



Bayer CropScience

Bayer CropScience

Group 4 Title V Renewal Permit Application

Institute, West Virginia

Redacted Copy

Prepared By:

ENVIRONMENTAL RESOURCES MANAGEMENT, Inc.
Hurricane, West Virginia

September 2010

**TITLE V PERMIT APPLICATION CHECKLIST
FOR ADMINISTRATIVE COMPLETENESS**

<p>A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a Title V permit application. Any submittal will be considered incomplete if the required information is not included.*</p>	
<input checked="" type="checkbox"/>	Two signed copies of the application (at least one <u>must</u> contain the original “ <i>Certification</i> ” page signed and dated in blue ink)
<input checked="" type="checkbox"/>	Correct number of copies of the application on separate CDs or diskettes, (i.e. at least one disc per copy)
<input checked="" type="checkbox"/>	*Table of Contents (needs to be included but not for administrative completeness)
<input checked="" type="checkbox"/>	Facility information
<input checked="" type="checkbox"/>	Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios
<input checked="" type="checkbox"/>	Area map showing plant location
<input checked="" type="checkbox"/>	Plot plan showing buildings and process areas
<input checked="" type="checkbox"/>	Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships
<input checked="" type="checkbox"/>	Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance
<input checked="" type="checkbox"/>	Listing of all active permits and consent orders (if applicable)
<input checked="" type="checkbox"/>	Facility-wide emissions summary
<input checked="" type="checkbox"/>	Identification of Insignificant Activities
<input checked="" type="checkbox"/>	ATTACHMENT D - Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities
<input checked="" type="checkbox"/>	ATTACHMENT E - Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance
<input checked="" type="checkbox"/>	ATTACHMENT G - Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D)
<input checked="" type="checkbox"/>	ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each control device for which the “Is the device subject to CAM?” question is answered “Yes” on the Air Pollution Control Device Form (ATTACHMENT G)
<input checked="" type="checkbox"/>	General Application Forms signed by a Responsible Official
<input checked="" type="checkbox"/>	Confidential Information submitted in accordance with 45CSR31



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.wvdep.org/daq

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. Name of Applicant (As registered with the WV Secretary of State's Office): Bayer CropScience	2. Facility Name or Location: Route 25 Institute, West Virginia 25112
3. DAQ Plant ID No.: 0 3 9 — 0 0 0 0 7	4. Federal Employer ID No. (FEIN): 1 3 2 8 8 7 8 2 5
5. Permit Application Type: <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial Permit Application When did operations commence? MM/DD/1993 What is the expiration date of the existing permit? 05/14/2011	
6. Type of Business Entity: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Governmental Agency <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Partnership	7. Is the Applicant the: <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> 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: ~ 500	
9. Governmental Code: <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> District government owned and operated; 5	
10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: P.O. Box 1005

City: InSTITUTE

State: WV

Zip: 25112 -

Telephone Number: (304) 767 - 6500

Fax Number: (304) 767 - 6879

12. Facility Location

Street: Route 25

City: InSTITUTE

County: Kanawha

UTM Easting: 432.0 km

UTM Northing: 4,248.3 km

Zone: 17 or 18

Directions: Adjacent to Route 25, west of InSTITUTE, West Virginia

Portable Source? Yes NoIs 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).

Kentucky
OhioIs facility located within 100 km of a Class I Area¹? Yes No

If yes, name the area(s).

If no, do emissions impact a Class I Area¹? Yes No¹ 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: Steven B. Hedrick		Title: Vice President, Head Institute Industrial Park
Street or P.O. Box: P.O. Box 1005		
City: Institute	State: WV	Zip: 25112 -
Telephone Number: (304) 767 - 6500	Fax Number: (304) 767 - 6879	
E-mail address: N/A		
Environmental Contact: Brian Schmidt		Title: Environmental Specialist
Street or P.O. Box: P.O. Box 1005		
City: Institute	State: WV	Zip: 25112 -
Telephone Number: (304) 767 - 6161	Fax Number: (304) 767 - 6879	
E-mail address: brian.schmidt@bayercropscience.com		
Application Preparer:		Title:
Company:		
Street or P.O. Box:		
City:	State:	Zip:
Telephone Number:	Fax Number:	
E-mail address:		

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
Aldicarb Unit	Aldicarb Solution	325320	2879

Provide a general description of operations.

