Tony Go

10CFR50.75 (g) LEAK/SPILL RECORD

NOP-OP-4705-01 Rev. 02

PART 1 – Location/Source

Event Date:	Plant Name:	
6 / 10 / 2009	☐ BV ☒ DB ☐ PY	Check one: ☒ Leak? ☐ Spill?
Volume (gallons)	Location of Spill/Leak	Source of spill/leak
Follow-up Sample of Well - MW-34S	East side of plant, inside protected area (Sample of Monitoring Well MW-34S	Follow-up Groundwater Sample of Well MW-34S

Duration of leak/spill: N/A

Gamma Activity (μCi/cc)	Tritium Activity (μCi/cc)	Total Area Impacted (ft^2)
None Detectable	MW-34S = 2,353 pCi/liter	MW-34S

PART 2 – Event Description

Outside of Protected Area? ☐ Yes ☒ No ☐ Unknown

If unknown, what actions needed to determine?

Description of event/issue

Results of spring 2009 site Groundwater Monitoring Well sampling show one well (well MW-34S) with a Tritium value of 2,352 pCi/liter. Any Tritium value above 2,000 pCi/liter requires courtesy notifications to be made. ODCM formal regulatory notification requirements for water samples is 20,000 pCi/liter for drinking water and 30,000 pCi/liter for non-drinking water.

This well is in the immediate vicinity of the 3" Condensate line that was found to be leaking on October 22, 2009 (see CR 08-48288).

The previous Tritium result from well MW-34S immediately following the 3" line leak discovery was 695 pCi/liter.

Note: MW-34S is a pre-construction era well, and is not part of our NEI 07-07 Groundwater Monitoring Program. It was only sampled in response to the failure of the 3" Condensate line.

All other wells sampled produced results below 2,000 pCi/liter, and none of the wells showed any detectable gamma activity.

Actions Taken to Stop Spill or Leak

As described in CR 09-60346, the MW-34S well is a pre-construction well in the immediate vicinity of the 3" Condensate line that was found to be leaking on October 22, 2009 (see CR 08-48288). On June 15, 2009, MW-34S was re-sampled as a follow-up to the spring groundwater monitoring tritium result of 2,352 pCi/L. The re-sample tritium result was 1,998 pCi/L and no gamma activity was detected. This June 15 result confirms the earlier result, and given the downward trend, it does not appear that there is an active leak in either of the two underground lines that carry radioactive liquids in this area. Although not procedurally required, these results were informally communicated to State of Ohio officials on 6/26/09.

No further actions are necessary at this time.

Actions Taken to Clean-up Spill or Leak and Long Term Monitoring

No further actions are necessary at this time. Monitoring Well MW-34S is planned to be sampled in the next semi-annual groundwater monitoring sampling scheduled for the fall 2009.

PART 3 - Communications

Condition Report Number:	CR 09-60346
State Agency Notification: (Describe what agency, when, and who)	Courtesy calls to NRC, state and local officials were made for a Tritium value above 2,000 pCi/liter. Courtesy notification/calls were made to the NRC resident inspector, Ohio Emergency Management Agency (EMA),

N-26

	and Lucas and Ottawa County EMA on 6/10/09. There was no press release made by the DBNPS, the NRC, or state or local agencies. Tritium levels measured were below any ODCM limits. Therefore, this CR is not reportable in accordance with 10 CFR 50.72(b)(2)(x) - News Release or Notification of Other Government Agency.
NRC Notification: (when and who)	J. Vetter (Manager, Site Emergency Response), D. Wuokko (Regulatory Compliance Manager), P, Boissoneault (Chemistry, Manager), D. Noble (Radiation Protection Manager); on 6/10/09

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Prepared by: J. Sturdavant Date: 8/21/09

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Reviewed by: D. Noble Douglas Noble Date: 8/21/09

Copy sent to Site Regulatory Compliance: Initial: JS Date: 8/24/09

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NOP-LP-2001-01

Site: G201

CONDITION REPORT

CR Number 09-60346

TITLE: GROUNDWATER MONITORING WELL TRITIUM RESULT EXCEEDS 2,000 PCI/LITER

ORIGINATION

DISCOVERY DATE	TIME	EVENT DATE	TIME	SYSTEM / ASSET#
6/10/2009	0730	6/10/09	0730	

EQUIPMENT DESCRIPTION ENVIRONMENTAL EQUIPMENT

System DB-SUB015-04 | **FLOC** DB-SUB015-04 | **AP-913:** OS

DESCRIPTION OF CONDITION and PROBABLE CAUSE (if known) Summarize any attachments. Identify what, when, where, why, how.

