

**Environmental  
Protection Agency**

Ted Strickland, Governor  
Les Fisher, Lt. Governor  
Cory Botwin, Director

December 21, 2010

RE: NPDES Compliance Evaluation Inspection

Mr. Steven Bradley Brown  
Tate & Lyle Citric Acid  
5600 Brentlinger Drive  
Dayton, OH 45414

Dear Mr. Brown:

On December 15<sup>th</sup> I met with you to conduct a compliance inspection relative to your NPDES-permitted waste water discharge to the Great Miami River. Four other Tate & Lyle representatives were involved in the inspection.

A review of your self-monitoring reports since my previous inspection revealed a reporting violation in July when monitoring did not occur during the fourth weekly period of July 22<sup>nd</sup> through the 28<sup>th</sup> (monitoring occurred on July 29<sup>th</sup>). You indicated that you are now aware of the weekly reporting periods and that this error will not occur in the future.

In response to my previous inspection, you e-mailed me a scanned copy of Tate & Lyle's Storm Water Pollution Prevention Plan (SWP3). Based on my review of the plan, I believe it needs your attention in the following areas:

- The plan was not signed/certified as required (pages 2 and 47);
- The plan is lacking the referenced site drainage map (pages 11 & 12);
- The plan is lacking the referenced storm water monitoring data (page 48 and Appendix A);
- The plan makes several references to "attached observation, inspection and test schedules" but no schedule is included with the plan.
- The plan calls for operations personnel to inspect roofs with venting annually to ensure there isn't a buildup of materials that could then come in contact with storm water. I believe this section needs to be re-evaluated to determine if more frequent inspections are warranted based on the potential for pollutants to be released through vents and deposited on roofs. If annual inspections are to remain, it would be good for the plan explain that this pollutant pathway poses a low potential for release to storm water.

Please review the plan in light of these comments and provide a response (along with any necessary amendments) by January 17, 2011.

Mr. Steven Bradley Brown  
December 21, 2010  
Page 2

### **Temperature Monitoring**

Beginning with the NPDES permit renewal in October, temperature is required to be monitored continuously with the maximum value for the day reported. You indicated that the continuous pH and temperature meter passes the temperature readings through the display at the monitoring point to a computer located in the office area. It is from this computer that you get the highest reading for the day that is then reported using e-DMR. Please be prepared to demonstrate this data collection and storage system the next time your facility is inspected.

We also discussed the need to check the thermometer against a National Institute of Standards and Technology (NIST)-traceable thermometer at least annually and post any correction value at the readout station and where data is recorded.

The model 14-648-43 thermometer manufactured by Control Company you planned to use to check the continuous-read thermometer at the monitoring point is only accurate to 1 degree Celsius and is not acceptable for that purpose. It is necessary for you to obtain an NIST-traceable thermometer that is accurate to within 0.1 degree Celsius in the expected range of discharge temperatures for use in checking the continuous-read thermometer at least annually to see if the reading needs to be adjusted.

I also indicated that the continuous-read thermometer must be accurate to 0.1 degree Celsius pursuant to the requirements to use methods prescribed by 40 CFR Part 136. After further consideration, I don't believe it is necessary to utilize equipment with that degree of accuracy based on the significant distance between the point of measurement and the final outfall and the fact that the wastewater is conveyed in an open ditch with significant turbulence that makes measuring at the sampling station to within a tenth of a degree unnecessary. However, please provide me the technical specifications for the meter indicating its operating range and its accuracy.

### **Chloride Monitoring**

In October, you reported a result from chloride monitoring. Data for any additional parameters you elect to monitor can be reported using e-DMR, but please note that your permit does not require chloride monitoring.

### **High Flow Value**

On September 29<sup>th</sup>, you reported a discharge flow of 55 MGD which is far above your normal flow rate. Since you indicated that this is likely an error, it is necessary for you to amend the discharge monitoring report to correct this value. Please let me know if you have any trouble making this correction.

Mr. Steven Bradley Brown  
December 21, 2010  
Page 3

### **Outfall Sign**

The outfall sign required to be installed by December 1<sup>st</sup> pursuant to Part II(H) of your NPDES permit is missing. You were surprised that it was missing when we went down to the outfall and indicated that the aluminum sign you had installed on a metal post must have been recently stolen – possibly for its scrap value.

Please arrange to provide a new marker by January 21, 2011 that satisfies the intent of the permit condition for the outfall to be easily identified with the required information. Your proposal to make the sign out of wood should minimize the potential for the sign being stolen in the future. Please e-mail me a picture of the new sign when it is installed.