Aldicarb Unit Process Description

A solution of aldicarb in a solvent is produced in a carbamoylation reaction. The aldicarb product is transferred to the product hold and storage tanks and then loaded into tank trucks for distribution to formulators. A closed vent system connected to a vent header is utilized to route process emissions to a condenser, followed by a scrubber, and then a flare.

- 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.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input checked="" type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)

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.

- 40CFR60, Subpart D - Standards of Performance for Fossil-Fuel-fired Steam Generators constructed after August 17, 1971
Basis for Applicability Determination: Applies to steam generation units with heat input > 250 mmBtu/hr, and were constructed, reconstructed, or modified after 8/17/71. The Unit does not contain a regulated source.
- 40CFR60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
Basis for Applicability Determination: Applies to steam generating units with heat input > 100 mmBtu/hr which were constructed, reconstructed, or modified after 6/19/84. The Unit does not contain a regulated source.
- 40CFR60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
Basis for Applicability Determination: Applies to steam generating units with heat input of 10-100 mmBtu/hr which were constructed, reconstructed, or modified after 6/9/89 and burn one of the listed fuels. The Unit does not contain a regulated source.
- 40CFR60, Subpart E - Standards of Performance for Incinerators.
Basis for Applicability Determination: Applies only to burning solid waste. The Unit does not contain a regulated source.
- 40CFR60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids constructed or modified after June 11, 1973 and prior May 19, 1978.
Basis for Applicability Determination: Petroleum liquids are not stored in vessels with a capacity greater than 40,000 gallons.
- 40CFR60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids constructed or modified after May 18, 1978 and prior July 23, 1984.
Basis for Applicability Determination: Petroleum liquids are not stored in vessels with a capacity greater than 40,000 gallons.
- 40CFR60, Subpart Kb - Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.
Basis for Applicability Determination: Volatile Organic Liquids are not stored in vessels meeting the volume capacity and vapor pressure requirements of this Subpart.
- 40CFR60, Subpart O - Standards of Performance for Sewage Treatment Plants.
Basis for Applicability Determination: The Unit does not operate a municipal treatment plant.
- 40CFR63, Subpart G - National Emissions Standards for Organic HAPs from the SOCM I Process Vents, Storage Vessels, Transfer Operations, and Wastewater.
Basis for Applicability Determination: Subpart G is not applicable because the Unit does not manufacture as an intermediate or final product any of the listed chemicals that would trigger applicability.
- 40CFR63, Subpart I - National Emission Standards for Organic Hazardous Air Pollutants for certain processes subject to the negotiated regulation for Equipment Leaks.
Basis for Applicability Determination: Subpart MMM takes precedence.
- 40CFR63, Subpart EEEE - National Emission Standards for Organic Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).
Basis for Applicability Determination: Storage tanks were below the regulation's capacity or vapor pressure threshold, specifically exempt by the regulation, or are regulated under another MACT regulation.

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).

Open Burning - 45CSR§6-3.1 and 3.2
Asbestos - 40CFR61 and 45CSR15
Odor - 45CSR§4-3.1 (State enforceable only)
Standby Plan for Reducing Emissions - 45CSR§11-5.2
Emission Inventory - WV Code § 22-5-4(a)(14)
Ozone-Depleting Substances - 40CFR82, Subpart F
Risk Management Plan - 40CFR68
NOx Budget Trading Program - 45CSR1
Facility Construction & Operation - 45CSR13, Permit No. R13-793

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.)

