



State of Ohio Environmental Protection Agency
Southwest District

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Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

October 10, 2008

Mr. Ronald Garcia
Agrium US, Inc.
North Bend Nitrogen Operation
P.O. Box 158
10743 Brower Road
North Bend, Ohio 45052

Re: Agrium US, Inc. – CEI – OH0009571;1IE00009*GD - Notice of Violation

Dear Mr. Garcia:

On September 10, 2008, Marianne Piekutowski of this office met with Chuck Jessell to conduct a NPDES compliance evaluation inspection (CEI) at the Agrium US, Inc. facility in North Bend. The purpose of the inspection was to evaluate compliance with the terms of the NPDES permitt. Please note that the report, by its format, tends to highlight negative areas.

As indicated in the attached NPDES compliance inspection report, all areas that were rated received a satisfactory rating.

Thank you and your staff for the time extended during the inspection. If you have any questions, please contact Ms. Piekutowski at the office at 937.285.6108.

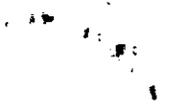
Sincerely,

Martyn G. Burt
Environmental Supervisor
Division of Surface Water

Enclosure

Cc: Chuck Jessell, Agrium US, Inc.







State of Ohio Environmental Protection Agency
Southwest District Office

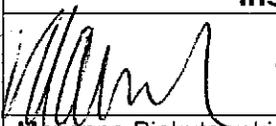
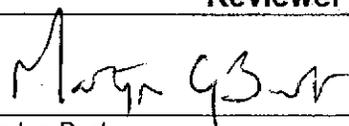
NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
11E00009*GD	OH0009571	09/10/2008	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Agrium U.S., Inc. North Bend Nitrogen Operation 10743 Brower Road North Bend, Ohio	8:00 am	07/01/2006
	Exit Time	Permit Expiration Date
	10:00 am	06/30/2011
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Chuck Jessell, EHS Manager	513.941.4100	
Name, Address and Title of Responsible Official	Phone Number	
Ronald Gracia, Facility Manager Agrium U.S., Inc. P.O. Box 158 North Bend, Ohio 45052	513.941.4100	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	N	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	N	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	N	Sludge Storage/Disposal	N	Other
N	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)
See Attached Report.

Inspector	Reviewer
	
Date 10/10/08	Date 10/10/08
Marianne Piekutowski Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Correct name and location of receiving waters..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... Y
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application... Y
- (f) New treatment process(es) added since last inspection..... N
- (g) Notification given to State of new, different or increased discharges..... N
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

e) Only treat the sanitary flow.

Section E: Permit Verification

- (a) Any significant violations since the last inspection..... N
- (b) Permittee is taking actions to resolve violations..... NA
- (c) Permittee has a compliance schedule..... N
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... NA

Comments/Status:

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed N
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... Y
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... NA
- (e) Operator of Record holds unexpired license of class required by permit..... NA
Class: NA
- (f) Copy of certificate of Operator of Record displayed on-site..... NA
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... NA
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... N
- (j) Operation and maintenance manual provided and maintained..... Y
- (k) Any plant bypasses since last inspection..... Y
- (l) Regulatory agency notified of bypasses..... NA
On MORs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... N

Record Keeping:

- (a) Log book provided..... NA
- (b) Format of log book (i.e. computer log, hard bound book)

NA

- (c) Log book(s) kept onsite (in an area protected from weather)..... NA
- (d) Log book contains the following:
 - I. Identification of treatment works..... NA
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... NA
 - III. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... NA
 - IV. Laboratory results (unless documented on bench sheets)... NA
 - V. Identification of person making log entries..... NA
- (d) Has the operator of record submitted written notification to the permittee, Ohio EPA and (if applicable) any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... NA

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Percent combined system: %
- (b) Any collection system overflows since last inspection..... NA
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... NA
- (d) CSO O&M plan provided and implemented..... NA
- (e) CSOs monitored and reported in accordance with permit..... NA
- (f) Portable pumps used to relieve system..... NA
- (g) Lift station alarms provided and maintained..... NA
- (h) Are lift stations equipped with permanent standby power
or equivalent..... NA
- (i) Is there an inflow/infiltration problem (separate sewer system),
or were there any major repairs to collection system since
last inspection..... NA
- (j) Any complaints received since last inspection of basement flooding NA
- (k) Are any portions of the sewer system at or near capacity..... NA

Comments/Status:

Treatment Works (b): *There is a high level alarm on the sanitary system.*

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted N/A
- (b) Sludge management plan current..... NA
(c) Sludge adequately disposed..... NA
(Method:)
(d) If sludge is incinerated, where is ash disposed of
(e) Is sludge disposal contracted..... NA
(Name:)
(f) Has amount of sludge generated changed significantly since
last inspection..... NA
(g) Adequate sludge storage provided at plant..... NA
(h) Land application sites monitored and inspected per SMP..... NA
(i) Records kept in accordance with State and Federal law..... NA
(j) Any complaints received in last year regarding sludge..... NA
(k) Is sludge adequately processed (digestion, pathogen control)..... NA

Comments/Status:

a) Ace Sanitation pumps out the septic tank.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir Weir
Calculated from influent Other (Specify:)
- (b) Calibration frequency adequate Y
(Date of last calibration: March/April 2008 at manufacturers')
- (c) Secondary instruments operated and maintained..... NA
(d) Flow measurement equipment adequate to handle full range
of flows..... Y
(e) Actual flow discharged is measured..... Y
(f) Flow measuring equipment inspection frequency
 Daily Weekly monthly other

Comments/Status:

f) Flow meter checked daily when reading is taken.

