



**Environmental
Protection Agency**

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

August 16, 2010

RE: LORAIN COUNTY
EATON TWP.
CIRCLE K # 5317
NPDES # 3PR00494
(35000 E. ROYALTON RD.)

Mac's Convenience Stores
PO Box 347
Columbus, IN 47207
Attn: Dir. of Facilities

Gentlemen:

On July 27, 2010, a Compliance Evaluation Inspection (CEI) was conducted on the wastewater treatment plant (WWTP) serving the Circle K # 5317 convenience store, located at 35000 E. Royalton Road, Eaton Township, Lorain County.

At the time of the July 27th WWTP inspection, the following observations were made:

- (1) The trash trap was in use and its contents were typical. A slight layer of floating scum was observed on the contents of the tank.
- (2) The aeration tank was being well aerated, and its contents were dark brown. The return sludge line was operating, returning medium brown sludge.
- (3) The settling tank contents were dark brown and turbid. There was a slight floating scum on the surface of the water.
- (4) The dosing station pumps were set in the 'AUTO' mode, and were operational when tested in the 'HAND' mode.
- (5) The south cell of the surface sand filter was in use, and was slightly ponded with water. The north cell contained some drying solids, with a slight vegetative growth in the southwest corner. Sand in both filter cells needed raking level.
- (6) One tablet tube was missing in the tablet chlorination unit. The remaining tube contained evidence of 1 dissolved tablet.

Mac's Convenience Stores (Circle K #5317) should make the following improvements, and continue the implementation of operation and maintenance practices which will enable the WWTP to consistently discharge a well treated effluent:

- 1) The sand in the sand filters should be kept level, and free of vegetation and solids.
- 2) Chlorine tablets should be kept well stocked in the tablet disinfection unit tubes.
- 3) The missing tablet tube in the chlorination unit should be replaced.
- 4) A tablet dechlorination unit needs to be installed in the disinfection tank.

A review of the Circle K # 5317 WWTP operating data for the period of January 1, 2009 through August 1, 2010, was conducted prior to the inspection. The electronic Discharge Monitoring Report (eDMR) data for that period found the following numeric effluent violations of the Circle K # 5317 NPDES permit to discharge:

CIRCLE K # 5317
NPDES PERMIT NO. 3PR00494
NUMERIC EFFLUENT VIOLATIONS
(Jan. 1, 2009 to Aug. 1, 2010)

| Reporting Period | Parameter | Limit Type | Limit | Reported Value | Violation Date |
|------------------|---------------------------|------------|-------|----------------|----------------|
| June 2009 | Total Suspended Solids | 30D Conc | 12 | 25. | 6/1/2009 |
| June 2009 | Total Suspended Solids | 7D Conc | 18 | 25. | 6/15/2009 |
| December 2009 | Nitrogen, Ammonia (NH3-N) | 7D Conc | 4.5 | 5.41 | 12/8/2009 |
| March 2010 | Total Suspended Solids | 30D Conc | 12 | 22. | 3/1/2010 |
| March 2010 | Nitrogen, Ammonia (NH3-N) | 30D Conc | 3.0 | 14.32 | 3/1/2010 |
| March 2010 | Nitrogen, Ammonia (NH3-N) | 30D Qty | 0.028 | .04336 | 3/1/2010 |
| March 2010 | CBOD 5 day | 30D Conc | 10 | 16. | 3/1/2010 |
| March 2010 | Total Suspended Solids | 7D Conc | 18 | 22. | 3/22/2010 |
| March 2010 | Nitrogen, Ammonia (NH3-N) | 7D Conc | 4.5 | 14.32 | 3/22/2010 |
| March 2010 | Nitrogen, Ammonia (NH3-N) | 7D Qty | 0.042 | .04336 | 3/22/2010 |
| March 2010 | CBOD 5 day | 7D Conc | 15 | 16. | 3/22/2010 |
| June 2010 | Nitrogen, Ammonia (NH3-N) | 30D Conc | 1.0 | 3.3 | 6/1/2010 |
| June 2010 | Nitrogen, Ammonia (NH3-N) | 30D Qty | 0.009 | .00999 | 6/1/2010 |
| June 2010 | Nitrogen, Ammonia (NH3-N) | 7D Conc | 1.5 | 3.3 | 6/15/2010 |

Proper operation and maintenance practices should continue to be implemented, which will enable the Circle K #5317 WWTP to continuously meet its NPDES Permit effluent limits.

If there are questions or comments regarding the contents of this letter, please contact this office.

Respectfully,



Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/mt

pc: John Sabo, Lorain County Health Department

File: SP/Lorain/EatonTwp/Circle K 5317