH
1	UPDATE NO. 1	MCR 3/3/97	JKP 3/3/97

CYTEC

CYTEC INDUSTRIES INC.
#1 HEILMAN AVE.
WILLOW ISLAND, WV 26134

SCALE

DRAFTSMAN
egl 960826

ENGINEER
JKP

PROJECT NUMBER

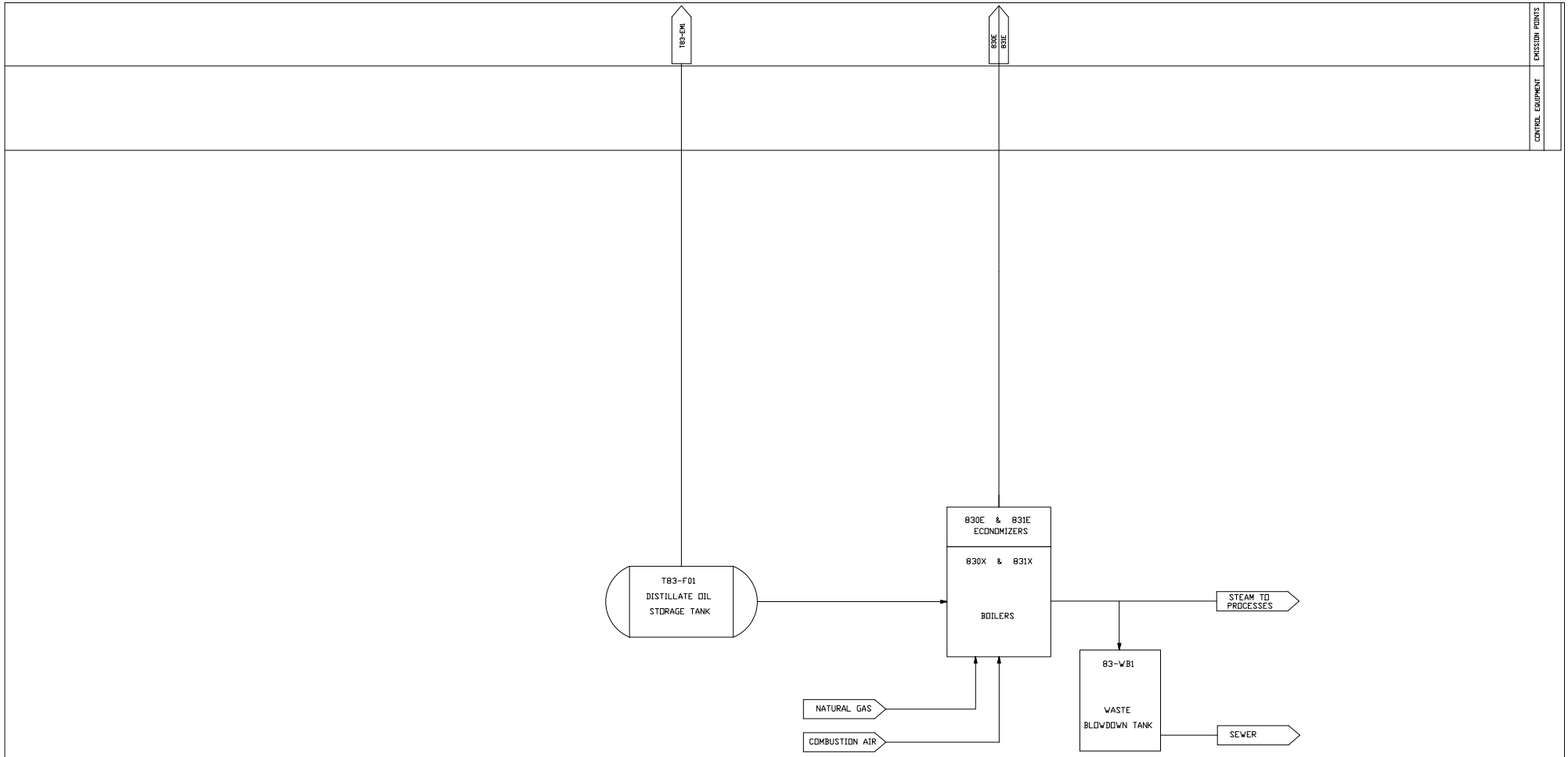
WORK ORDER NUMBER

EQUALIZATION / NEUTRALIZATION FACILITY
(PROCESS FLOW DIAGRAM)