Monitoring - N/A
Testing - WV Code § 22-5-4(a)(15) and 45CSR13
Record Keeping Requirements

- Monitoring Information - 45CSR§30-5.1.c.2.A
- Retention of Records - 45CSR§30-5.1.c.2.B
- Odor - 45CSR§30-5.1.c (State enforceable only)

Reporting Requirements

- Responsible Official - 45CSR§30-4.4, 5.1.c.3.D and 5.1.c.3.E
- Certified Emissions Statement - 45CSR§30-8
- Compliance Certification - 45CSR§30-5.3.e
- Semi-Annual Monitoring Reports - 45CSR§30-5.1.c.3.A
- Emergencies – Section 2.17 of Title V permit.
- Deviations - 45CSR§30-5.1.c.3.B through D
- New Applicable Requirements - 45CSR§30-4.3.h.1.B

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

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

22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance	Permit Condition Number
N/A	N/A	N/A
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Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	NA
Nitrogen Oxides (NO _x) – Includes startups and diversions.	NA
Lead (Pb)	NA
Particulate Matter (PM _{2.5}) ¹	NA
Particulate Matter (PM ₁₀) ¹	0.47
Total Particulate Matter (TSP)	0.47
Sulfur Dioxide (SO ₂)	NA
Volatile Organic Compounds (VOC)	<0.001
Hazardous Air Pollutants ²	Potential Emissions
HCl (HAP)	0.47
Regulated Pollutants other than Criteria and HAP	Potential Emissions
NA	

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>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.</p> <p>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:</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input checked="" type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

<input checked="" type="checkbox"/>	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.)
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input checked="" type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input checked="" type="checkbox"/>	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. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

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: Steven B. Hedrick

Title: Vice President, Head Institute Industrial Park

Responsible official's signature:

Signature: _____ Signature Date: _____
(Must be signed and dated in blue ink)

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

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input checked="" type="checkbox"/>	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.wvdep.org/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