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
- (d) Sample collection procedures are adequate..... Y
 - (i) Samples refrigerated during compositing..... Y
 - (ii) Proper preservation techniques used..... Y
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y
- (e) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e, continuous monitoring instrumentation, calibration and maintenance records)..... Y
- (f) Adequate records maintained of sampling date, time, location, etc.. Y

Laboratory:

General

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (b) If alternate analytical procedures are used, proper approval has been obtained..... NA
- (c) Analyses being performed more frequently than required by permit. N
- (d) If (c) is yes, are results in permittee's self-monitoring report..... Y
- (e) Commercial laboratory used..... Y

Parameters analyzed by commercial lab:

Fecal coliform, NH3, cBOD, Nitrite-Nitrate, TSS

Lab name:

Belmont Labs

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained..... NA
- (g) Satisfactory calibration and maintenance of instruments/equipment. NA
- (h) Adequate records maintained..... NA
- (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory

Date:

Comments/Status:

Sampling f): List the preservation method on the chain-of-custody forms. Also put on the bottle label.
QA/QC: Visited lab prior to selecting. Receive copies of the QA/QC for the samples.

Section J: Effluent/Receiving Water Observations

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
002	*	N	N	N	N	N	N	N

Comments/Status:

* - There is a sign on the tower for barge unloading noting there is an outfall.

Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status:

**AGRIUM US, INC. NORTH BEND NITROGEN OPERATION
NPDES COMPLIANCE EVALUATION INSPECTION
DATE OF INSPECTION: September 10, 2008**

ITEMS OF DISCUSSION FOR INSPECTION:

This inspection was to review compliance at the facility with its NPDES permit.

COMPLIANCE EVALUATION:

The facility's compliance history for its NPDES permit was reviewed from September 1, 2006 through October 1, 2008. The following effluent violations were noted:

EFFLUENT LIMIT VIOLATIONS

<u>Date</u>	<u>Parameter</u>	<u>Reported Value</u>	<u>Permit Limit</u>
07/2007	Fecal Coliform	210 #/100 mL	200 #/100 mL (Avg)
10/5/2007	Fecal Coliform	6,300 #/100 mL	400 #/100 mL (Daily)
10/25/2007	Fecal Coliform	800 #/100 mL	400 #/100 mL (Daily)
10/2007	Fecal Coliform	355.082 #/100 mL	200 #/100 mL (Avg)

In November 2006, August 2007, and November 2007, there were issues with the days the samples were collected. The days corresponded to calendar weeks not the weeks as defined in the facility's NPDES permit. This situation has been remedied.

OBSERVATIONS:

Agrium US, Inc. North Bend Nitrogen Operations manufactures ammonium nitrate and nitric acid for industrial use, and urea ammonium nitrate for fertilizer. Any process water that is generated from the facility drains into one of seven process water sumps. This wastestream is collected and used in the manufacturing of the fertilizer. This is not discharged into waters of the State. The urea will come in at 32%, and will be diluted to 28% for use by farmers. The facility also makes urea ammonium nitrate (UAN). To do this, the facility takes granular urea and granular ammonium nitrate and dissolves it in water to make UAN. The water to make this product comes from the scrubber water and sumps. This allows the water to be captured as part of the product, and is not discharged. The non-contact cooling water from the facility comes from a compressor. The compressor is used to convert ammonia from a gas to a liquid. The RO reject water is used in the cooling tower.

The facility also has a barge unloading station on the Ohio River. Approximately 12 barges are unloaded a year. There is a sign posted on the tower for the barge area noting

Agrium US, Inc.

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the NPDES permit outfall. A copy of the NPDES permit outfall signage requirements was sent to the facility in a separate email.

The production areas are all contained within areas served by a series of trench drains. All of these drains would collect condensate from steam lines and the non-contact cooling water generated on-site. Storm water would also be collected in these trenches. All of these drains flow into the sampling location for outfall 002. The sanitary flow from the facility also is present at the sampling location. The storm water from the site is also present at the sampling location.

There is a 1 million gallon emergency detention basin for the facility. This basin would be used in the event of a spill or a release. This would allow the facility to capture the spilled material before it can enter into waters of the State. The facility has changed its unloading procedures. When diesel, hydrogen peroxide, or gasoline is unloaded, the drains at the facility are routed to the emergency detention basin. The basin is being used as part of the secondary containment requirements for the facility's spill prevention countermeasures and control (SPCC) plan. This will prevent any product that spilled from reaching waters of the State. On the day of the inspection, there was minimal water in the basin. The solids collected in the basin are disposed of through Rumpke, Inc.

The facility was not sampling on the day of the inspection. The facility had some problems in the past with the definition of a "week". A new color-coded chart has eliminated this issue. The samples are refrigerated during collection, but this was not being noted on the chain-of-custody forms. This should be included on the form. The fecal coliform samples are being analyzed within six hours of collection. The fecal violations noted in this report have been attributed to dirty sampling tubing and from animal/bird waste from the facility's storm trenches. The sampler tubing has a new cleaning procedure, and the trenches may need to be cleaned more frequently. The facility has continuous pH monitoring on its discharge. The pH meter is calibrated based on the manufacturers' recommendations.

