OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

September 23, 2009

RE: CARGILL DEICING TECHNOLOGY
CUYAHOGA COUNTY
CITY OF CLEVELAND
NPDES PERMIT 3IE00042*DD
COMPLIANCE EVALUATION INSPECTION

Mr. David Bird, Environmental Engineer
Cargill Deicing Technology
P. O. Box 6920
Cleveland, OH 44101

Dear Mr. Bird:

On September 10, 2009, this office met with you and Ms. Shey Morris to conduct an inspection of the above referenced facility. Also present for the inspection was Mr. Jim Weber, Wastewater Treatment Operator. The purpose of the inspection was to obtain and review information in anticipation of renewal of the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit for Cargill Deicing Technology (Cargill) will expire on September 30, 2009. Receipt of the renewal application by Ohio EPA authorizes the permittee to discharge beyond the expiration date.

Cargill is a salt mining and processing facility. Salt is mined underground, crushed and transported to the surface via conveyors and a large elevator shaft. Surface operations include processing and packaging of the salt and production of animal grade salt blocks. Bulk salt is loaded into trucks, railroad cars and ships for distribution. Salt is also packaged into bags for industrial and private use.

The NPDES permit authorizes the discharge of wastewater from the 10,000 gpd extended aeration wastewater treatment plant (WWTP) via outfall 001, and uncontaminated storm water associated with industrial activity from outfalls 003 – 008, to the Ships Channel of the Cuyahoga River. The application for renewal of the NPDES permit includes three new storm water outfalls which were designated 002, 009 and 010.

Components of the WWTP consists of an equalization tank, trash trap, aeration tank and clarifier, upflow filter tank, dosing chamber, surface sand filter divided into two beds and ultraviolet disinfection. Sludge is transferred to an aerated sludge holding tank and hauled off site for proper disposal.

At the time of the inspection the WWTP was functioning properly. The flexible hose from the dosing chamber to the sand filter must be replaced with permanent piping meeting force main specifications. Provide written confirmation to this office upon completion.

All parameters required by the NPDES permits are collected and analyzed by a contract laboratory. Samples sent to the contract laboratory are submitted under a chain of custody. Data for daily parameters (i.e., flow, color, odor and turbidity) are the responsibility of facility personnel. As discussed, when determining a flow value for the purpose of NPDES reporting, the meter must be read at the same time each day for a 24 hour total.

Discharge monitoring reports (DMR), received by Ohio EPA for the period October 2004 through July 2009, were reviewed for compliance with the effluent limitations and monitoring requirements of the NPDES permit. The specific violations are cited in the enclosed attachment.

Limitation violations have typically been addressed in correspondence to this office. Hopefully, the actions taken will prevent any recurrences. Frequency violations for color, odor and turbidity have been resolved. The frequency violations for the weekly parameters appear to have been a failure to collect the appropriate number of samples within a given week. As discussed, a week starts with the first day of the month and ends seven days later (week 1: days 1 – 7, week 2: days 8 – 14, etc). No additional information is required at this time.

In accordance with Parts IV, V and VI of the NPDES permit, the permittee must develop and implement a storm water pollution prevention plan (SWP3). As noted by the cover page of the plan, it was last revised November 2005 and will expire November 2010. The SWP3 includes documentation of monthly site evaluations and requires yearly employee training. Documentation of employee training was not available at the time of this inspection, but was explained that the Safety Coordinator maintains the records which include employee signatures. At the time of the inspection, it appeared that the practices necessary to reduce pollutants in storm water discharges, in compliance with the terms and conditions of the NPDES permit, have not been properly implemented as noted below:

- Outfalls 002 and 003: The discharge of salt was evident at each of the catch basins. Due to erosion of the salt pile during wet weather events, storm water contaminated with salt discharges to the Ships Channel of the Cuyahoga River. It was indicated that the salt pile was not constructed/maintained in compliance with the criteria of the SWP3; the pile was constructed too close to the catch basins and was not trapped.