DRAWING NUMBER

SEQ. NUMBER	BAY	SIZE	REV.
810227V000E			3

BLDG. DISCIPLINE FLOOR



NO.	DESCRIPTION	BY / DATE	CHK / DATE
6	ENVR REVIEW	RLA 05/13/09	JKP 05/13/09
5	ENGR REVIEW	TMS 080204	JKP

CYTEC

CYTEC INDUSTRIES INC.
#1 HEILMAN AVE.
WILLOW ISLAND, WV 26134

SCALE none

ENGINEER

PROJECT NUMBER

WORK ORDER NUMBER

BOILERS & DISTILLATE OIL STORAGE TANK PROCESS FLOW DIAGRAM

DRAWING NUMBER

SEQ. NUMBER	BAY	SIZE	REV.
930099V000E			1
BLDG.	DISCPLINE	FLOOR	

Attachment D

Equipment Table

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
65WW	(open to atmosphere)	On-Site Biological Wastewater Treatment System	1973 - 1992	9,000,000 GPD	N/A
226X	226E	E/N Tank C	1994	31,000 Gal	Scrubbers 226C/226D
226Y	226E	E/N Tank B	1994	31,000 Gal	Scrubbers 226C/226D
830X	830E	Boiler A	2004	97.9 MMBTU/hr (Natural Gas) 93.6 MMBTU/hr (Distillate Oil)	N/A
831X	831E	Boiler B	2004	97.9 MMBTU/hr (Natural Gas) 93.6 MMBTU/hr (Distillate Oil)	N/A
T83-F01	T83-EM1	Distillate Fuel Oil Storage Tank	2004	12,000 Gal	N/A
65BL	65V05	Diesel Engine (Stationary Generator) – Bldg. 65	1988	355 hp	N/A
E04E	E04P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 97	2010	175 hp	N/A
E02E	E02P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 95	2012	183 hp	N/A
E03E	E03P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 95	2013	183 hp	N/A

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E

Emission Unit Forms

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
65WW	On-Site Biological Wastewater Treatment System	None – Open to atmosphere

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Primary and secondary biological wastewater treatment system consisting of: inlet, bar screen, primary clarifier, lift station, aeration basin, secondary clarification, settling/thickening and filtration.

Manufacturer:	**Model number:**	**Serial number:**
Various	NA	NA

Construction date:	**Installation date:**	**Modification date(s):**
1971 - 1973	1971 - 1973	Various

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9,000,000 GPD

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	NA

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: Not Applicable	**Type and Btu/hr rating of burners:** Not Applicable

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Not Applicable

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Not Applicable			

Emissions Data		
Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	---	---
Nitrogen Oxides (NO_X)	---	---
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	---	---
Sulfur Dioxide (SO_2)	---	---
Volatile Organic Compounds (VOC)	NA	55.48
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
See list – page 4 of this form		
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Process modeling (EmissionMaster) and wastewater secondary emission modeling (ToxChem).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Operational limits – R30-07300003-2019 (Part 3 of 3): 4.1.1; 45CSR34; 40 C.F.R. §63.7881(c); 45CSR§30-6.5.b.2

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 4.4.1; 45CSR34; 40 C.F.R. §63.7881(c); 45CSR§30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Cytec Wastewater Treatment Plant – PTE HAP Species (in TPY)

Acrylic Acid	**0.20**
Benzene	**0.25**
Dimethyl formamide	**0.18**
Ethylbenzene	**<0.01**
Formaldehyde	**0.07**
Methanol	**3.33**
Methyl isobutyl ketone	**35.13**
Toluene	**8.38**
Triethylamine	**0.01**
Xylenes (isomers and mixtures)	**<0.01**

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
226X	E/N Tank C	226C/226D – vents via 226E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Vertical tank used to equalize organic waste streams.

Manufacturer:	**Model number:**	**Serial number:**
Patterson Industries	NA	100-004B

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
31,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,771 gph	14,918,000 gal	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: Not Applicable	**Type and Btu/hr rating of burners:** Not Applicable

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Not Applicable

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Not Applicable			

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	---	---
Nitrogen Oxides (NO_X)	---	---
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	---	---
Sulfur Dioxide (SO_2)	---	---
Volatile Organic Compounds (VOC)	21.5	5.2
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
THAP	21.5	1.5
Formaldehyde	0.5	0.05
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EmissionMaster emission modeling

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 5.1.1, 5.1.2; R13-0936B: 4.1.1, 4.1.2; 45CSR§13-5.10.
2. Operational limits – R30-07300003-2019 (Part 3 of 3): 5.1.3, 5.1.4; R13-0936B: 3.1.8, 4.1.3; 45CSR§13-5.10.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 5.2.1, 5.2.2, 5.4.1, 5.4.2, 5.5.1; R13-0936B: 3.4.2, 3.5.6, 4.2.1, 4.2.2, 4.4.1; 45CSR§27-10.4.
2. R30-07300003-2019 (Part 3 of 3): 5.2.1, 5.2.2, 5.4.1, 5.4.2; R13-0936B: 3.4.2, 4.2.1, 4.2.2, 4.4.1.