Results of spring 2009 site Groundwater Monitoring Well sampling show one well (well MW-34S) with a Tritium value of 2,352 pCi/liter. Any Tritium value above 2,000 pCi/liter requires courtesy notifications to be made. ODCM formal regulatory notification requirements for water samples is 20,000 pCi/liter for drinking water and 30,000 pCi/liter for non-drinking water.

This well is in the immediate vicinity of the 3" Condensate line that was found to be leaking on October 22, 2009 (see CR 08-48288).

The previous Tritium result from well MW-34S immediately following the 3" line leak discovery was 695 pCi/liter.

Note: MW-34S is a pre-construction era well, and is not part of our NEI 07-07 Groundwater Monitoring Program. It was only sampled in response to the failure of the 3" Condensate line.

All other wells sampled produced results below 2,000 pCi/liter, and none of the wells showed any detectable gamma activity.

IMMEDIATE ACTIONS TAKEN / SUPV COMMENTS (Discuss CORRECTIVE ACTIONS completed, basis for closure.)

Per NOP-OP-2012, step 4.3.5, Manager - Site Chemistry was notified. In addition, the Shift Manager, Plant Manager, RP Manager, Regulatory Compliance Manager, Emergency Response Manager and the Director, Work Management, Lucas County, and Outages were notified.

The Control Room and Duty Team were also notified. Courtesy contacts were made with the State of Ohio, Ottawa County, and the NRC.

QUALITY ORGANIZATION USE ONLY

Quality Org. Finding ☐ Yes

IDENTIFIED BY (Check one)

☑ Individual/Work Group
☐ Supervision/Management
☐ Self-Revealed
☐ Internal Oversight
☐ External Oversight

ATTACHMENTS

☐ Yes ☑ No

ORIGINATOR	ORGANIZATION	DATE	SUPERVISOR	DATE	PHONE EXT.
PERCIVAL, A	DBCH	6/10/2009	FILAR, K	6/10/2009	7643

CONDITION REPORT

CR Number 09-60346

TITLE: GROUNDWATER MONITORING WELL TRITIUM RESULT EXCEEDS 2,000 PCI/LITER

PLANT OPERATIONS

SRO REVIEW	EQUIPMENT OPERABLE	EP EQUIP	OPERABILITY ASSESSMENT REQUIRED	ORG. NOTIFIED	IMMED INVEST REQUIRED	ORG. NOTIFIED	MODE CHANGE RESTRAINT
☑ Yes ☐ No	☐ Yes ☐ No ☑ N/A	☐ Yes ☑ No	☐ Yes ☑ No		☐ Yes ☑ No		☐ Yes ☑ No

MODE	ASSOCIATED TECH SPEC NUMBER(S)	ASSOCIATED LCO ACTION STATEMENT(S)
N/A	N/A	#1 N/A
		#2
		#3

DECLARED INOPERABLE (Date / Time)	REPORTABLE?		APPLICABLE UNIT(S)
N/A	☐ Yes ☑ No ☐ Eval Required	One Hour N/A Four Hour N/A Eight Hour N/A Other N/A	☑ U1 ☐ U2 ☐ Both

COMMENTS

This condition does not impact Tech Spec required equipment, therefore, Equipment Operable? is marked N/A. The MW-34S well sample results did not reach the ODCM regulatory notification requirements, therefore this condition is not Reportable. As described by the Supervisor, all notifications required by NOP-OP-2012 were completed. The Chemistry Manager has agreed to perform communication actions required by NOP-OP-4075. Additional monitoring and sampling by BETA is expected to be completed next week.

Current Mode - Unit 1	Power Level - Unit 1	Current Mode - Unit 2	Power Level - Unit 2
1	100	N/A	N/A

SRO - UNIT 1	SRO - UNIT 2	DATE
Phillips,	Keller, L	6/10/2009

CRPA / SUPV / MRB

CATEGORY / EVAL	ASSIGNED ORGANIZATION	DUE DATE
AF	DBCH	7/10/2009

REGULATORY: REPORTABLE? ☐ Yes ☑ No ☐ LER No.

