Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

October 31, 2022

Mr. Tom Peake, Director
Center for Waste Management and Regulations
Radiation Protection Division
William Jefferson Clinton Building, West
1301 Constitution Ave NW, Mail Code 6608T
Washington, D.C. 20004

Subject: Response to the Environmental Protection Agency's September 22, 2022 Letter Regarding Reporting the Magnesium Oxide Excess Factor Generated by the Waste Data System.

Reference: EPA letter from Tom Peake, Director, Center for Waste Management and Regulations, to Michael Gerle, Director, Environmental Regulatory Compliance, Carlsbad Field Office, dated September 22, 2022.

Dear Mr. Peake:

This letter is in response to the Environmental Protection Agency's (EPA's) request for information concerning an error in reporting the Magnesium Oxide (MgO) excess factor generated by the Waste Data System (WDS). The EPA identified this as an inspection concern requiring a written response.

The WDS team has confirmed that the MgO excess factor in one of the reports provided to the EPA had an error in which the value for a disposal room corresponding to the panel number was applied to all disposal rooms in a panel. The error was traced back and determined to be a reference to the wrong variable on the report (*i.e.*, the report query selected the excess factor for the disposal room using the panel number instead of the disposal room number). A review of the extent of condition was performed and it has been determined that the issue was limited to Panel 7, Rooms 4 through 6.

In accordance with the procedure for the WDS Software Quality Assurance Plan (WP08-NT.04), an action log (WWIS2-AL-1111, Enclosure 1) was entered, which generated an issue (WWIS2-IS-7254, Enclosure 2). Because the WDS team follows a prescribed Institute of Electrical and Electronics Engineers (IEEE) procedure for the development and testing of software revisions, each of the WDS revisions must be developed and released in a prescribed order to comply with this procedure. The software error will be corrected in the next release, WDS Release 3.5, which is currently under development and is expected in the spring of 2023.

For reporting prior to WDS release 3.5, the Carlsbad Field Office has verified the calculations and corrections have been made to documents that may have used or will use these data, particularly the Annual Change Report. Additionally, we are providing the correct disposal room MgO excess factors for Panels 1 – 7 in Enclosure 3.

If you have any questions, please contact Dr. Anderson L. Ward at (575) 988-5414.

Sincerely,

Michael Gerle Digitally signed by Michael Gerle
Date: 2022.10.31 10:45:31 -06'00'

Michael Gerle, Director
Environmental Regulatory Compliance Division
Carlsbad Field Office

Enclosures

2201555

OCT 31 2022

CBFO:ERCD:MG:MC:22-0250

cc: w/enclosures

R. Lee, EPA	*ED
X. Tong, EPA	ED
M. Gerle, CBFO	ED
A. Ward, CBFO	ED
D. Standiford, CBFO	ED
J. McLemore, RES	ED

CBFO M&RC
*ED denotes electronic distribution

cc: w/o enclosures

J. Garza, CBFO	*ED
G. Basabilvazo, CBFO	ED
R. Chavez, RES	ED
R. Watson, RES	ED
M. Walentine, NWP	ED

*ED denotes electronic distribution

Nuclear Waste Partnership, LLC
- Barcode
- CHTES
- CTMA
- RHTES & RTMA
- TRUPACT-III (T3ES &T3MA)
- WDS

Administration
- Preferences
- Change Password
- Show Inactive
- Modify Projects

WDS

Action/Request Log Item: WWIS2-AL-1111 Edit

Last Update: Chris Luoma - 07/05/2022

Title:	Summary of Waste Emplacement report issues.
Type:	General
Subsystem:	Summary of Waste Emplacement Inventory Report
Requestor:	Chris Luoma
Reference:	e-mail from EPA (Xinyue Tong) on 06/23/2022
Request Date:	06/23/2022
Date Closed:	*Open*

Action/Request Details:
Excess factor that is displayed on the last section of the Summary of Waste Emplacement Inventory report is displaying the same excess factor for every room in the panel.