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
226Y	E/N Tank B	226C/226D – vents via 226E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Vertical tank used to equalize organic waste streams.

Manufacturer:	**Model number:**	**Serial number:**
Patterson Industries	NA	100-004B

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
31,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,771 gph	14,918,000 gal	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: Not Applicable	**Type and Btu/hr rating of burners:** Not Applicable

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Not Applicable

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Not Applicable			

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	---	---
Nitrogen Oxides (NO_X)	---	---
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	---	---
Sulfur Dioxide (SO_2)	---	---
Volatile Organic Compounds (VOC)	21.5	5.2
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
THAP	21.5	1.5
Formaldehyde	0.5	0.05
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EmissionMaster emission modeling

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 5.1.1, 5.1.2; R13-0936B: 4.1.1, 4.1.2; 45CSR§13-5.10.
2. Operational limits – R30-07300003-2019 (Part 3 of 3): 5.1.3, 5.1.4; R13-0936B: 3.1.8, 4.1.3; 45CSR§13-5.10.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 5.2.1, 5.2.2, 5.4.1, 5.4.2, 5.5.1; R13-0936B: 3.4.2, 3.5.6, 4.2.1, 4.2.2, 4.4.1; 45CSR§27-10.4.
2. R30-07300003-2019 (Part 3 of 3): 5.2.1, 5.2.2, 5.4.1, 5.4.2; R13-0936B: 3.4.2, 4.2.1, 4.2.2, 4.4.1.

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
830X	Boiler #A	None – vents via 830E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
In 2004, Cytec replaced their three existing boilers with two new natural gas, distillate oil co-firing boilers. The boilers generate steam, which is used on the plant site for process heat and for comfort heat.

Manufacturer:	**Model number:**	**Serial number:**
English Boiler & Tube, Inc.	80-SLG-250	24-011-1
Construction date:	**Installation date:**	**Modification date(s):**
2004	2004	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
97,900 cuft/hr (Natural Gas) ; 658 gal/hr (Distillate Oil)	858 MM cuft /yr (Natural Gas) ; 5.764 MM gal/yr (Distillate Oil)	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel?	**If yes, is it?**
_X_ Yes ____ No	_X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)	**Type and Btu/hr rating of burners:** Todd Combustion, John Zink Co. LLC 97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Primary Fuel: Natural Gas 97,900 cuft/hr 858 MM cuft /yr
Secondary Fuel: Distillate Oil 658 gal/hr 5.764 MM gal/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	0.2 gr /100 ft3	NA	1,000 BTU/cuft
Distillate Oil	0.05 wt%	NA	142,200 BTU/gal

Emissions Data	**[When combusting Natural Gas]**	
Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	8.06	35.40
Nitrogen Oxides (NO_X)	4.70	20.58
Lead (Pb)	0.001	0.0003
Particulate Matter ($PM_{2.5}$)	0.91	4.00
Particulate Matter (PM_{10})	0.91	4.00
Total Particulate Matter (TSP)	0.91	4.00
Sulfur Dioxide (SO_2)	0.06	0.30
Volatile Organic Compounds (VOC)	0.66	2.90
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Benzene	0.0003	0.0011
Hexane	0.22	0.95
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Primary means of estimating emissions is utilizing emission factors from AP-42 Chapter 1.4 Natural Gas Combustion or Chapter 1.3 Fuel Oil Combustion, combined with actual combustion quantities of natural gas or fuel oil.

