



State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Road
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Ottawa County
Davis Besse Nuclear Power Station
NPDES Permit

November 8, 2007

Mr. Vincent Cappozziello, Chemical Supervisor
Davis Besse Nuclear Power Station
5501 N. State Route 2
Oak Harbor, Ohio 43449

Dear Mr. Cappozziello:

On October 25, 2007, an NPDES permit compliance inspection was made at the Davis Besse Nuclear Power Station. Mr. Steve Chimo, and Mr. Joe Sturdavant were also present. At the time of my visit the power plant was in full operation. We reviewed facility operations, and permit compliance issues. I also inspected the sanitary wastewater treatment plant, and all the outfalls. My comments and recommendations are as follows:

- 1) The renewed NPDES permit has been in effect for one year now, and only one Total Residual Oxidant violation was noted at outfall 001 in September 2006. This occurred following a manual shutdown of the plant, while the automatic chlorination/bromination feed to the water circulation system continued, allowing chlorine levels to rise. New procedures have been implemented and additional training provided to prevent a reoccurrence.
- 2) The renewal included quarterly monitoring for asbestos fibers at outfall 004 following the discovery of broken cooling tower panels in the basin. Thus far all four analyses have found no asbestos fibers in the discharge.
- 3) Only the east, 28,000 gpd sanitary treatment plant continues being used. Both operation and maintenance appeared good. At the time of my visit a very clear final effluent was being discharged from the plant, which then flows to a settling pond, where the discharge is monitored as internal outfall 601. The pond and effluent had a brown tint. One item we discussed was the noticeable near septic odor of the plant, typically found in plants with inadequate aeration. I believe this is due to inefficient oxygen transfer of the diffusers, which was confirmed by logbook entries indicating internal dissolved oxygen levels in the aeration tank as low as 1 mg/l. A minimum concentration level of 2.0 mg/l dissolved oxygen must be supplied at all times to prevent this condition. I recommended to Mr. Chimo that you consider converting to more efficient "fine bubble" diffusers during the upcoming scheduled maintenance of this facility.

Mr. Vincent Cappozziello, Chemical Supervisor

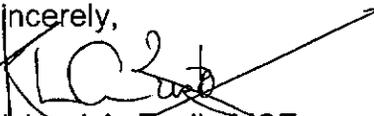
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4) Outfalls 001, 002, 003, and 004 all exhibited normal characteristics.

Please find enclosed a copy of our inspection report on the sanitary plant, If there are any errors, or if you have any questions, please feel free to call me at (419) 373-3020 or email at rick.zuzik@epa.state.oh.us.

Sincerely,


Richard A. Zuzik, MSE
Division of Surface Water

/llr

pc: Steve Chimo

DSW-NWDO-File

OHIO ENVIRONMENTAL PROTECTION AGENCY

OPERATION AND MAINTENANCE INSPECTION
 WWTP'S LESS THAN 25,000 GPD

NPDES Permit No. 21B00011601

Facility Name Davis Bessie East Plant #2 Expiration Date 9-30-11

Facility Address 5501 SR2 Date 10-25-09 Time 10⁰⁰ (am/pm)

City - County Ottawa Township Carroll

Name and Address of Owner First Energy

Person Contacted Steve Chimo, Joe Sturdavant Owner Phone _____

Flow: Design 28,000 GPD Present 20,000 GPD (metered - estimated)

Trib. Pop. 750-800 (actual estimated) Weather at time of inspection: Temp 50° Overcast

OEPA Personnel Rick Zuzik District NWDO

1. Plant Effluent - Mark Severity No.

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
<u>0</u>	None		<u>Clear</u>		<u>None</u>		<u>Colorless</u>
1	Mild						
2	Moderate		Light Solids		Musty		Grey
3	Serious						
4	Extreme		Heavy Solids		Septic		Black

2. Effect of effluent on Receiving Stream Name: Lake Erie

No.	Severity Description	No.	Turbidity	No.	Odor	No.	Color
<u>0</u>	None		<u>Clear</u>		<u>None</u>		<u>Colorless</u>
1	Mild						
2	Moderate		Light Solids		Musty		Grey
3	Serious						
4	Extreme		Heavy Solids		Septic		Black

3. a. Plant has _____ excellent _____ good _____ fair _____ poor operation
 b. Plant has _____ excellent _____ good _____ fair _____ poor maintenance
 c. Sand filters have _____ excellent _____ good _____ fair _____ poor maintenance

d. Not operating at expected efficiency due to:

- (1) _____ hydraulic overload
 (2) _____ organic/ solids overload
 (3) _____ personnel inefficiency
 (4) _____ equipment failure
 (5) _____ wastes
 (6) _____

Disinfection: (Required May 1 thru Oct.31.)

IN	OUT	
_____	_____	Chlorination Tablets
_____	_____	Dechlorination Tablets
_____	_____	U.V.

4. Yes No Compliance with NPDES Permit

Periodic Violations Y N Parameters: _____
 Chronic Violations _____ ✓ _____

5. Adequate plant safety

6. Operation and Maintenance Service Name In-house

Frequency of Visits Daily

Facility Name: Davis Bessie East Sanitary Plant #2

Process	# Units	Unit	If Needed - Description and Comments
Preliminary		Trash Trap	Pumping Frequency:
		Grease Trap	Pumping Frequency:
		Bar Screen	
	2	Comminutor	New Muffin Monsters
	1	Flow Equalization	
Aeration Equipment		Plant Timer ___Y___N	Cycle Time:
	4	Motor/ Blower Unit	
Secondary Treatment	1	Aeration Tank	Color: Grey-Brown Septic Smell Adequate Aeration: Y___N✓
Final Settling	1	Clarifier	turbid
	2	Sludge Return	In ✓ Out
	1	Surface Skimmer	In ✓ Out
		Fixed Media Clarifier	
Tertiary Treatment		Surface Sand Filter	
	1	Polishing Pond	Brown Tint 3 aerators, Barley Bails of Straw
		Other	
Disinfection		Contact Tank	
		Chlorine Tube Feeder	
		Dechlorination Tube Feeder	
		Ultraviolet (UV)	
Flow Metering	✓	Elapsed Pump Time	
		Recorder (continuous total)	
Pumps	8	Raw Wastewater (type)	
		Sand Filter Effluent Dosing	
Sludge Handling	1	Aerated Storage Tank	
		Sludge Drying Bed	
Sludge Disposal	✓	Municipal POTW	
		Landfill	
		Land Application	
Advanced Treatment		Post Aeration	
		Spray Irrigation	
		Other	