



State of Ohio Environmental Protection Agency
Southwest District

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

August 26, 2008

Mr. Fred Tudor
EMD Chemicals, Inc.
2909 Highland Avenue
Cincinnati, Ohio 45212

**Re: EMD Chemicals, Inc. -- OH0047759;1IN00019*ED -- CEI/Pre-Permit
Inspection -- NOTICE OF VIOLATION**

Dear Mr. Tudor:

On July 31, 2008, Marianne Piekutowski of this office met with Dale Bloemker, Gene Desotelle, Rob Highley, Bruce Herzig, and yourself to conduct a NPDES pre-permit/compliance evaluation (CEI) inspection at the EMD Chemicals, Inc. facility. The purpose of this inspection was to update the facility's NPDES permit renewal application and evaluate compliance with the terms of the NPDES permit. Please note that the report, by its format, tends to highlight negative areas.

As indicated on the attached NPDES Compliance Inspection Report, all areas that were rated, with the exception of the Permit section, received a satisfactory rating. The Permit section received a rating of marginal because the NPDES renewal application is incomplete. The needed items were discussed as part of the inspection.

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

Sincerely,

Martyn G. Burt
Environmental Supervisor
Division of Surface Water

Enclosures





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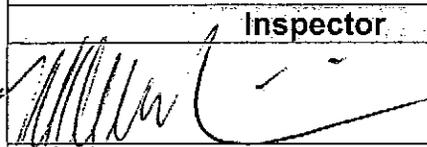
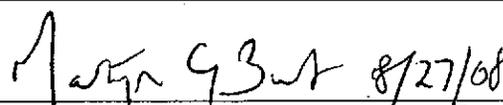
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
11N00019*ED	OH0047759	07/31/2008	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
EMD Chemicals, Inc. 2909 Highland Avenue Cincinnati, Ohio 45212	10:15 am	04/01/2004
	Exit Time	Permit Expiration Date
	12:00 pm	09/30/2008
Name(s) and Title(s) of On-Site Representatives		Phone Number(s)
Fred Tudor, Regulatory Affairs Manager		513.631.0445x235
Name, Address and Title of Responsible Official		Phone Number
Fred Tudor, Regulatory Affairs Manager EMD Chemicals, Inc. 2909 Highland Avenue Cincinnati, Ohio 45212		513.631.0445x235

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
M	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: 8/26/08	Date: 8/27/08
Marianne Piekutowski Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Permit # : 1IN00019*ED
NPDES #: OH0047759

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..... Y
- (g) Notification given to State of new, different or increased discharges..... Y
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

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 NA
- (b) Adequate alarm system available for power or equipment failures.. NA
- (c) All treatment units in service other than backup units..... NA
- (d) Operator holds unexpired license of class required by permit..... NA
Class: I
- (f) Routine and preventative maintenance schedule/performed
on time..... NA
- (g) Any major equipment breakdown since last inspection..... NA
- (h) Operation and maintenance manual provided and maintained..... NA
- (i) Any plant bypasses since last inspection..... NA
- (j) Regulatory agency notified of bypasses..... NA
On MORs and/or Spill Hotline (1-800-282-9378)
- (k) Any hydraulic and/or organic overloads since last inspection..... NA

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:

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:

Section I: Self-Monitoring Program

Flow Measurement:

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

Comments/Status:

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..... NA
 - (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..... NA
 - (e) Commercial laboratory used..... NA
- Parameters analyzed by commercial lab:

Lab name:

Quality Control/Quality Assurance

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

Date:

Comments/Status:

The facility analyzes its samples in-house. Samples are collected and logged in. They are placed in a refrigerator in the lab. The thermometer in the refrigerator was not adequate for sampling purposes. It has to read to 0 deg C and should be kept in a jar with liquid. The lab runs surrogates, spikes and recovery in line with USEPA guidance. The facility does not participate in the DMRQA program.

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	No	No	No	No	No	No	No
002	No	No	No	No	No	No	No
003	No	No	No	No	No	No	No
004	No	No	No	No	No	No	No
005	NA	NA	NA	NA	NA	NA	NA

Comments/Status:

Outfall 001 was the only outfall discharging the day of the inspection. Outfall 002 which drains the loading/unloading area was closed. Outfall 003, 004 and 005 are storm water only. There was no discharge in 003 and 004. Outfall 005 was not observed since it was in a manhole prior to entering ODOT right of way.