Previous stack tests have been conducted for carbon monoxide, due to the former Boiler MACT requirements, on the following dates: 9/27/05, 9/12/06, 9/25/07, 9/23/08.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 6.1.1; R13-2560F: 4.1.1, 4.1.9, and 4.1.13.; 45CSR§2-4.1.b; 45CSR§10-3.1.e.
2. Emission limits – R30-07300003-2019 (Part 3 of 3): 6.1.6; R13-2560F: 4.1.7 and 4.1.17(c); 45CSR§2-3.1; 45CSR16; 40 C.F.R. §60.43c(c).
3. Operational limits – R30-07300003-2019 Part 3 of 3): 6.1.2, 6.1.3, 6.1.4, 6.1.7; R13-2560F: 4.1.2, 4.1.3, 4.1.4, 4.1.12 and 4.1.17 (b); 45CSR§2-9.2; 45CSR16; 40 C.F.R. § 60.42c(d) and 60.42c(i).
4. Operational limits/Boiler MACT – R30-07300003-2019 (Part 3 of 3): 6.1.8, 6.1.9, 6.1.10, 6.1.11; 45CSR34; 40 C.F.R. §63.7495(b); §63.7500(a)(1), Table 3, Item #1; 40 C.F.R. §63.7505(a); 40 C.F.R. §§ 63.7540(a)(12) and (13); 40 C.F.R. §§ 63.7540(a)(10)(i) through (vi); §63.7500(a)(1), Table 3, Item #4; 40 C.F.R. §63.7505(a); §63.7500(a)(3).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 6.1.5, 6.3.1, 6.3.2, 6.3.3, 6.4.1; R13-2560F: 4.1.5, 4.1.10, 4.1.11, 4.1.17 (d) and(e), 4.3.1, 4.4.4, and 4.4.7; 40 C.F.R. §§60.48c(g) and 60.7(b); 45CSR§§2-8.3.c and 8.3.d
2. R30-07300003-2019 (Part 3 of 3): 6.2.1, 6.3.1, 6.3.2, 6.3.3, 6.4.3; R13-2560F: 4.1.8, 4.1.10, 4.2.1 and 4.3.1, ; 45CSR§2-3.2; 45CSR16; 40 C.F.R. §60.45c(a); 45CSR§30-5.1.c.
3. R30-07300003-2019 (Part 3 of 3): 6.1.5, 6.4.1, 6.4.2, 6.5.1; R13-2560F: 4.1.5, 4.1.11, 4.1.17(a), (b), (d) and (e), 4.4.4, 4.4.5, 4.4.6, and 4.4.7; 45CSR16; 40 C.F.R. §§60.48c(d), (e)(1) and (11), f(1), and (j).
4. R30-07300003-2019 (Part 3 of 3): 6.4.4, 6.4.5, 6.4.8, 6.5.3 – 6.5.8; 45CSR34; 40 C.F.R. §63.7555(a); §63.7555(h); §§63.7560(a), (b), and (c); §63.7530(e); §§ 63.7530(f), 63.7545(a), 63.7545(e)(1), (6), (7), (8)(i) and (ii), and 63.9(h); §63.7540(b); §63.7545(f); §63.7545(h); §§63.7550(a), (b), and (c)(1); 40 C.F.R. §63.7550(h)(3).

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
831X	Boiler B	None – vents via 831E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
In 2004, Cytec replaced their three existing boilers with two new natural gas, distillate oil co-firing boilers. The boilers generate steam, which is used on the plant site for process heat and for comfort heat.

Manufacturer:	**Model number:**	**Serial number:**
English Boiler & Tube, Inc.	80-SLG-250	24-011-2
Construction date:	**Installation date:**	**Modification date(s):**
2004	2004	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
97,900 cuft/hr (Natural Gas) ; 658 gal/hr (Distillate Oil)	858 MM cuft /yr (Natural Gas) ; 5.764 MM gal/yr (Distillate Oil)	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel?	**If yes, is it?**
_X_ Yes ____ No	_X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)	**Type and Btu/hr rating of burners:** Todd Combustion, John Zink Co. LLC 97.9 MMBTU/hr (Natural Gas) ; 93.6 MMBTU/hr (Distillate Oil)

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Primary Fuel: Natural Gas 97,900 cuft/hr 858 MM cuft /yr
Secondary Fuel: Distillate Oil 658 gal/hr 5.764 MM gal/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	0.2 gr /100 ft3	NA	1,000 BTU/cuft
Distillate Oil	0.05 wt%	NA	142,200 BTU/gal

Emissions Data	**[When combusting Natural Gas]**	
Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	8.06	35.40
Nitrogen Oxides (NO_X)	4.70	20.58
Lead (Pb)	0.001	0.0003
Particulate Matter ($PM_{2.5}$)	0.91	4.00
Particulate Matter (PM_{10})	0.91	4.00
Total Particulate Matter (TSP)	0.91	4.00
Sulfur Dioxide (SO_2)	0.06	0.30
Volatile Organic Compounds (VOC)	0.66	2.90
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Benzene	0.0003	0.0011
Hexane	0.22	0.95
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Primary means of estimating emissions is utilizing emission factors from AP-42 Chapter 1.4 Natural Gas Combustion or Chapter 1.3 Fuel Oil Combustion, combined with actual combustion quantities of natural gas or fuel oil.