### **Replacement of Cooling Tower Piping**

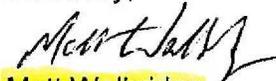
Mr. Walton indicated that corroded piping associated with the cooling tower system will be replaced in the foreseeable future. While this work is being done, there will be the need to provide an alternate source of cooling water. Mr. Walton indicated that the well water system will not be able to provide sufficient flow to cool the fermentation units on its own and he is proposing to utilize the city water supply during the short period that the pipe replacement project is expected to last (a few days at most). During this time Tate & Lyle would provide a temporary dechlorination system.

Although Mr. Walton said more detailed information would be provided in a written proposal closer to the event, I find the proposed actions to be reasonable and it my intention to accommodate them. Please plan to make every reasonable effort to minimize the time that chlorinated water is used and to minimize the residual chlorine in the discharge by the effective use of temporary dechlorination equipment.

I ask that you please submit the proposed actions associated with this event in writing at least two weeks prior to the start of the project.

Please provide me a written, signed response addressing the issues I have raised in this inspection letter. If you have any questions concerning this letter or the inspection form, please call me at (937) 285-6095.

Sincerely,



**Matt Walbridge**  
Division of Surface Water



**Section A: National Data System Coding**

Permit Number <b>1IN00016*GD</b>	NPDES Number <b>OH0047368</b>	Inspection Date <b>12-15-10</b>	Inspection Type <b>C</b>	Inspector <b>S</b>	Facility Type <b>2</b>
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**Section B: Facility Data**

Name and Location of Facility Inspected:	Entry Time	Permit Effective Date
<b>Tate &amp; Lyle Citric Acid 5600 Brentlinger Drive Dayton, OH 45414</b>	<b>1400</b>	<b>10-1-10</b>
	Exit Time	Permit Expiration Date
	<b>1615</b>	<b>9-30-15</b>
Name(s) and Titles of On-Site Representative(s)	Phone Number(s)	
<b>David Miller – Plant Manager</b>	<b>(937) 235-4084</b>	
<b>Doug Walton – Senior Process Engineer</b>	<b>(937) 235-4080</b>	
<b>Brandon Johnson – Operations Manager</b>	<b>(937) 235-4086</b>	
<b>Steven Bradley Brown – Health, Environment &amp; Safety Coordinator</b>	<b>(937) 235-4081 (937) 760-0623 mobile</b>	
<b>Randy Truex - Technical Resource for Powerhouse, Fermentation &amp; Extraction</b>	<b>(937) 235-4092</b>	
Name, Title and Address of Responsible Official:	Phone Number	
<b>David Miller – Plant Manager Tate &amp; Lyle Citric Acid 5600 Brentlinger Drive Dayton, OH 45414</b>	<b>(937) 235-4084</b>	

**Section C: Areas Evaluated During Inspection**

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

<b>S</b> Permit	<b>S</b> Flow Measurement	<b>NA</b> Pretreatment
<b>S</b> Records/Reports	<b>S</b> Laboratory	<b>NA</b> Compliance Schedules
<b>M</b> Operations & Maintenance	<b>S</b> Effluent/Receiving Waters	<b>NA</b> Collection System
<b>S</b> Facility Site Review	<b>NA</b> Sludge Storage/Disposal	<b>U</b> Other ( <i>no outfall sign</i> )
<b>M</b> Self-monitoring Program		

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

- **Reporting frequency violation in July 2010 (weekly monitoring occurred on July 29<sup>th</sup> when it should have occurred sometime during the weekly period of July 22<sup>nd</sup> through the 28<sup>th</sup>.)**
- **Need to document calibrations of in-line pH meter in a log book. Recommend weekly calibrations.**
- **Need to ensure reported temperature is the highest daily value and that the thermometer is checked against an NIST-traceable thermometer at least annually (with documentation and adjustment value posted where readings are taken).**
- **Need to have a signed copy of the SWP3 on-site (e-mailed copy was not signed). The plan is missing a site map showing drainage patterns. Also, it needs to specifically identify areas to be inspected, activities necessary to minimize pollutants potentially exposed to storm water, responsibilities for clean-up/maintenance activities, inspection frequencies, delegation of inspection activities, and inspection documentation.**
- **Outfall sign is missing.**

Name and Signature of Inspector(s)  Matt Walbridge	Agency / Office / Telephone <b>Ohio EPA / Southwest District Office / (937) 285-6095</b>	Date <b>12-21-10</b>
Name and Signature of Reviewer(s)  Martyn G. Burt	Agency / Office / Telephone <b>Ohio EPA / Southwest District Office / (937) 285-6034</b>	Date <b>12/22/10</b>