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:

Permit # : 1IN00019*ED
NPDES # : OH0047759

EMD CHEMICALS, INC.
NPDES PRE-PERMIT/COMPLIANCE EVALUATION INSPECTION
DATE OF INSPECTION: July 31, 2008

ITEMS FOR DISCUSSION:

The facility submitted its NPDES renewal application, but it was not complete. On June 3, 2008, a letter was sent requesting additional sampling information. The sampling requirements were discussed for the Forms 2C, Item V and 2F, Item VII. In addition, an email was sent noting the Group A parameters needed for 2F, Item VII. Ohio EPA is still waiting on this sampling data. The lack of rain is affecting the sampling of the storm water.

COMPLIANCE EVALUATION:

The facility's compliance history was checked from April 1, 2004 through August 1, 2008. The following effluent limit violation at outfall 11N00019001 was noted:

Parameter	Code	Date	Reported	Units	Permit Limit
pH	00400	07/11/2006	9.24	SU	9.0 SU

This report will serve as the Notice of Violation for this violation. No further action is required on this item.

The following frequency violations were noted, however they appear to be related to a SWIMware submittal issue. The facility is in the process of resubmitting the data:

Outfall 11N00019001

Reporting Period	Violation Date	Parameter	Sample Frequency	Expected	Reported
Feb. 2007	02/01/07	Flow Rate	1/Month	1	0
Nov. 2007	11/01/07	Flow Rate	1/Month	1	0

Outfall 11N00019002:

Reporting Period	Violation Date	Parameter	Sample Frequency	Expected	Reported
Apr. 2007	04/01/07	Flow Rate	1/Month	1	0

OBSERVATIONS:

EMD Chemicals, Inc. prepares and sells laboratory grade chemicals, solvents and salts.

The facility will purify, blend and repackage the materials. The process wastewaters from this facility are discharged to MSD of Greater Cincinnati. The facility has a total of five outfalls to waters of the State. Only two of these outfalls have a non-storm water discharge. Outfall 11N00019001 has non-contact cooling and storm water discharged. The storm water draining to outfall 001 has the empty containers that are stored in the area awaiting refill. The non-contact cooling water is generated from the vacuum pump system and water jacket. There is a continuous discharge from the cooling tower associated with these systems. The treatment chemicals used are the same as during the last inspection.

Outfall 11N00019002 is the discharge from the diked area of the tank farm. The correct form to use for this outfall is Form 2C not Form 2F. There is no treatment associated with this outfall. The outfall is normally locked closed. When there is enough water to discharge, it is sampled. If the discharge is in compliance with the facility's permit limits, then the wastewater is released. If it is not in compliance, then the wastewater is sent off-site for disposal. This is hauled off-site by Clean Waters Limited. All of the areas associated with the loading/unloading area are sloped into trenches that drain to the sump. There was nothing being discharged on the day of the inspection.

Outfall 11N00019003 is located near Highland Avenue. This is a storm water only outfall that drains the parking lot. There was no discharge in this sump the day of the inspection. Outfall 11N00019004 has a grate and is located in a gravel area. This is also a storm water only outfall. There was no discharge on the day of the inspection. Outfall 11N00019005 is a manhole located between EMD's fencing and ODOT's fencing. This is also a storm water only discharge. This manhole was not opened on the day of the inspection.

The sample refrigerator in the facility's laboratory did not have an adequate thermometer. The thermometer that was in the refrigerator did not read a low enough temperature and was not in any liquid. An appropriate thermometer is needed. The facility performs all of its own NPDES permit monitoring. The laboratory will run spikes and surrogates, and do recoveries. These are run in line with USEPA recommendations. The facility does not participate in the DMRQA program.

The facility receives all of its incoming water from Greater Cincinnati Water Works through the City of Norwood. There are no on-site production wells.

REQUIRED ACTIONS

EMD Chemicals, Inc. must submit all of the required monitoring for its NPDES permit renewal. This must be done as soon as there is an appropriate rain event.

EMD Chemicals, Inc. must have an appropriate thermometer in the sample refrigerator at the laboratory. This must be in place by September 12, 2008.

RECOMMENDED ACTION

EMD Chemicals, Inc. should consider participating in the DMRQA program as a level of validation for its analytical methods.