Previous stack tests have been conducted for carbon monoxide, due to the former Boiler MACT requirements, on the following dates: 9/27/05, 9/12/06, 9/25/07, 9/23/08.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 6.1.1; R13-2560F: 4.1.1, 4.1.9, and 4.1.13.; 45CSR§2-4.1.b; 45CSR§10-3.1.e.
2. Emission limits – R30-07300003-2019 (Part 3 of 3): 6.1.6; R13-2560F: 4.1.7 and 4.1.17(c); 45CSR§2-3.1; 45CSR16; 40 C.F.R. §60.43c(c).
3. Operational limits – R30-07300003-2019 (Part 3 of 3): 6.1.2, 6.1.3, 6.1.4, 6.1.7; R13-2560F: 4.1.2, 4.1.3, 4.1.4, 4.1.12 and 4.1.17 (b); 45CSR§2-9.2; 45CSR16; 40 C.F.R. § 60.42c(d) and 60.42c(i).
4. Operational limits/Boiler MACT – R30-07300003-2019 (Part 3 of 3): 6.1.8, 6.1.9, 6.1.10, 6.1.11; 45CSR34; 40 C.F.R. §63.7495(b); §63.7500(a)(1), Table 3, Item #1; 40 C.F.R. §63.7505(a); 40 C.F.R. §§ 63.7540(a)(12) and (13); 40 C.F.R. §§ 63.7540(a)(10)(i) through (vi); §63.7500(a)(1), Table 3, Item #4; 40 C.F.R. §63.7505(a); §63.7500(a)(3).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 6.1.5, 6.3.1, 6.3.2, 6.3.3, 6.4.1; R13-2560F: 4.1.5, 4.1.10, 4.1.11, 4.1.17 (d) and(e), 4.3.1, 4.4.4, and 4.4.7; 40 C.F.R. §§60.48c(g) and 60.7(b); 45CSR§§2-8.3.c and 8.3.d
2. R30-07300003-2019 (Part 3 of 3): 6.2.1, 6.3.1, 6.3.2, 6.3.3, 6.4.3; R13-2560F: 4.1.8, 4.1.10, 4.2.1 and 4.3.1, ; 45CSR§2-3.2; 45CSR16; 40 C.F.R. §60.45c(a); 45CSR§30-5.1.c.
3. R30-07300003-2019 Part 3 of 3): 6.1.5, 6.4.1, 6.4.2, 6.5.1; R13-2560F: 4.1.5, 4.1.11, 4.1.17(a), (b), (d) and (e), 4.4.4, 4.4.5, 4.4.6, and 4.4.7; 45CSR16; 40 C.F.R. §§60.48c(d), (e)(1) and (11), f(1), and (j).
4. R30-07300003-2019 (Part 3 of 3): 6.4.4, 6.4.5, 6.4.8, 6.5.3 – 6.5.8; 45CSR34; 40 C.F.R. §63.7555(a); §63.7555(h); §§63.7560(a), (b), and (c); §63.7530(e); §§ 63.7530(f), 63.7545(a), 63.7545(e)(1), (6), (7), (8)(i) and (ii), and 63.9(h); §63.7540(b); §63.7545(f); §63.7545(h); §§63.7550(a), (b), and (c)(1); 40 C.F.R. §63.7550(h)(3).

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
T83-F01	Distillate Fuel Oil Storage Tank	None – vents via T83-EM1

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Horizontal fixed roof storage tank, supplying alternate fuel to steam generating boilers.

Manufacturer:	**Model number:**	**Serial number:**
Highland Tank & Mfgr Co.	NA	NA
Construction date:	**Installation date:**	**Modification date(s):**
2004	2004	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
12,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,315 gal	11,526,000 gal	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: Not Applicable	**Type and Btu/hr rating of burners:** Not Applicable

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Not Applicable

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Not Applicable			

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	---	---
Nitrogen Oxides (NO_X)	---	---
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	---	---
Particulate Matter (PM_{10})	---	---
Total Particulate Matter (TSP)	---	---
Sulfur Dioxide (SO_2)	---	---
Volatile Organic Compounds (VOC) No. 2 Distillate Fuel Oil	<0.1	0.026

Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
---	---	---

Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

EPA Tanks 4.0

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Operational limits – R30-07300003-2019 (Part 3 of 3): 6.1.3 R13-2560F: 4.1.3

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-209 (Part 3 of 3): 6.4.2 R13-2560F: 4.1.17(a) and (b), 4.4.5, 4.4.6, and 4.4.7; 45CSR16; 40 C.F.R. §§60.42c(h)(1) and 60.48c(f)(1).