- Outfall 004: The discharge of salt was evident at the catch basin. A large green puddle (food dye additive in salt) was eroding the area and draining to the catch basin which discharges to the Ships Channel of the Cuyahoga River.

- Bagging Staging Area: Salt was discharging directly to the Ships Channel of the Cuyahoga River. Salt was falling off the conveyor while loading a ship at dock. The salt which did not fall directly into the Ships Channel was accumulating on the dock and along the wall. A drain hole opening in the dock wall to the Ships Channel is located directly below the conveyor. During a wet weather event, salt would be flushed to the Ships Channel.

- Outfall 009: This outfall is located in the area where the salt is transferred out of the mine. Salt accumulation was significant in this area. The discharge of salt was evident at two catch basins tributary to this outfall.

- Outside Storage Tanks: An accumulation of salt particles was evident within the dike areas of the YPS and brine tanks. Storm water which collects within the dike area is contaminated by the salt. The contaminated storm water is pumped to outfall 009.

- A contractor was pressure washing construction equipment near the fence line by the WWTP. The wash water was discharging directly onto the ground. In accordance with SWP3 requirements, wash waters must be collected for proper disposal. It is our understanding that there is a pad located outside the maintenance facility for washing equipment. Wash water from the pad is diverted to the sanitary sewer system and the WWTP. The contractor was instructed to cease washing.

Please be advised the storm water outfalls associated with industrial activity are to be free from process wastewaters and other contaminates. The SWP3 must be reviewed and revised accordingly to address the areas cited above. Confirmation of the measures implemented to eliminate the release of salt must be submitted in writing to this office.

This office received a complaint from a Cleveland Councilman regarding the Cargill salt pile located in the vicinity of Jennings Road and Harvard Avenue. Information regarding the complaint was discussed with Mr. Shawn Mayclin, Surface Superintendent. As explained, remote salt storage piles are the responsibility of the Cargill, North Olmsted facility. Mr. Mayclin indicated he would follow-up on the complaint with the Cargill, North Olmsted Facility. As discussed, a response to the investigation is required by this office.

The renewal application contained a request for the use of recirculating water and boiler water additives and a request for the modification of the pH limitation. This information has been forwarded to our Columbus Office for review.

Within thirty days of the date of this letter, submit a written response to this office addressing all deficiencies cited above.

This office will proceed with drafting a renewal NPDES permit for Cargill which will be sent under separate cover. Any comments regarding the draft permit must be submitted in writing during the public notice period.

If you should have any questions, please contact this office at (330) 963-1124.