Also the emplaced LWA TRU waste inventory displayed on page one is including NCM. It should not include NCM. After further analysis, the report is working correctly in conjunction with the NCM flag.

The first software bug will be fixed in WDS 3.5.

Question: Should the NCM flag remain on reports that display waste volume totals?

Resolution:
Issue 7254 is included in PR 3.5.

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WDS

Regulatory Reports > **Summary of Waste Emplacement Inventory Report**

Issue: WWIS2-IS-7254 Edit

Last Update: Roxane Rohweder-Garza - 08/12/2022

Issue Title:	Correct the Excess Factor reported for Panel and Room		
Work Package:	3.5 - Reports		
Subsystem:	Summary of Waste Emplacement Inventory Report	Status:	Open
Priority:	High	Disposition:	PM QA Review
Identified By:	Chris Luoma	Date Identified:	06/30/2022
Schedule Severity:	Critical	Cost Severity:	
Technical Severity:		Issue Type:	Corrective
Resolution Type:	Other	Reoccurrence:	
Date Resolved:	06/30/2022	Resolved By:	Katie Richey
PM Approval:		QA Approval:	
Production Date:		Review Required:	N

Issue Description:
Excess factor that is displayed on the last section of the Summary of Waste Emplacement Inventory report is displaying the same excess factor for every room in the panel.

AL-1111.

Integration Implications:
1 = Low (No other subsystems affected)

Resolution Details:
regWstEmplInvMgo.jrxml - corrected the call to wds.mgo.ef() to pass panel and room (was passing panel and panel).

Comments:
Dorothy Thomas - 07/06/2022
WDS Software Change Request Number NTP-WDS-SCR-1055 has been created to document that software change control activities are being performed in accordance with WP08-NT.04, Revision 28, WDS Software QA Plan, Section 4.2.

Add Comment

Associated Test Cases

Test Case	Title	Latest Status
WWIS2-TC-3569	Correct the Excess Factor reported for Panel and Room	08/12/2022 Pass

This Issue is assigned to a Test Case, requirement associations cannot be modified

Associated Requirements

WWIS2-REQ-1514	For each panel and room in which waste was emplaced on or before the specified report period ending ...

Modify Issue Assignments

Issue Assignments
Following are project team members currently assigned this issue
Slater, Bryant Assigned: 08/12/2022 12:25 PM

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ENCLOSURE 3: MgO Excess Factor corrected by Panel and Room

Panel	Room	MgO (kg)	Waste (kg)	CPR (kg)‡	Excess Factor
1	7	1,127,526	508,254	276,990	2.01
	6	222,885	101,210	86,116	1.44
	5	222,885	160,047	79,213	1.56
	4	228,600	128,597	85,525	1.51
	3	1,034,415	749,764	342,069	1.67
	2	1,028,825	948,002	229,442	2.17
	1	617,220	311,843	138,330	2.14
2	7	1,028,700	571,001	236,830	2.09
	6	982,980	461,528	209,305	2.20
	5	988,820	498,970	197,979	2.28
	4	977,265	518,555	220,912	2.17
	3	1,028,700	667,662	211,841	2.27
	2	965,835	733,025	165,412	2.62
	1	691,515	416,679	186,469	1.71
3	7	960,120	711,188	109,685	3.83
	6	954,405	876,558	229,646	1.93
	5	1,022,985	808,693	284,651	1.70
	4	960,120	899,470	255,172	1.79
	3	931,545	1,000,561	243,860	1.89
	2	942,975	1,004,479	228,067	2.02
	1	662,940	722,043	183,088	1.76
4	7	942,975	1,051,062	248,903	1.90
	6	925,830	945,599	267,494	1.71
	5	948,690	890,039	265,302	1.71
	4	1,049,655	830,990	290,739	1.76
	3	1,015,365	745,955	285,755	1.70
	2	931,545	933,179	374,327	1.22
	1	668,655	554,822	265,884	1.23
5	7	937,260	982,069	353,286	1.28
	6	875,477	1,085,573	140,033	2.85
	5	782,346	1,121,769	298,832	1.24
	4	737,167	1,046,323	225,449	1.64
	3	714,286	1,039,662	215,961	1.61
	2	730,612	978,110	194,069	1.84
	1	485,714	759,882	135,766	1.75