Are you in compliance with all applicable requirements for this emission unit? __X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
65BL	Diesel Engine	None – vents via 65V05

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Diesel engine powering emergency electric generator for wastewater treatment critical equipment.

Manufacturer:	**Model number:**	**Serial number:**
Cummins	NT 855C2	56207
Construction date:	**Installation date:**	**Modification date(s):**
1988	1988	No Modifications

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
355 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ____ No	**If yes, is it?** ____ Indirect Fired _X_ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 355 hp	**Type and Btu/hr rating of burners:** NA

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
#2 Lo-sulfur Diesel Fuel

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Low-Sulfur Distillate Oil	0.05 wt. %	NA	142,200 BTU/gal

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY (300 hr)
Carbon Monoxide (CO)	2.37	0.36
Nitrogen Oxides (NO_X)	0.45	0.07
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	0.78	0.12
Particulate Matter (PM_{10})	0.78	0.12
Total Particulate Matter (TSP)	0.78	0.12
Sulfur Dioxide (SO_2)	0.73	0.11
Volatile Organic Compounds (VOC)	0.002	0.0003
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY (300 hr)
Benzene	NA	<0.001
Toluene	NA	<0.001
Formaldehyde	NA	<0.001
Acetaldehyde	NA	<0.001
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
None	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

AP-42 / Stack test data

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 7.1.9.; 45CSR34; 40 C.F.R. 63 Subpart ZZZZ §63.6595(a)(1).

2. Operational limits – R30-07300003-2019 (Part 3 of 3): 7.1.10. - 7.1.15.; 45CSR34; 40 C.F.R. 63 Subpart ZZZZ §63.6602, Table 2c, Item#1; §63.6625(h); §63.6605(b); §§63.6625(e) and 63.6625(e)(2); 40 C.F.R. §63.6640(a), Table 6, Item # 9; §63.6625(f); §63.6625(i); §§63.6640(f)(1), (2), and (3).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 7.4.2. - 7.4.4., 7.5.1. - 7.5.3.; 40 C.F.R. § 63.6655(e) and 63.6655(e)(2); §§63.6655(f) and 63.6655(f)(1); §§63.6660(a), (b), and (c); § 63.6640(b); §63.6640(e); §63.6650(f); 45CSR34.

2. R30-07300003-2019 (Part 3 of 3) 7.4.2. - 7.4.4., 7.5.1. - 7.5.3.; 40 C.F.R. §§63.6655(e) and 63.6655(e)(2); §§63.6655(f) and 63.6655(f)(1); §§63.6660(a), (b), and (c); §63.6640(b); §63.6640(e); §63.6650(f); 45CSR34.

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
E02P	Emergency Diesel Engine (Stationary Fire Pump)	None – vents via E02E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fire protection system emergency fire pump power engine.

Manufacturer:	**Model number:**	**Serial number:**
John Deere	6068HFC28	PE6068L222710

Construction date:	**Installation date:**	**Modification date(s):**
2012	2012	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
183 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	100 hr/yr (expected maximum annual operating hours)

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel?	**If yes, is it?**
_X_ Yes ____ No	____ Indirect Fired _X_ Direct Fired

Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**
183 hp	NA

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Diesel Fuel #2 (low sulfur)

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel Fuel	0.05 wt. %	NA	142,200 BTU/gal

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	1.04	0.052
Nitrogen Oxides (NO_X)	5.67	0.284
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	0.06	0.003
Particulate Matter (PM_{10})	0.06	0.003
Total Particulate Matter (TSP)	0.06	0.003
Sulfur Dioxide (SO_2)	0.38	0.019
Volatile Organic Compounds (VOC)	0.45	0.023
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Trace	---	---
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
Trace	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

CO & PM factors from Tier 3 Emission certification standards.
NOx, SO2 and VOC from AP-42.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 7.1.1., 7.1.2.; 45CSR16; 45CSR34; 40 C.F.R. 60 Subpart IIII §§60.4205(c), Table 4 to Subpart IIII; 40 C.F.R. 63 Subpart ZZZZ §63.6590(c).

2. Operational limits – R30-07300003-2019 Part 3 of 3): 7.1.3. - 7.1.8.; 45CSR16; 40 C.F.R. 60 Subpart IIII §§60.4206, 60.4207(b), 60.4211(a), 60.4211(c), 60.4211(f), (g) and (g)(2).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 7.1.2., 7.1.3.; 45CSR16; 40 C.F.R. 60 Subpart IIII § 60.4205(c), 60.4207(b), Table 4 to Subpart IIII.

