

August 16, 2006

MEMORANDUM TO: Steven K. Orth, Team Leader
Division of Reactor Safety

FROM: Jamnes L. Cameron, Chief/*G. M. McCann acting for RA/*
Decommissioning Branch
Division of Nuclear Materials Safety

SUBJECT: ANALYTICAL RESULTS OF WATER SAMPLES FROM THE
VICINITY OF THE PERRY NUCLEAR POWER STATION
(BATCH P-2006-01)

By letter dated May 9, 2006 (see ADAMS ML061350067), we received the results of the analysis of five water samples from the NRC's contract laboratory, the Oak Ridge Institute for Science and Education (ORISE). The licensee collected two samples for the NRC in the vicinity of the Perry Nuclear Power Station for analysis for tritium: one on March 30, 2006; and one on April 3, 2006. Three independent samples were also collected by Region III Decommissioning personnel on April 20, 2006, in the vicinity of the Perry Nuclear Power Station for analysis for tritium. The licensee collected separate samples for their analysis at the same time they collected the samples for the NRC. The Ohio Department of Health analyzed two samples from April 20, 2006: one from location Manhole 20 (licensee sample 526263), and one from location Manhole 23 (licensee sample 526264).

We have reviewed the analysis results from ORISE and compared the results with the licensee's results for their samples as well as the Ohio Department of Health's results for their samples. The enclosed Table provides the results of the analyses and an assessment of how they compared. The comparison was based on the Confirmatory Measurements Program criteria provided in Inspection Procedure 84750, "Radioactive Waste Treatment, and Effluent and Environmental Monitoring," dated March 15, 1994. There was "agreement" in the results between the ORISE and licensee analyses for all five samples. One sample was also analyzed for gamma emitting nuclides. No radioactivity was identified in the sample in excess of the minimum detectable concentrations for cobalt-58, cobalt-60, cesium-134, or cesium-137. The Ohio Department of Health analysis results agreed with the ORISE and licensee results.

Enclosure:
As Stated

CONTACT: William G. Snell, DNMS
(630) 829-9871

*See Previous Concurrence

DOCUMENT NAME: E:\Filenet\ML062290030.wpd

Publicly Available

Non-Publicly Available

Sensitive

Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII:DNMS	E	RIII	N	RIII	E	
NAME	WGSnell:dh EAB for*		EABonano*		JLCameron GMM for		
DATE	08/14/06		08/14/06		08/16/06		

OFFICIAL RECORD COPY

H-45

**Tritium Sample Results
Perry Nuclear Power Plant**

#	Collection Date	NRC Sample ID	Tritium pCi/L ± uncertainty		MDC	Licensee Sample ID	Tritium pCi/L ± uncertainty		Ratio: Licensee to NRC	
1	3/30/06	P-06-1-01	<MDC		180	523517 (ESW Suction)	<MDC		n/a	Ag
2	4/3/06	P-06-1-02	51800	1400	180	524144 (Manhole 23)	50000		0.97	Ag
3	4/20/06	P-06-1-03	380	120	180	526263 (Manhole 20)	<MDC		n/a	Ag
4	4/20/06	P-06-1-04	37400	1000	180	526264 (Manhole 23)	32900		0.88	Ag
5	4/20/06	P-06-1-05	<MDC		180	526328 (ESW Suction)	<MDC		n/a	Ag

MDC - minimum detectable concentration

Licensee's MDC was 10,000 pCi/L

--	--	--	--	--	--	--	--	--	--	--

Results of Analysis Conducted by the Ohio Department of Health

3	4/20/06	526263	415	272	300					
4	4/20/06	526264	35024	676	300					