Panel	Room	MgO (kg)	Waste (kg)	CPR (kg)‡	Excess Factor
6	7	744,218	1,087,058	167,605	2.11
	6	666,667	926,903	189,775	1.74
	5	474,294	739,695	203,497	1.24
	4	471,586	730,555	202,434	1.25
	3	406,533	806,134	171,330	1.25
	2	291,716	625,341	121,710	1.22
	1	235,107	475,890	80,223	1.46
7	7	57,692	127,192	15,900	1.76
	6	99,320	259,225	28,832	1.83
	5	315,646	934,715	76,186	1.80
	4	161,905	445,712	32,351	2.10
	3	321,088	930,341	110,790	1.30
	2	555,112	849,866	218,582	1.26
	1	182,053	290,738	75,662	1.25

‡CPR- Cellulose, Plastic and Rubber

Biscaino, Debra - TFE

From: Michelle Cook (CONTR) <Michelle.Cook@cbfo.doe.gov>
Sent: Monday, October 31, 2022 1:02 PM
To: Peake.Tom@epa.gov
Cc: Lee.Raymond@epa.gov; Tong.Xinyue@epa.gov; Michael Gerle; Ward, Anderson (Andy) - FedNet; Standiford, Daniel (Dan) - FedNet; McLemore, Judy - RES; DOE M&RC
Subject: Response to the Environmental Protection Agency's September 22, 2022 Letter Regarding Reporting the Magnesium Oxide Excess Factor Generated by the Waste Data System
Attachments: 22-0250 Enclosure 3.pdf

Good Afternoon,

Please see attached the 3rd enclosure. My apologies for not including the enclosure in the original email.

Thank you,

Michelle Cook

Administrative Assistant
Carlsbad Technical Assistance Contractor (Navarro Research and Engineering Inc.)
Contractor to the Department of Energy
4021 National Parks Highway
Carlsbad, NM 88220
(575) 234-7154

NAVARRO

From: Michelle Cook (CONTR)
Sent: Monday, October 31, 2022 12:38 PM
To: 'Peake.Tom@epa.gov' <Peake.Tom@epa.gov>
Cc: 'Lee.Raymond@epa.gov' <Lee.Raymond@epa.gov>; Tong.Xinyue@epa.gov; Michael Gerle <Michael.Gerle@cbfo.doe.gov>; Anderson Ward <Anderson.Ward@cbfo.doe.gov>; Dan Standiford <Dan.Standiford@cbfo.doe.gov>; McLemore, Judy - RES <judy.mclemore@wipp.ws>; DOE M&RC - WIPPNet <doem&rc@wipp.ws>
Subject: Response to the Environmental Protection Agency's September 22, 2022 Letter Regarding Reporting the Magnesium Oxide Excess Factor Generated by the Waste Data System

Good Afternoon Mr. Peake,

If you have any questions regarding the attached letter/enclosures, please contact Dr. Anderson Ward at (575) 988-5414 or at Anderson.Ward@cbfo.doe.gov.

Thank you,

Michelle Cook

Administrative Assistant
Carlsbad Technical Assistance Contractor (Navarro Research and Engineering Inc.)
Contractor to the Department of Energy
4021 National Parks Highway
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(575) 234-7154

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Subject:	Response to the Environmental Protection Agency's September 22, 2022 Letter Regarding Reporting the Magnesium Oxide Excess Factor Generated by the Waste Data System
Attachments:	22-0250 Letter Rev. 3.pdf; 22-0250 Enclosure 1 - WWIS2-AL-111.pdf; 22-0250 Enclosure 2 - WWIS2-IS-7254.pdf

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