Sincerely,

Sandra M. Cappotto

Sandra M. Cappotto
Environmental Scientist
Division of Surface Water

SMC:bo

enclosure

Attachment
Cargill Deicing Technology
3IE00042*DD

Limitation Violation

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	31616	Fecal Coliform	1D Conc	2000	42000.	7/6/2005
001	31616	Fecal Coliform	30D Conc	1000	1945.82	6/1/2008
001	31616	Fecal Coliform	1D Conc	2000	2300.	6/4/2008
001	31616	Fecal Coliform	1D Conc	2000	14300.	6/18/2008
001	00400	pH	1D Conc	6.5	6.4	4/6/2005
001	00400	pH	1D Conc	9.0	9.3	5/26/2005
001	00400	pH	1D Conc	6.5	6.4	6/8/2005
001	00400	pH	1D Conc	6.5	6.4	7/27/2005
001	00400	pH	1D Conc	6.5	6.3	11/1/2005
001	00400	pH	1D Conc	6.5	6.	2/9/2006
001	00400	pH	1D Conc	6.5	5.9	2/23/2006
001	00400	pH	1D Conc	6.5	6.3	3/3/2006
001	00400	pH	1D Conc	6.5	6.17	5/23/2006
001	00400	pH	1D Conc	6.5	6.22	6/6/2006
001	00400	pH	1D Conc	9.0	9.3	10/8/2008
001	00400	pH	1D Conc	6.5	6.4	3/5/2009
001	00400	pH	1D Conc	6.5	6.4	3/11/2009
001	00400	pH	1D Conc	6.5	6.3	3/18/2009
001	00400	pH	1D Conc	6.5	6.	4/1/2009
001	00400	pH	1D Conc	6.5	6.	4/8/2009
001	00400	pH	1D Conc	6.5	6.4	4/15/2009
001	00400	pH	1D Conc	6.5	6.2	4/22/2009
001	00400	pH	1D Conc	6.5	6.3	7/24/2009
001	00530	Total Suspended Solids	30D Conc	12	23.	9/1/2005
001	00530	Total Suspended Solids	1D Conc	18	23.	9/2/2005
001	00530	Total Suspended Solids	30D Conc	12	17.	10/1/2005
001	00530	Total Suspended Solids	1D Conc	18	27.	8/1/2007
001	00530	Total Suspended Solids	1D Qty	0.68	1.09553	8/1/2007
001	00530	Total Suspended Solids	1D Qty	0.68	.80621	10/3/2007
001	00530	Total Suspended Solids	1D Conc	18	36.	10/1/2008
001	00530	Total Suspended Solids	30D Conc	12	21.75	10/1/2008
001	00530	Total Suspended Solids	1D Qty	0.68	.94156	10/1/2008
001	00530	Total Suspended Solids	30D Qty	0.45	.92081	10/1/2008
001	00530	Total Suspended Solids	1D Conc	18	34.	10/8/2008
001	00530	Total Suspended Solids	1D Qty	0.68	2.41165	10/8/2008

Frequency Violations

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00083	Color, Severity	1/Day	1	0	10/02/2004
001	00083	Color, Severity	1/Day	1	0	10/03/2004
001	00083	Color, Severity	1/Day	1	0	10/09/2004
001	00083	Color, Severity	1/Day	1	0	10/10/2004
001	00083	Color, Severity	1/Day	1	0	10/16/2004
001	00083	Color, Severity	1/Day	1	0	10/17/2004
001	00083	Color, Severity	1/Day	1	0	10/23/2004
001	00083	Color, Severity	1/Day	1	0	10/24/2004
001	00083	Color, Severity	1/Day	1	0	10/30/2004
001	00083	Color, Severity	1/Day	1	0	10/31/2004
001	00083	Color, Severity	1/Day	1	0	11/06/2004
001	00083	Color, Severity	1/Day	1	0	11/07/2004
001	00083	Color, Severity	1/Day	1	0	11/13/2004
001	00083	Color, Severity	1/Day	1	0	11/14/2004
001	00083	Color, Severity	1/Day	1	0	11/20/2004
001	00083	Color, Severity	1/Day	1	0	11/21/2004
001	00083	Color, Severity	1/Day	1	0	11/27/2004
001	00083	Color, Severity	1/Day	1	0	11/28/2004
001	00300	Dissolved Oxygen	1/Week	1	0	10/01/2004
001	00300	Dissolved Oxygen	1/Week	1	0	10/08/2004
001	00300	Dissolved Oxygen	1/Week	1	0	10/15/2004
001	00300	Dissolved Oxygen	1/Week	1	0	10/22/2004
001	00300	Dissolved Oxygen	1/Week	1	0	11/01/2004
001	00300	Dissolved Oxygen	1/Week	1	0	11/08/2004
001	00300	Dissolved Oxygen	1/Week	1	0	11/15/2004
001	00300	Dissolved Oxygen	1/Week	1	0	11/22/2004
001	00300	Dissolved Oxygen	1/Week	1	0	12/01/2004
001	00300	Dissolved Oxygen	1/Week	1	0	12/08/2004
001	00300	Dissolved Oxygen	1/Week	1	0	12/15/2004
001	00300	Dissolved Oxygen	1/Week	1	0	12/22/2004
001	00300	Dissolved Oxygen	1/Week	1	0	01/01/2005
001	00300	Dissolved Oxygen	1/Week	1	0	01/08/2005
001	00300	Dissolved Oxygen	1/Week	1	0	01/15/2005
001	00300	Dissolved Oxygen	1/Week	1	0	01/22/2005
001	00300	Dissolved Oxygen	1/Week	1	0	07/15/2005
001	00300	Dissolved Oxygen	1/Week	1	0	09/15/2005
001	00300	Dissolved Oxygen	1/Week	1	0	03/22/2008
001	00300	Dissolved Oxygen	1/Week	1	0	01/22/2009
001	01330	Odor, Severity	1/Day	1	0	10/02/2004
001	01330	Odor, Severity	1/Day	1	0	10/03/2004
001	01330	Odor, Severity	1/Day	1	0	10/09/2004
001	01330	Odor, Severity	1/Day	1	0	10/10/2004
001	01330	Odor, Severity	1/Day	1	0	10/16/2004