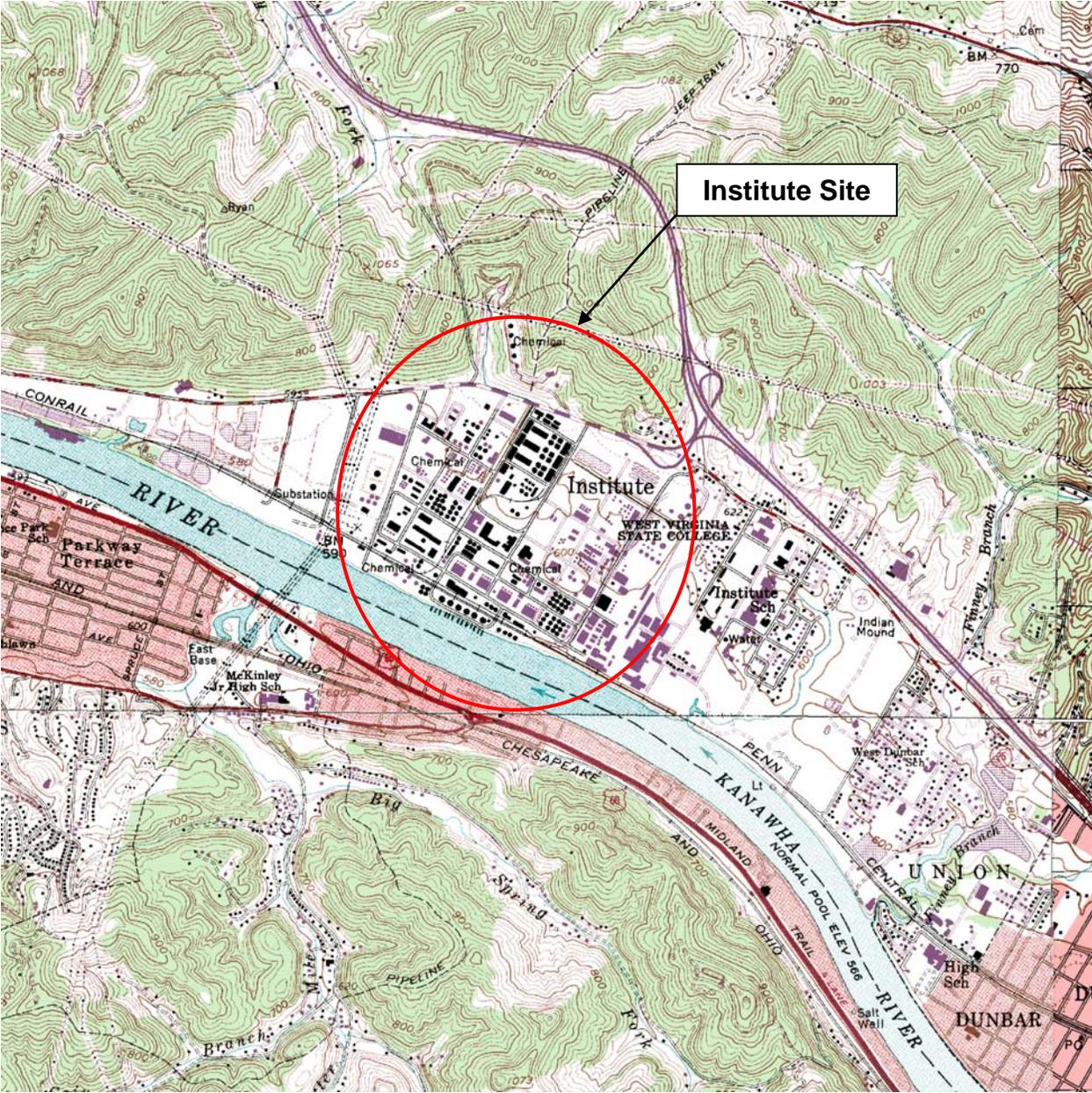
Table of Contents

ATTACHMENT A	Area Map
ATTACHMENT B	Plot Plan
ATTACHMENT C	Process Flow Diagrams
ATTACHMENT D	Equipment Tables
ATTACHMENT E	Emission Unit Forms
ATTACHMENT F	Schedule of Compliance
ATTACHMENT G	Air Pollution Control Device Forms
ATTACHMENT H	Compliance Assurance Monitoring