2. R30-07300003-2019 (Part 3 of 3) 7.2.1., 7.4.1.; 45CSR16; 45CSR§30-5.1.c.; 40 C.F.R. 60 Subpart IIII §§4209(a), 60.4214(b).

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
E03P	Emergency Diesel Engine (Stationary Fire Pump)	None – vents via E03E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fire protection system emergency fire pump power engine.

Manufacturer:	**Model number:**	**Serial number:**
John Deere	6068HFC28	PE6068L222710

Construction date:	**Installation date:**	**Modification date(s):**
2013	2013	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
183 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	100 hr/yr (expected maximum annual operating hours)

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel?	**If yes, is it?**
_X_ Yes ____ No	____ Indirect Fired _X_ Direct Fired

Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**
183 hp	NA

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Diesel Fuel #2 (low sulfur)

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel Fuel	0.05 wt. %	NA	142,200 BTU/gal

Emissions Data

Criteria Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Carbon Monoxide (CO)	1.04	0.052
Nitrogen Oxides (NO_X)	5.67	0.284
Lead (Pb)	---	---
Particulate Matter ($PM_{2.5}$)	0.06	0.003
Particulate Matter (PM_{10})	0.06	0.003
Total Particulate Matter (TSP)	0.06	0.003
Sulfur Dioxide (SO_2)	0.38	0.019
Volatile Organic Compounds (VOC)	0.45	0.023
Hazardous Air Pollutants	Potential Emissions (After Control)	
	PPH	TPY
Trace	---	---
Regulated Pollutants other than Criteria and HAP	Potential Emissions (After Control)	
	PPH	TPY
Trace	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

CO & PM factors from Tier 3 Emission certification standards.
NOx, SO2 and VOC from AP-42.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 7.1.1., 7.1.2.; 45CSR16; 45CSR34; 40 C.F.R. 60 Subpart IIII §§60.4205(c), Table 4 to Subpart IIII; 40 C.F.R. 63 Subpart ZZZZ §63.6590(c).

2. Operational limits – R30-07300003-2019 (Part 3 of 3): 7.1.3. - 7.1.8.; 45CSR16; 40 C.F.R. 60 Subpart IIII §§60.4206, 60.4207(b), 60.4211(a), 60.4211(c), 60.4211(f), (g) and (g)(2).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 7.1.2., 7.1.3.; 45CSR16; 40 C.F.R. 60 Subpart IIII § 60.4205(c), 60.4207(b), Table 4 to Subpart IIII.

2. R30-07300003-2019 (Part 3 of 3) 7.2.1., 7.4.1.; 45CSR16; 45CSR§30-5.1.c.; 40 C.F.R. 60 Subpart IIII §§4209(a), 60.4214(b).

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
E04P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 97	None – vents via E04E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fire protection system emergency fire pump power engine.
Manufactured date = 2010.
See attached engine nameplate photo at the end of this Attachment E.

Manufacturer:	**Model number:**	**Serial number:**
Clarke (John Deere)	JU6H-UFAD58	PE 6068L 129305

Construction date:	**Installation date:**	**Modification date(s):**
12/2010	12/2010	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
175 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	500 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 175 hp	**Type and Btu/hr rating of burners:** NA

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Diesel Fuel #2 Ultra Lo-sulfur Diesel Fuel

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel Fuel	15 ppm	0.01%	142,200 BTU/gal

Emissions Data		
Criteria Pollutants	Potential Emissions 500 hr/yr	
	PPH	TPY
Carbon Monoxide (CO)	1.01	0.26
Nitrogen Oxides (NO_X)	1.15	0.29
Lead (Pb)	NA	NA
Particulate Matter ($PM_{2.5}$)	0.06	0.02
Particulate Matter (PM_{10})	0.06	0.02
Total Particulate Matter (TSP)	0.06	0.02
Sulfur Dioxide (SO_2)	0.36	0.09
Volatile Organic Compounds (VOC)	1.15	0.29
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Trace	---	---
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Trace	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

NOx, CO, VOC & PM factors from Tier 3 Emission certification standards.
SO2 from AP-42.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2019 (Part 3 of 3): 7.1.1., 7.1.2.; 45CSR16; 45CSR34; 40 C.F.R. 60 Subpart IIII §§60.4205(c), Table 4 to Subpart IIII; 40 C.F.R. 63 Subpart ZZZZ §63.6590(c).

2. Operational limits – R30-07300003-2019 (Part 3 of 3): 7.1.3. - 7.1.8.; 45CSR16; 40 C.F.R. 60 Subpart IIII §§60.4206, 60.4207(b), 60.4211(a), 60.4211(c), 60.4211(f), (g) and (g)(2).