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	01330	Odor, Severity	1/Day	1	0	10/17/2004
001	01330	Odor, Severity	1/Day	1	0	10/23/2004
001	01330	Odor, Severity	1/Day	1	0	10/24/2004
001	01330	Odor, Severity	1/Day	1	0	10/30/2004
001	01330	Odor, Severity	1/Day	1	0	10/31/2004
001	01330	Odor, Severity	1/Day	1	0	11/06/2004
001	01330	Odor, Severity	1/Day	1	0	11/07/2004
001	01330	Odor, Severity	1/Day	1	0	11/13/2004
001	01330	Odor, Severity	1/Day	1	0	11/14/2004
001	01330	Odor, Severity	1/Day	1	0	11/20/2004
001	01330	Odor, Severity	1/Day	1	0	11/21/2004
001	01330	Odor, Severity	1/Day	1	0	11/27/2004
001	01330	Odor, Severity	1/Day	1	0	11/28/2004
001	00400	pH	1/2Weeks	1	0	10/15/2004
001	00400	pH	1/2Weeks	1	0	11/15/2004
001	00400	pH	1/2Weeks	1	0	11/15/2004
001	00400	pH	1/2Weeks	1	0	12/15/2004
001	00400	pH	1/2Weeks	1	0	12/15/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/02/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/03/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/09/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/10/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/16/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/17/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/23/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/24/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/30/2004
001	01350	Turbidity, Severity	1/Day	1	0	10/31/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/06/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/07/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/13/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/14/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/20/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/21/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/27/2004
001	01350	Turbidity, Severity	1/Day	1	0	11/28/2004
001	01350	Turbidity, Severity	1/Day	1	0	06/13/2008
001	01350	Turbidity, Severity	1/Day	1	0	11/17/2008
001	00010	Water Temperature	1/Week	1	0	10/01/2004
001	00010	Water Temperature	1/Week	1	0	10/08/2004
001	00010	Water Temperature	1/Week	1	0	10/15/2004
001	00010	Water Temperature	1/Week	1	0	10/22/2004
001	00010	Water Temperature	1/Week	1	0	11/01/2004
001	00010	Water Temperature	1/Week	1	0	11/08/2004
001	00010	Water Temperature	1/Week	1	0	11/15/2004

Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	00010	Water Temperature	1/Week	1	0	11/22/2004
001	00010	Water Temperature	1/Week	1	0	12/01/2004
001	00010	Water Temperature	1/Week	1	0	12/08/2004
001	00010	Water Temperature	1/Week	1	0	12/15/2004
001	00010	Water Temperature	1/Week	1	0	12/22/2004
001	00010	Water Temperature	1/Week	1	0	01/01/2005
001	00010	Water Temperature	1/Week	1	0	01/08/2005
001	00010	Water Temperature	1/Week	1	0	01/15/2005
001	00010	Water Temperature	1/Week	1	0	01/22/2005
001	00010	Water Temperature	1/Week	1	0	07/15/2005
001	00010	Water Temperature	1/Week	1	0	09/15/2005
001	00010	Water Temperature	1/Week	1	0	01/22/2009