Attachment A

Area Map

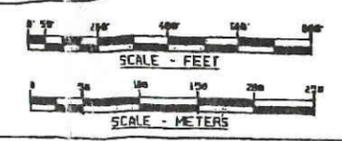
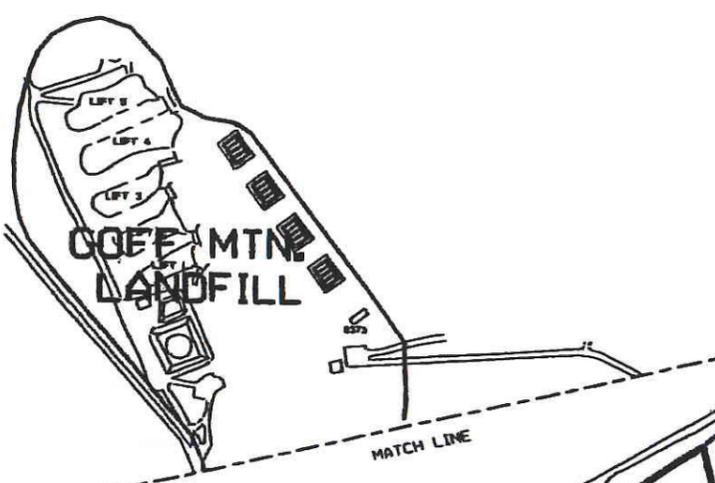
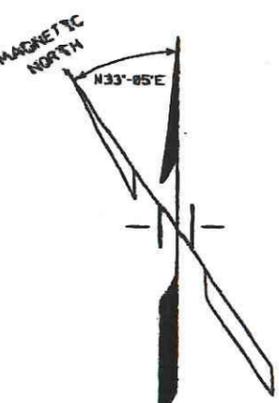
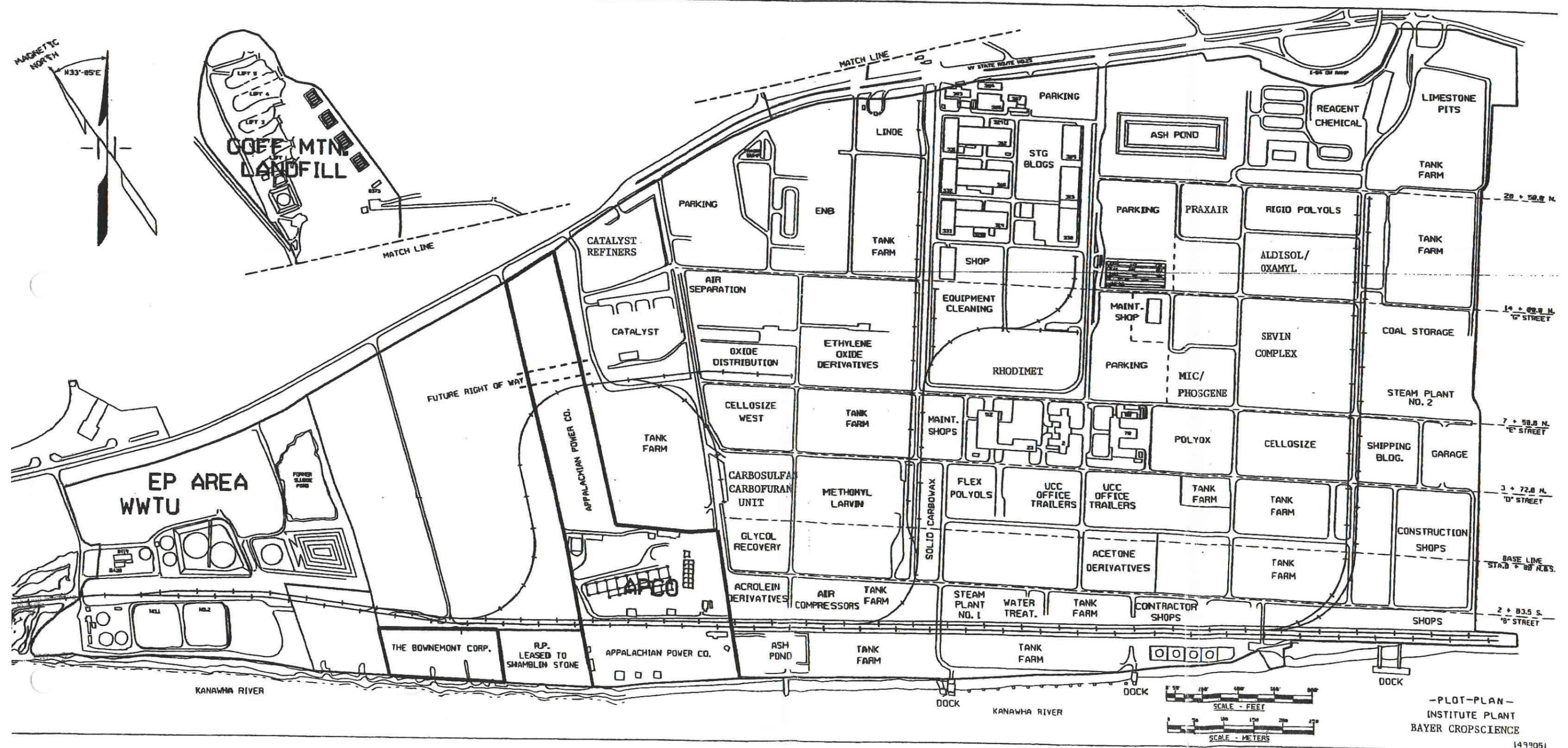
Attachment A Area Map