TREND CODES Process / Activity / Cause Code(s)			Comp Type / ID (If Cause T or W)		Cause Org
OP2	4500	NA			NONE

REPORTABILITY REVIEWER: Sturdavant, J

DATE: 06/19/09

INVESTIGATION OPTIONS	CLOSED BY	DATE
☐ Maint.Rule ☐ OE Evaluation ☐ Generic Implications ☐ Part 21		7/8/2009

Site: G201

CONDITION REPORT

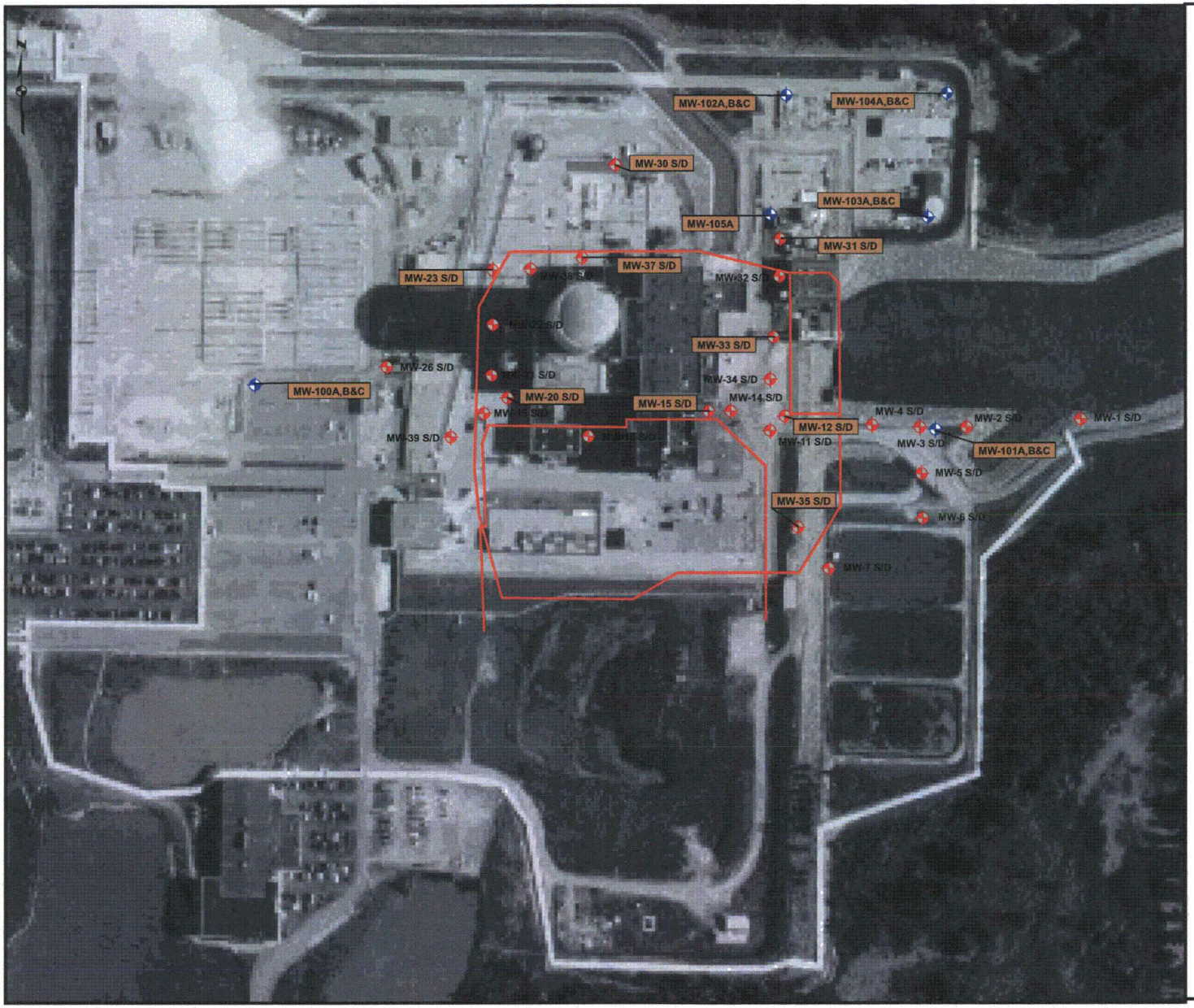
CR Number

09-60346

REPORTABILITY DETERMINATION:

