OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office
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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

November 17, 2009

RE: LAKE PARK TOOL AND MACHINE
NPDES PERMIT NO. 3IS00020

Mr. Oscar Lund, President
Lake Park Tool and Machine
1221 Velma Court
Youngstown, OH 44512

Dear Mr. Lund:

On October 9, 2009, this writer conducted a pre-permit inspection of the Lake Park Tool and Machine facility. The intent of the inspection was to verify information provided in the NPDES Permit renewal application submitted to this office. The NPDES Permit includes limits and monitoring requirements for the discharge of contact cooling water to an unnamed tributary of Pine Hollow Creek.

The existing permit includes three monitoring locations. These locations include: at the hose delivering potable water, at the pit receiving contact cooling water, and at the final discharge location to a tributary of Pine Hollow Creek. The intent to include these three outfalls in the permit was to account for the relatively high pH associated with the potable water used in the cooling system.

The state of Ohio has established chemical water quality standards for streams throughout the state. The standards are protective of the fish and aquatic insects that inhabit the streams. The water quality standard for pH that is applicable to all streams in Ohio is 6.5 – 9.0 su.

Prior to the discharge of cooling water, Lake Park Tool and Machine adds acid to the water in an attempt to reduce the pH to 10.4 su in the receiving pit prior to discharging the water to a storm sewer through outfall 601. The intent was that additional treatment of the cooling water would possibly occur as the water continued to contact the acid, and as the cooling water was subjected to the turbulent conditions in the storm sewer pipe. It was anticipated that the additional contact time with the acid, along with the subsequent turbulence, would reduce the pH of the cooling water to below 9.0 su prior to discharging into the unnamed tributary through outfall 001.

A review of the monitoring data submitted by Lake Park Tool and Machine demonstrates that the pH of cooling water discharging to the unnamed tributary through outfall 001 exceeds the water quality standard of 6.5 - 9.0 su. In addition, at times the

pH in the receiving pit (601) is higher than the pH at outfall 801 for the potable water used to generate the contact cooling water. It appears from the data submitted by Lake Park Tool and Machine that procedures used to adjust the pH have been unable to attain the level of treatment necessary to maintain the water quality standard for pH in the receiving stream.

Parameter	Units	Date	001[1]	601[2]	801
pH	S.U.	11/1/2008	AL[3]	AL	AL
pH	S.U.	1/1/2009	AL	AL	AL
pH	S.U.	2/20/2009	10.24	11.1	10.9
pH	S.U.	3/26/2009	11.22	10.66	10.77
pH	S.U.	4/1/2009	AL	AL	AL
pH	S.U.	5/14/2009	10.67	10.84	11.35
pH	S.U.	6/15/2009	6.64	6.4	10.23
pH	S.U.	7/23/2009	9.5	10.83	10.51
pH	S.U.	8/1/2009	AL	AL	AL
pH	S.U.	9/9/2009	9.57	10.96	11.17

[1] Acceptable range for the measured pH of water discharged to the unnamed tributary is 6.5 – 9.0 su.
[2] NPDES Permit limit of 10.4 su.
[3] AL – No discharge

In order to ensure that the cooling water does not impact the unnamed tributary or Pine Hollow Creek, the NPDES Permit will be modified to require Lake Park Tool and Machine to meet a pH level between 6.5 and 9.0 su prior to discharge. The NPDES Permit will include a compliance schedule that will provide adequate time for Lake Park Tool and Machine to install the treatment units necessary for consistent compliance. The treatment units may include a pump, mixer, tank and acid delivery system.

Be advised that per Ohio Revised Code 6111.45 and Ohio Administrative Code 3745-42, a Permit-to-Install is required from Ohio EPA for installation of wastewater treatment equipment. Detailed plans and the appropriate application forms must be submitted to the Ohio EPA Northeast District Office for review. The Web address to access the Permit-to-Install forms is as follows: http://www.epa.ohio.gov/dsw/pti/PTIForms.aspx. The applicable forms from the list include Forms A, B5, and the Anti-degradation Addendum. Also included on the Web page are the directions for preparing and submitting a Permit-to-Install application to Ohio EPA.

Once you receive the draft NPDES Permit, you will have 30 days to review the permit and provide any questions or comments to this office. It is recommended that you take the time to review the permit carefully, especially the changes and compliance schedule that will be included in the permit.

Finally, it is the understanding of this writer that pH samples are transported to ACCRA Micro-Chem Laboratories in Twinsburg for analysis. Be advised that the NPDES permit requires that the analysis for pH be conducted immediately after the sample is collected. In order to meet this time limitation, the samples collected for pH must be analyzed on site immediately after they are collected.

You may contact this office at (330) 963-1251 to discuss any questions you have regarding this inspection letter and/or the NPDES Permit.

Respectfully

John Kwolek
District Engineer
Division of Surface Water

JK/mt

cc: Rodger Pryor, Microbiologist, ACCRA Micro-Chem Laboratories, LLC

File: Industrial/Lake Park Tool and Machine/Permit and Compliance