Attachment B

Plot Plan

Attachment B - Plot Plan



-PLOT-PLAN-
INSTITUTE PLANT
BAYER CROPSCIENCE

Attachment C

Process Flow Diagrams

**Attachment C – Process Flow Diagram
Bayer CropScience Aldicarb Unit**

**Aldicarb
Process Flow
Diagram is
Confidential**

**Redacted Copy
Claim of Confidentiality
9/2/10**

Attachment D

Equipment Tables

ATTACHMENT D - Emission Units 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	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Aldicarb					
C-101	242A	Reactor	1985	7,000 gal	A-3100 A-2732 A-242
C-130	242A	Product Hold Tank	1985	7,000 gal	A-3100 A-2732 A-242
C-118	242A	Product Tank	1985	25,000 gal	A-3100 A-2732 A-242
C-109	242A	Storage Tank	1985	25,000 gal	A-3100 A-2732 A-242
C-144	242A	Storage Tank	1999	6,960 gal	A-2732 A-242
D-113	310A	Storage Tank	1985	70,000 gal	N/A
L9TT	242A	Tank Truck	N/A	4,800 gal	A-3100 A-2732 A-242
L7TC	310A	Tank Railcar	N/A	25,000 gal	N/A
C-1099	C-1099	Glycol Storage	1985	30,000 gal	N/A
D-123	D-123	Reactor Tempered Water Tank	1985	900 gal	N/A
D-132	D-132	Product Tank Tempered Water	1985	200 gal	N/A
D-132A	D-132A	Truck Rack Tempered Water	1985	450 gal	N/A
D-1040	D-1040	Top Destruct Tank	1985	7,200 gal	N/A
D-1041	D-1041	Bottom Destruct Tank	1985	7,200 gal	N/A
A-3100	242A	Refrigerated Vent Condensers (2)	1985	53,100 BTU/hr per unit (only one in service at a time)	A-2732 A-242

ATTACHMENT D - Emission Units 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	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Control Device					
A-2732	242A	Caustic Scrubber	1985	11,200 gal	A-242
A-242	242A	Flare	1976	300 Million BTU/HR	N/A

¹For 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

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: C-101	Emission unit name: Reactor	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Reactor Unit			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 7,000 gallons			
Maximum Hourly Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 329 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___Yes <u>X</u> No		If yes, is it? ___ Indirect Fired ___Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	0.12	0.47
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrogen Chloride	0.12	0.47
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>Mass balance calculations along with engineering estimates were used to develop the potential emissions.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: C-109	Emission unit name: DCM Storage Tank	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Storage Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 25,000 gallons			
Maximum Daily Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 365 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A

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.).

Engineering Estimate. Potential emissions are included with amounts provided in C-101 because of venting equalization.

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: C-118	Emission unit name: Product Storage Tank	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Storage Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 25,000 gallons			
Maximum Daily Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 365 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___Yes <u>X</u> No		If yes, is it? ___ Indirect Fired ___Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A

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.).

Engineering Estimate. Potential emissions are included with amounts provided in C-101 because of venting equalization.

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: C-130	Emission unit name: Product Hold Tank	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Holding Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 7,000 gallons			
Maximum Hourly Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 329 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___Yes <u>X</u> No		If yes, is it? ___ Indirect Fired ___Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A

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.).

Engineering Estimate. Potential emissions are included with amounts provided in C-101 because of venting equalization.

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

Are you in compliance with all applicable requirements for this emission unit? 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: C-144	Emission unit name: Catalyst Feed Tank	List any control devices associated with this emission unit: A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Catalyst Feed Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1999	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 6,960 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>Engineering Estimate. Potential emissions are included with amounts provided in C-101.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPS SCIENCE – 09/02/10

Emission Unit Description			
Emission unit ID number: C-1099	Emission unit name: Glycol Storage Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Glycol storage tank for process.			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 30,000 gallons			
Maximum Hourly Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	0.001	< 0.001
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>AP-42</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: D-113	Emission unit name: ADO Storage Tank	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Raw Material Storage Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 70,000 gallons			
Maximum Daily Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 365 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	<0.001	<0.001
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>AP-42</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.*)

NA

Are you in compliance with all applicable requirements for this emission unit? 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: D-123	Emission unit name: Reactor Tempered Water Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Tank for tempered water for reactor.			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 900 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>NA. Emissions are water.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

Are you in compliance with all applicable requirements for this emission unit? 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: D-132	Emission unit name: Product Tempered Water Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Tank for tempered water for Product Tank.			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 200 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>NA. Emissions are water.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

<i>Emission Unit Description</i>			
Emission unit ID number: D-132A	Emission unit name: Truck Rack Tempered Water	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Tank for tempered water for Truck Rack.			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 450 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>NA. Emissions are water.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

Are you in compliance with all applicable requirements for this emission unit? 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: D-1040	Emission unit name: Top Destruct Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Top Destruct Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 7,200 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>NA. Emissions are water.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

Are you in compliance with all applicable requirements for this emission unit? 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: D-1041	Emission unit name: Bottom Destruct Tank	List any control devices associated with this emission unit: N/A	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Bottom Destruct Tank			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: 1985	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 7,200 gallons			
Maximum Hourly Throughput: NA	Maximum Annual Throughput: NA	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p>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.).</p> <p>NA. Emissions are water.</p>		

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

RREDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

<i>Emission Unit Description</i>			
Emission unit ID number: L7TC	Emission unit name: Tank Car Unloading	List any control devices associated with this emission unit: NA	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Tank Car Unloading			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: N/A	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 25,000 gallons			
Maximum Daily Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 52 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <input checked="" type="checkbox"/> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A

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. Venting and emission reporting is through D-113.

