

September 7, 2016

AEP-NRC-2016-71
10 CFR 50.4

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2
NOTIFICATION OF INCREASED CHLORIDE
CONCENTRATION AT MONITORING WELL

References:

1. Letter from J. H. Harner, Indiana Michigan Power Company, to J. Sanders, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated August 15, 2016.

By Reference 1, Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, submitted to Michigan Department of Environmental Quality a notification of increased chloride concentration at Monitoring Well 19, for Groundwater Permit GW1810102.

On August 8, 2016, CNP noted that the chloride concentration at Monitoring Well 19 was 501 mg/l, which exceeds the limits of 500 mg/l, set forth in part 324.3109e(1)(b) of the Natural Resources and Environmental Protection Act 451 of 1994. The cause of increased chloride levels is a result of storm water runoff from the previous winter's road and sidewalk deicing activities.

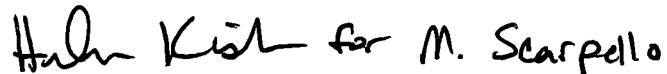
The identified increase in chloride concentration is not a permit exceedance but does require response activities in accordance with Part 11(f) of CNP's groundwater permit. Response activities require any downgradient drinking wells to be sampled and treated. In this instance, CNP does not have any downgradient drinking wells due to the fact that the groundwater discharges from our property to Lake Michigan.

Reference 1 is provided, as an enclosure to this letter, in accordance with CNP's Environmental Protection Plan, Section 5.4.2., "Routine Reports." Other monitoring wells are within permit limits from this sampling period. No further actions are required.

IEZ5
NRR

This letter contains no new or revised commitments. Should you have any questions please contact Jon H. Harner, Environmental Manager, at (269) 465-5901, extension 2102.

Sincerely,

Handwritten signature in black ink that reads "John Kist for M. Scarpello".

Michael K. Scarpello
Regulatory Affairs Manager

Enclosure: Letter from J. H. Harner, Indiana Michigan Power Company, to J. Sanders, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated August 15, 2016.

KMH/ml

c: R. J. Ancona - MPSC
A.W. Dietrich, NRC Washington D.C.
NRC Resident Inspector, w/o enclosure
C. D. Pederson - NRC Region III
A.J. Williamson - AEP Ft. Wayne

ENCLOSURE TO AEP-NRC-2016-71

Letter from J. H. Harner, Indiana Michigan Power Company, to J. Sanders, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated August 15, 2016.



**INDIANA
MICHIGAN
POWER**

A unit of American Electric Power

Indiana Michigan Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49105
IndianaMichiganPower.com

Mr. Jerod Sanders, District Supervisor
Michigan Department of Environmental Quality
Surface Water Quality Division
7953 Adobe Road
Kalamazoo, MI 49009

August 15, 2016

Re: American Electric Power Company
Donald C. Cook Nuclear Plant
Groundwater Permit No. GW1810102

Dear Mr. Sanders:

This notification is made pursuant to Cook Nuclear Plant's Groundwater Permit GW 1810102, Part I.11.f), Compliance Requirements.

On August 8, 2016 we noted that the chloride concentration at monitoring well 19 was 501 mg/l, which exceeds the limit of 500 mg/l as set forth in Part 324.3109e (1)(b) of the Natural Resources and Environmental Protection Act 451 of 1994. While not a permit exceedance, we are following the compliance schedule detailed in Part 11 (f) of our groundwater permit.

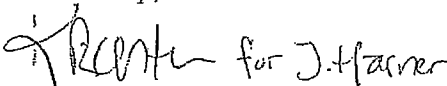
Well 19 is located approximately 1200 feet North of the plant's rapid infiltration basin. Upgradient wells and other monitoring wells are within permit limits from this sampling period. A similar issue occurred in August of 2014 with this well. We determined that the elevated chloride levels were the result of stormwater runoff from the previous winter's road and sidewalk deicing program. A review of groundwater outfall data shows chloride levels that are well below what we have detected in the groundwater.

We have reviewed the requirements to ensure compliance with the permit. In Parts I.11.g) (1), (2) and (3) response activities require any downgradient drinking wells to be sampled and treated. In this case, there are no downgradient drinking wells due to the fact that the groundwater discharges from our property to Lake Michigan so no response other than this notification is required.

The most recent chloride data from Well 19 was 459 mg/l on August 5, 2016.

Please contact me at telephone (269) 465-5901 ext. 2102 if you have any questions regarding this information.

Sincerely,


 for J. Harner

Jon H. Harner per 2016-237
Environmental Manager
Donald C. Cook Nuclear Plant

c: Ms. Christine Bauer, MDEQ - Kalamazoo
USNRC per Appendix B. T.S.

Mr. Jerod Sanders
Monitoring well notification
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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

 for J. Warner per 2016-237

J.H. Warner
Environmental Manager