

NPDES NONCOMPLIANCE NOTIFICATION  
Possible Noncompliance With Daily Average/Maximum Limitation  
July 16, 1980

Plant: Palisades

Permit No: MI-0001457

Outfall Description: Turbine Sump Oil Separator Waste  
(00G)

Outfall No: 800218

Parameter: Oil and Grease

Parameter No: 00556

1. Date of Incident: 7/3/80 Through 7/7/80

2. Identification of specific effluent limitation exceeded:

Oil and grease daily maximum limitation of 20 mg/l and monthly average limitation of 15 mg/l.

3. Description of Incident:

See attached.

4. Apparent Cause:

See attached.

5. If not immediately corrected, the anticipated time the condition is expected to continue:

NA.

6. Corrective Action - The following corrective action was taken or will be taken to reduce, eliminate and prevent recurrence:

See attached.

7. Additional Comments:

NA.

8. Signed: R L Fobes

*Ronald L Fobes*

3. Description of Noncompliance and

4. Apparent Cause of Noncompliance

On July 2, 1980 at 1700 hours, a welded seam on the Generator Seal Oil Strainer burst resulting in a major loss of oil to the turbine building floor. Due to the Hydrogen concentration in the generator at that time, the oil system could not be shutdown until the unit was shutdown and thoroughly purged with carbon dioxide. The Hydrogen concentration was less than 3% at 2200 hours on 7/2/80 and the oil system was shutdown at that time. During this five hour period, approximately 10,000 gallons of lubricating oil was spilt onto the floor.

The immediate action taken by members of the plant staff, Operations, Maintenance, and Chemistry was to: 1) build dams (using clay based oil absorbant) to prevent oil from getting into floor drains, 2) using 50 cubic foot waste liner tanks and available pumps, the majority of the oil was collected and is being stored on site awaiting shipment for re-processing, and 3) expedite getting Hydrogen off the machine and replaced with carbon dioxide. These actions were extremely effective in minimizing the amount of oil which reached the floor drains. The maximum amount of oil which reached the Turbine Sump Separator Tank (T 41) was about 80 gallons.

Follow-up actions taken after the incident were as follows:

- 1) On Thursday, July 3, 1980, Stoddard & Sons of Wayland was called in to remove the accumulated oil in the Turbine Sump Separator Tank (T41)
- 2) The T 41 discharge sampling program was increased to a daily sample to accurately monitor the discharge.
- 3) A passive oil removal filter was placed in the storm drain into which T 41 drains prior to release into the discharge mixing basin. This filter did remove about 1½ - 2 liters of oil from the basin during a 3 day period.

- 4) Clean up of the oil and the absorbant used to contain the oil throughout the area of the turbine building affected by the spill.
- 5) The strainer was repaired by rewelding the seam.
- 6) Closer attention is being paid to the oil interceptor and oily waste emulsion breaker to continue to clean up any residual oil not already cleaned up.

The results of the sampling program for the first 5 days following the incidents are listed in Table 1.

Table 1

<u>Date</u>	<u>mg/l Oil</u>	<u>Volume of Waste Water</u>	<u>Calculated Oil Discharged (Gal.)</u>
7/3/80	320.	41,300	13.2
7/4/80	46.4	31,500	1.47
7/5/80	81.5	23,700	1.93
7/6/80	15.3	9,200	0.14
7/7/80	83.9	9,200	0.77

As can be seen, less than two tenths of one percent of the oil lost from the system was actually released to the lake. During the entire period, there was no perceptible oil in the mixing basin or in any part of Lake Michigan discharge.

The samples analyzed thus far indicate that we are in violation of our 20 mg/l daily limit for four of the days following the incident and the magnitude of these values is such that we will be in violation of our 15 mg/l monthly average also. The actions taken by the plant during this incident should result in the oil discharge being less than the maximum allowable for the majority of the month remaining.

#### 6. Corrective Action

The actions taken by plant personnel as stated above were adequate to minimize the impact of this spill. No long term corrective actions are planned due to the low probability of recurrence of this type of event.