Environmental Protection Agency

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

May 21, 2010

RE: Compliance Evaluation Inspection
Notice of Violation

Mr. Mike Willson
APS Materials
4011 Riverside Drive
Dayton, OH 45405

Dear Mr. Willson:

On May 13, 2010 I met with you and Mr. Ken Gross to conduct an inspection of your facility with respect to its wastewater discharge to the Stillwater River. A review of your Discharge Monitoring Reports (DMRs) since my previous inspection revealed a monitoring frequency violation in April 2010 when APS failed to monitor during the two-week period of April 1st through the 14th. You indicated that you schedule monitoring to occur around the 5th and 20th of the month and will work to ensure required monitoring is performed in the future.

Installation of Dechlorination Systems

You just recently completed installation of two of the three dechlorination systems and indicated that you expected to have the feed systems tuned by mid-June. Installation was required to be completed by April 1st and compliance with the residual chlorine limit of 0.038 mg/l (compliance criterion is 0.050 mg/l) was required by May 1, 2010. Please work to tune the dechlorination systems as quickly as possible.

Sample Collection

APS discharges into the storm sewer from three separate buildings and therefore collects a sample from each building. Continuous temperature monitors also exist on each source and a reading is taken when samples are collected. Combining the discharges and conducting one analysis is not appropriate nor is deriving a flow-weighted average (given both the logarithmic scale of pH measurements and the logistics of determining flow rates from the three sources). I see two possible solutions to this reporting issue:

Possible Solution #1: APS Materials reports, and is held liable for, the highest analytical result from the grab samples collected from each of its three buildings; or

Possible Solution #2: The NPDES permit is modified to include three monitoring stations (one for each building) with the same limits as exist in the current permit.

Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911

937 | 285 6357
937 | 285 6249 (fax)
www.epa.ohio.gov

This second possibility carries a three-fold increase in your reporting obligation. In both cases, violations would require you to address the cause and take corrective measures.

I am leaning toward trying to make Solution #1 the reporting and compliance standard. Please provide me your thoughts on this issue, including any alternate ideas you may have.

Sample Analysis

Currently, there is no documentation that analysis for residual chlorine and pH is being conducted within 15 minutes of sample collection as required. To address this issue, I suggested that you establish a log book to document:

- The date and time of sample collection;
- The name of the person that collected the sample; and
- The time analysis was conducted and the name of the person conducting the analysis.

Since calibration of the meter is necessary prior to each analysis, calibrations would also be recorded in this log book. This documentation would be the source for the results reported in the DMRs. Additionally, the analysis and calibration procedures would be kept in the front of the log book. Finally, because of the coordination involved with sample collection and analysis, I suggest the person conducting the analysis be the person collecting the samples. Please let me know how you decide to address these monitoring requirements. It would be ideal if you could send me a template of any forms you develop.

Flow Monitoring

You recently completed the installation of water use meters at each building to allow your utility bill to be adjusted to account for the water that was discharged to the river instead of to the sanitary sewer. I would like for you to use these new meters to report discharge flows required by your NPDES permit. This would be accomplished by recording the total cumulative flow (from all three meters) since the previous monitoring event (when temperature, pH and residual chlorine samples are collected) and reporting the average daily flow for the period by dividing the cumulative flow by the number of production days since the previous monitoring event. For example, if you monitored chlorine, pH and temperature on May 20th, you would determine how much water was consumed (and subsequently discharged to the storm sewer) since the previous monitoring event and divide that by the number of production days between the two monitoring events to come up with an average gallon-per-day value. Please let me know if you are agreeable to this approach.

e-DMR Reporting

To help minimize transcription errors when entering data from the log book into Ohio EPA's e-DMR system, please consider having the analyst enter the recorded results into an Excel spreadsheet that is then e-mailed to the person that prepares the report for submittal. This spreadsheet automatically populates the e-DMR. Instructions for this reporting method can be found on page 45 of the e-DMR *Facility User's Guide* available on our website at:

http://www.epa.ohio.gov/portals/35/edmr/doc/(Attach2)e-DMRusersGuideOEPA051407.pdf

Dechlorination Chemical

You indicated that the dechlorination chemical is expensive ($825 for 55 pounds). At the current make-up concentration and feed rate this provides a little over two weeks of dechlorination in the main building alone. Because of this cost issue, you are interested in exploring other less-expensive sources of ascorbic acid. I do not have any objections to switching chemical suppliers so long as effective dechlorination is maintained. Please let me know if you end up switching to a different supply of ascorbic acid.

Please provide a written response to the items listed in this letter by June 14th. If you have any questions, please call me at (937) 285-6095.

Sincerely,

Matt Walbridge
Division of Surface Water

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
*1IN00216*CD*	*OH0118265*	*5-13-10*	*C*	*S*	*2*

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
APS Materials, Inc. *4011 Riverside Drive* *Dayton, OH 45405*	*1000*	*5-1-09*
	Exit Time	Permit Expiration Date
	1145	*4-30-14*
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Mike Willson – President *Ken Gross – Engineer*	*(937) 278-6547*	
Name, Address and Title of Responsible Official	Phone Number	
Mike Willson – President *APS Materials, Inc.* *4011 Riverside Drive* *Dayton, OH 45405*	*937) 278-6547*	

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated, NA = Not Applicable)

S	Permit	*M*	Flow Measurement	*NA*	Pretreatment
M	Records/Reports	*M*	Laboratory	*M*	Compliance Schedule
S	Operations & Maintenance	*N*	Effluent/~~Receiving Waters~~	*M*	Self-Monitoring Program
S	Facility Site Review	*NA*	Sludge Storage/Disposal	*NA*	Other
NA	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)

There are approximately 20 thermal spray machines that generate approximately 7 gpm of NCCW. Water is used to cool the electrical supply cables to keep them from melting. Most are on a solenoid valve system that activates with the plasma generator is activated, but some are manually activated.

Extech EX 800 test kit is used for the analysis of residual chlorine and pH.

Dechlor solution feed rate does not change with respect to flow rate. A flow sensor turns the feed pump on and off.

10 pounds of ascorbic acid powder is added to the 55-gallon drum and mixed with water. Lasts about 3 days in the main '4011' building.

Samples are collected from bleed-off valves in each of the three buildings (the line is purged first). These samples are then analyzed in the facility's lab.

Inspector	Reviewer
5-21-10	5/21/10
Matt Walbridge Division of Surface Water Southwest District Office Date	Martyn Burt Environmental Supervisor Division of Surface Water Southwest District Office Date