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

ATTACHMENT E - Emission Unit Form

REDACTED CLAIM OF CONFIDENTIALITY – BAYER CROPSCIENCE – 09/02/10

Emission Unit Description			
Emission unit ID number: L9TT	Emission unit name: Tank Truck Loading and Unloading	List any control devices associated with this emission unit: A-3100, A-2732 and A-242	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Tank Truck Loading and Unloading			
Manufacturer: N/A	Model number: N/A	Serial number: N/A	
Construction date: N/A	Installation date: N/A	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 4,800 gallons			
Maximum Daily Throughput: CONF.	Maximum Annual Throughput: CONF.	Maximum Operating Schedule: 365 days/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? ___ Yes <u> X </u> No		If yes, is it? ___ Indirect Fired ___ Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: N/A	
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. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
N/A	N/A	N/A	N/A

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO _x)	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	N/A	N/A
Particulate Matter (PM ₁₀)	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO ₂)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A

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.).

Engineering Estimate. Venting is equalized with the C-118, C-130, C-101 and C-109. All emissions are calculated and reported through C-101.

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.

40CFR63, Subpart MMM

- Aldicarb Unit is subject to the PAI MACT.

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.)

NA

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

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

Attachment F

Schedule of Compliance

Attachment F

Schedule of Compliance

Since there are currently no “out of compliance” emission units in the Aldicarb Unit, this section is not applicable.

Attachment G

Air Pollution Control Device Forms

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: A-242	List all emission units associated with this control device. Aldicarb process equipment
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Manufacturer: National Air Oil Company	Model number: 12" NGR-C	Installation date: 1976
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input checked="" type="checkbox"/> Flare	<input type="checkbox"/> Other (describe)
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> 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
DCM	99.99%	100% conversion to HCl

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

- Gas flow rate = 250 lbs/hr of methane or natural gas.
- HCl concentration not greater than 210 milligrams per dry cubic meter.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Unit is subject to the PAI MACT. 40CFR§§63 Subpart MMM

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

- The permittee shall monitor the flare pilot flame presence at least once every 15 minutes.
- The permittee shall monitor the gas flow rate to the flare.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: A-3100	List all emission units associated with this control device. Aldicarb process equipment
--	---

Manufacturer: NA	Model number: NA	Installation date: 1985
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input checked="" type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe)
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> 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
DCM	99.99%	98%

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

- Parallel Refrigerated Condenser

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Unit is subject to the PAI MACT. 40CFR§§63 Subpart MMM

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

NA

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: A-2732	List all emission units associated with this control device. Aldicarb process equipment
--	---

Manufacturer:	Model number: NA	Installation date: 1985
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe)
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> 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
MIC	100%	99.99%

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

- Scrubber liquor is caustic solution of no less than 5%.
- Liquor flow rate is ≥ 60 gal/min.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** Unit is subject to the PAI MACT. 40CFR§§63 Subpart MMM

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

- The concentration of the aqueous sodium hydroxide shall be measured once per week.
- The pressure drop across the Scrubber A-2732 shall be monitored.
- The liquor flow rate shall be monitored.

Attachment H

Compliance Assurance Monitoring

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:

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.

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
NA	NA	NA	NA	NA	NA
<u>EXAMPLE</u> 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:	4b) Pollutant:	4c) ^a Indicator No. 1:	4d) ^a Indicator No. 2:
5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators:			
^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:			
^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:			
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
^d Provide the <u>MONITORING FREQUENCY</u> :			
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:			
Provide the <u>DATA AVERAGING PERIOD</u> 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:

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:

The Aldicarb Unit is covered by 40CFR63, Subpart MMM (PAI MACT). In addition, emission limits and standards have been established by the previous Title V permit. Also, some pollutants are not regulated and the potential to emit for some are less than 100 tons per year before controls.