_NA_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2019 (Part 3 of 3): 7.1.2., 7.1.3.; 45CSR16; 40 C.F.R. 60 Subpart IIII § 60.4205(c), 60.4207(b), Table 4 to Subpart IIII.

2. R30-07300003-2019 Part 3 of 3) 7.2.1., 7.4.1.; 45CSR16; 45CSR§30-5.1.c.; 40 C.F.R. 60 Subpart IIII §§4209(a), 60.4214(b).

Are you in compliance with all applicable requirements for this emission unit? _X_ Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Attachment F

Schedule of Compliance Form

This form is not required due to there being no noncompliance issues of the applicable requirements of the issued permit.

Attachment G

Air Pollution Control Device Forms

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
226C	226X, 226Y	
Manufacturer:	**Model number:**	**Installation date:**
Cyanamid	In-house design	1987

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber X Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
HCL	100%	98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Water Flow Rate >= 3 GPM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes X No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Control Device 226C is not a subject Pollutant-Specific Emissions Unit as defined at 40 C.F.R. §64.1, because this control device has potential pre-control device annual emissions of applicable regulated air pollutants that are less than major source levels, and thus is exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Presence or absence of flow is monitored with a flow switch.
Flow meter monitors flow rate.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
226D	226X, 226Y	
Manufacturer:	**Model number:**	**Installation date:**
Cyanamid	In-house design	1987

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter
___ Venturi Scrubber
___ Multiclone
___ Carbon Bed Adsorber
_X_ Packed Tower Scrubber
___ Single Cyclone
___ Carbon Drum(s)
___ Other Wet Scrubber
___ Cyclone Bank
___ Catalytic Incinerator
___ Condenser
___ Settling Chamber
___ Thermal Incinerator
___ Flare
___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator
___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
HCL	100%	98%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Water Flow Rate >= 3 GPM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**
If No**, Provide justification.** Control Device 226D is not a subject Pollutant-Specific Emissions Unit as defined at 40 C.F.R. §64.1, because this control device has potential pre-control device annual emissions of applicable regulated air pollutants that are less than major source levels, and thus is exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Presence or absence of flow is monitored with a flow switch.
Flow meter monitors flow rate.

Attachment H

Compliance Assurance Monitoring (CAM) Form

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at http://www.epa.gov/ttn/emc/cam.html

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): ☐ YES ☒ NO**

a. The PSEU is located at a major source that is required to obtain a Title V permit;

b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is NOT exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
- Stratospheric Ozone Protection Requirements.
- Acid Rain Program Requirements.
- Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
- An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).

c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;

d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND

e. The PSEU is NOT an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit: Not Applicable

☐ RENEWAL APPLICATION. **ALL** PSEUs for which a CAM plan has NOT yet been approved need to be addressed in this CAM plan submittal.

☐ INITIAL APPLICATION (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

☐ SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

** **Rationale for CAM Exemption:** The facility does not own or operate a subject pollutant-specific emissions unit as defined at 40 C.F.R. §64.1, because all Site Services Area control devices have potential pre-control device annual emissions of applicable regulated air pollutants that are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

3) [a] BACKGROUND DATA AND INFORMATION

Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	[b] EMISSION LIMITATION or STANDARD	[c] MONITORING REQUIREMENT
Not Applicable					
~~EXAMPLE~~ Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

[a] If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

[b] Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

[c] Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA			
Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. if more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.			
4a) PSEU Designation: Not Applicable	**4b) Pollutant:**	**4c) [a] Indicator No. 1:**	**4d) [a] Indicator No. 2:**
5a) GENERAL CRITERIA Describe the MONITORING APPROACH used to measure the indicators:			
[b] Establish the appropriate INDICATOR RANGE or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
5b) PERFORMANCE CRITERIA Provide the SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, such as detector location, installation specifications, and minimum acceptable accuracy:			
[c] For new or modified monitoring equipment, provide VERIFICATION PROCEDURES, including manufacturer's recommendations, TO CONFIRM THE OPERATIONAL STATUS of the monitoring:			
Provide QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
[d] Provide the MONITORING FREQUENCY:			
Provide the DATA COLLECTION PROCEDURES that will be used:			
Provide the DATA AVERAGING PERIOD for the purpose of determining whether an excursion or exceedance has occurred:			

[a] Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

[b] Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

[c] The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

[d] Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:	6b) Regulated Air Pollutant:
Not Applicable	

7) **INDICATORS AND THE MONITORING APPROACH**: Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES**: Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how **EACH** indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.

- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.

- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION: