



**Environmental  
Protection Agency**

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

March 12, 2010

RE: Reconnaissance Inspection  
NPDES Permit 11B00022\*DD

Mr. Jack Hounshell  
The Dayton Power and Light Company  
1065 Woodman Drive  
Dayton, OH 45432

Dear Mr. Hounshell:

On February 25<sup>th</sup> I met with you to conduct a reconnaissance inspection in preparation for the renewal of your NPDES permit scheduled to expire on July 1<sup>st</sup>. The only known permit violations since the previous inspection on March 11, 2005 was a minor monitoring frequency violation during the first two weeks of December 2005 (days 1 through 14) when temperature and pH monitoring did not occur. Findings from my inspection are as follows:

**Temperature Monitoring** - From my inspection I learned that DP&L uses a maximum indicating thermometer containing mercury. This thermometer is left in the lower pond and read every two weeks. You must ensure temperature is measured at the point of discharge and not in the pond where temperature below the surface can be significantly cooler depending on how deep the thermometer is located.

To avoid the possibility of the thermometer breaking and releasing elemental mercury into the pond and receiving water, I strongly encourage you to pursue obtaining a digital thermometer. These battery-operated meters record the maximum temperature until they are reset or they log temperature over time which is then uploaded to a computer for data storage and management. Please note that the thermometer must be accurate to 0.1°C (which is different from the resolution of the readout). Finally, Ohio EPA will properly dispose of mercury-containing thermometers you wish to get rid of and will even pick them up at your facility.

Please inform me of your intentions to address this issue.

**Iron Solids Accumulation** - Upon viewing the upper pond from the roof of the office building, I noted that it had a slight orange hue to it, especially at the center. This apparently is from accumulated iron that occasionally breaks free from the extensive geothermal well piping system. You indicated that sometimes the pond becomes so orange that you receive phone calls of concern from neighboring residents. Please note that your NPDES permit does not authorize the discharge of iron deposits into the receiving water. So long as iron solids are retained in the upper pond, there is no violation, but I encourage you to investigate how much of the pond volume has been lost to accumulated iron deposits and whether you need to develop a plan removing the accumulated solids. Please let me know how you plan to address this issue.

Please provide a written response to these findings by April 5<sup>th</sup>. 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	NPDES Number	Inspection Date	Inspection Type	Inspector	Facility Type
1IB00022*DD	OH0096521	2-25-10	R	S	2

**Section B: Facility Data**

Name and Location of Facility Inspected:	Entry Time	Permit Effective Date
<b>Dayton Power and Light Company MacGregor Park Office Building 1065 Woodman Drive Dayton, OH 45432</b>	1545	8-1-05
	Exit Time	Permit Expiration Date
	1620	7-31-10
Name(s) and Titles of On-Site Representative(s)	Phone Number(s)	
<b>Jack Hounshell</b>	(937) 259-7170 Jackson.hounshell@dplinc.com	
Name, Title and Address of Responsible Official:	Phone Number	
<b>Jack Hounshell or Scott Arentsen Dayton Power and Light Company 1065 Woodman Drive Dayton, OH 45432</b>	(937) 259-7170 (Jack) (937) 259-7375 (Scott)	

**Section C: Areas Evaluated During Inspection**

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

S	Permit	S	Flow Measurement	NA	Pretreatment
S	Records/Reports	NA	Laboratory	NA	Compliance Schedules
S	Operations & Maintenance	S	Effluent/Receiving Waters	NA	Collection System
S	Facility Site Review	NA	Sludge Storage/Disposal	NA	Other
S	Self-monitoring Program				

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

- Flow reporting is based on the taking the meter reading on the feed water every day.
- Monitoring location is at the discharge from the lower pond.
- The upper pond had an orange tint to it. Said to be caused by slugs of iron occasionally breaking free from the piping.
- The heat exchangers are cleaned manually about once a year.

Name and Signature of Inspector(s)	Agency / Office / Telephone	Date
 Matt Walbridge	Ohio EPA / Southwest District Office / (937) 285-6095	3-12-10
Name and Signature of Reviewer(s)	Agency / Office / Telephone	Date
 Martyn G. Burt	Ohio EPA / Southwest District Office / (937) 285-6034	3/12/10