As described in the CR Origination Section, one of the construction era groundwater wells (MW-34S - Shallow) results from the spring 2009 site Groundwater Monitoring Well sampling indicated a Tritium value of 2,352 picocuries/liter (pCi/liter). This well is not one of the NEI 07-07, Groundwater Monitoring Program, wells.

A courtesy call to NRC, state and local officials is made for a Tritium value above 2,000 pCi/liter. Courtesy notification/calls were made to the NRC resident inspector, Ohio Emergency Management Agency (EMA), and Lucas and Ottawa County EMA on 6/10/09. There was no press release made by the DBNPS, the NRC, or state or local agencies. Tritium levels measured were below any ODCM limits therefore, there was no concern for public radiological health or safety. Therefore, this CR is not reportable in accordance with 10 CFR 50.72(b)(2)(x) - News Release or Notification of Other Government Agency. There is no corresponding 10 CFR 50.73 (LER) requirement.



Legend

- Limits of Grout Curtain
- Existing Monitoring Well Couplet (Upper Dolomite (S) & Lower Dolomite (D))
- New Monitoring Well (Overburden (A), Upper Dolomite(B), Lower Dolomite (C))
- MW-1 S/D — Monitoring Well Identified for Groundwater Monitoring in September 2007

1:2,500

200 100 0 200 Feet

Figure 1 - Groundwater Monitoring Locations

Davis-Besse Nuclear Power Station, Oak Harbor, OH

ERM

R:FirstEnergy\GIS\DavisBesse\Working\Figures\Figure 1 - Site Plan\Figure 1 - Sept.mxd, 13 September 2007

Groundwater Monitoring Wells 2007				Groundwater Monitoring Wells 2008			Groundwater Monitoring Wells 2009		
	June	July	Sept/Oct	Spring	Fall	Post-Leak	Spring	Fall	
Well No.	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	[H-3], pCi/liter	
MW-100A			<193	<173	405		225		
MW-100B			<193	<173	282		<158		
MW-100C			<149	<154	<140		<158		
MW-101A			237	203	376		220		
MW-101B			207	<173	257		192		
MW-101C			<193	<173	<141		<158		
MW-102A			387	713	458		484		
MW-102B			394	442	531		508		
MW-102C			<193	<143	<141		<158		
MW-103A			495	423	326		455		
MW-103B			362	435	365		475		
MW-103C			<149	<156	<140		192		
MW-104A			237	436	250		400		
MW-104B			250	230	254		300		
MW-104C			<193	<154	141		<158		
MW-105A			1832	1477	1041	1183	1077		
MW-01S	<169								
MW-01D	<169								
MW-07S	426								
MW-12S	657	860	276			1219	1634/1690		
MW-12D		1155	769			689	519		
MW-15S	375		301						
MW-15D	704		442						
MW-18S	277			436	324				
MW-18D	204								
MW-20S	255		189	380	426				
MW-20D	328		<174						
MW-23S			306						
MW-26S	341								
MW-26D	<169								
MW-30S	1307	1149	494						
MW-30D		231	<174						
MW-31S		7322	3149			1612	1680		
MW-31D		108	183			118	<182		
MW-32S	5838	7535				1240	1577		
MW-32D	466	507				552	702		
MW-33S	2287	2702	1230	767	212	581	851		
MW-33D	2975	3271	1934			1538	1175		
MW-34S		2839				695	2352		
MW-34D		1076				1142	875		
MW-35S			227						
MW-35D			368						
MW-37S		2961	1231	596	502				
MW-37D		135							

Site: G201

INVESTIGATION SUMMARY

CR Number: 09-60346

NOP-LP-2001-06

Category / Eval: AF **Assigned Organization:** DBCH **Quality Finding:** ☐ Yes ☑ No

For Fix Investigations Only:

☐ **Hardware / Degraded Condition Resolution Required?** ☐ Yes ☑ No **If Yes:** ☐ Repair ☐ Scrap ☐ Rework ☐ Use-As-Is

☐ **Acceptance of the CR Investigation signifies acceptance of the following items, as applicable:**

	Originator Identification	Date
Corrective Actions (listed below)	(listed below, if any)	(listed below, if any)
Cause Analysis		
Generic Implications		
10 CFR 21 Decision Checklist		

Acceptance of Investigation: Boissoneault, D. **Date:** 7/6/2009 **Quality Approval:** **Date:**

Site-VP Acceptance: **Date:**

Closure Comments:

Problem Statement:
The Spring 2009 Site Groundwater Monitoring Sampling Program showed one well (well MW-34S) with a Tritium value of 2,352 pCi/liter. Any tritium value above 2,000 pCi/liter requires courtesy notifications to be made to the State of Ohio.

Discussion:
The MW-34S well is a pre-construction well in the immediate vicinity of the 3" Condensate line that was found to be leaking on October 22, 2009 (see CR 08-48288). On June 15, 2009, MW-34S was re-sampled as a follow-up to the spring groundwater monitoring tritium result of 2,352 pCi/L. The re-sample tritium result was 1,998 pCi/L and no gamma activity was detected. This June 15 result confirms the earlier result, and given the downward trend, it does not appear that there is an active leak in either of the two underground lines that carry radioactive liquids in this area. Although not procedurally required, these results were informally communicated to State of Ohio officials on 6/26/09.

No further actions are necessary at this time.

Quality Comments:

CORRECTIVE ACTIONS

CA Number:	Sched Type:	CA Type:	Cause Code:	Resp Org. Codes:	CA Acceptance:	Accept Date:	Due Date:	Completed Date:

Site: G201

INVESTIGATION SUMMARY

CR Number: 09-60346

NOP-LP-2001-06

Environmental, Inc.
Midwest Laboratory
an Allegheny Technologies Co.

700 Landwehr Road • Northbrook, IL 60062-2310
ph. (847) 564-0700 • fax (847) 564-4517

Mr. Al Percival
FirstEnergy Corporation
Mail Stop 1041
5501 North State Route 2
Oak Harbor, Ohio 43449

LABORATORY REPORT NO.: 8003-100-411
DATE: 07-01-09
SAMPLES RECEIVED: 06-23-09
PURCHASE ORDER NO.:

Below are results of the analyses for tritium and gamma emitting isotopes on one ground water sample.

Location	MW-34S
Lab Code	TSWU- 3107
Date Collected	06-15-09

	Concentration (pCi/L)
H-3	1936 ± 148 [a]
Mn-54	< 1.8
Fe-59	< 3.3
Co-58	< 2.5
Co-60	< 1.7
Zn-65	< 2.1
Zr-Nb-95	< 2.3
Cs-134	< 1.4
Cs-137	< 2.6
Ba-La-140	< 3.6

[a] Analysis was repeated; result of reanalysis, 2059 ± 151 pCi/L.

The error given is the probable counting error at the 95% confidence level. Less than (<) values are based on a 4.66 sigma counting error for the a background sample.

Sincerely,

SA Coorlim
Quality Assurance

APPROVED BY

Bronia Grob, M. S.
Laboratory Manager

Environmental, Inc.
Midwest Laboratory
an Allegheny Technologies Co.

Mr. Al Percival
FirstEnergy Corporation
Mail Stop 1041
5501 North State Route 2
Oak Harbor, Ohio 43449

LABORATORY REPORT NO.: 8003-100-412
DATE: 07/02/2009
SAMPLES RECEIVED: 05/08/2009
PURCHASE ORDER NO.:

Below are results of the additional analyses requested on one monitoring ground water sample.

Sample ID	Lab Code	Collection Date / Time	Gross Alpha [a]	Gross Beta [a]	Fe-55	Ni-63	Sr-89	Sr-90
MW-34S	TWW-2120	4/22/09 12:58	< 3.9	5.2 ± 2.2	< 732.7	< 83.1	< 1.0	< 0.5

The error given is the probable counting error at the 95% confidence level.
Less than (<) values are based on a 4.66 sigma counting error for the background sample.

SA Coorlim
Quality Assurance

APPROVED:

Bronia Grob
Laboratory Manager