

**UNREVIEWED WASTE MANAGEMENT QUESTION
EVALUATION (UWMQE)**

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UWMQE Number: SRR-CWDA-2015-00088

Revision: 0

UWMQE Title: Use of Grade 120 Slag in tank closure grout

UWMQE Supported Documents

TECHNICAL

Number: SDDR #13182

Date: 06/2015

Revision: 0

Number: USQ-HTF-2015-00300

Date: 08/28/2015

Revision: 0

SUPPORTING

Number: SRR-CWDA-2015-00057

Date: 08/27/2015

Revision: 1

Number: _____

Date: _____

Revision: _____

1. Unreviewed Waste Management Question Evaluation

Proposed Activity Description

The proposed activity is to allow use of Grade 120 Slag in tank closure grout. A deviation (SDDR #13182) from Section 3.2.3.3 of the bulk fill grout procurement specification (C-SPP-F-000055, Rev 4) is being proposed to allow either Grade 100 or Grade 120 Slag to be used in the waste tank grout. Section 3.2.3.3 of the bulk fill grout procurement specification currently specifies that only Grade 100 Slag Cement may be used. While tank grout meeting the grout fill formulation specifications will inherently meet the HTF (SRR-CWDA-2010-00128) and FTF (SRS-REG-2007-00002) Performance Assessment (PA) assumptions, a deviation from the specifications does not necessarily lead to the grout not meeting the PA conclusions.

NOTE: Each question below requires Comment / Justification.

- a. Is the Proposed Activity or New Data outside the bounds of the critical inputs/assumptions of the analyses contained in the WD, PA, CA, approved SA(s), or approved UWMQE(s)? For example, does the proposed activity or new information involve a change to the assumed critical design features for a waste tank/disposal unit design as described in the WD, PA, CA, approved SA(s), or approved UWMQE(s) such as critical inputs/assumptions?

Yes ☐

No ☒

Comment / Justification:

Since the Tank Farm Waste Determination Basis Documents (DOE/SRS-WD-2012-001 and DOE/SRS-WD-2014-001) do not prescribe a grout formulation and only describe general grout properties, the proposed activity is within the bounds of the Waste Determination Basis Documents. The impact of the grout formula change on the PAs was evaluated in SRR-CWDA-2015-00057 and use of Grade 120 Slag was shown to be consistent with the inputs and assumptions contained within the Tank Farm PAs.

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1. Unreviewed Waste Management Question Evaluation - continued

- b. Does the New Data involve an increase in the radionuclide inventory or chemical constituents evaluated in the approved WD, PA, CA, approved SA(s), and approved UWMQE(s)?

Yes ☐ No ☒

Comment / Justification:

The proposed activity relates to tank closure grout and does not increase the tank radionuclide inventories or chemical constituents.

- c. Would the radionuclide disposal limits need to be changed to implement the proposed activity?

Yes ☐ No ☒

Comment / Justification:

The proposed activity relates to tank closure grout and in no way impacts tank radionuclide inventory.

- d. Is it possible that the Proposed Activity or New Data causes the WD, PA, CA, approved SA(s), or approved UWMQE(s) performance objectives to be exceeded?

Yes ☐ No ☒

Comment / Justification:

The impact of the grout formula change on the PAs was evaluated in SRR-CWDA-2015-00057 and use of Grade 120 Slag was shown to be consistent with the inputs and assumptions contained within the Tank Farm PAs. Since the proposed activity does not relax other grout specification requirements (e.g., weight of grout ingredients such as cement, sand, water, fly ash, slag, etc) and the tank closure grout will continue to perform as assumed in the Tank Farm PAs, the proposed activity will not impact performance objective compliance.

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2. UWMQE Originator

IS the activity within the bounds of the existing
WD, PA, CA or approved SA(s) and approved
UWMQEs?

Yes ☒ No ☐

IS a Special Analysis required?

Yes ☐ No ☒

Comment / Justification:

The proposed activity is to allow use of Grade 120 Slag in tank closure grout. As documented in SRR-CWDA-2015-00057, the grout will continue to perform as assumed, the proposed activity will not impact performance objective compliance.

Check one of the following boxes below and forward to peer reviewer.

- ☐ CANCEL the proposed activity. (Document canceled activities as applicable.)
- ☐ MODIFY the proposed activity.
- ☒ PROCEED to PARC approval (if no SA is required).
- ☐ PROCEED with proposed activity; categorical exclusion applies.
- ☐ PERFORM Special Analysis.

Originator: Mark H. Layton

Print

Mark H. Layton

Signature

Date:

9/1/15

Time:

11:15

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3. UWMQE Peer Reviewer

Concur with the UWMQEO's determination?

Yes ☒

No ☐

Comment / Justification:

Reviewed the applicable sections of the HTF PA, FTF PA, HTF 3116 Basis Document, and FTF 3116 Basis Document. Also reviewed the UWMQE question responses. I concur with the originator's conclusion that the proposed activity can proceed.

Peer Reviewer:

Kent H. Rosenberger

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Kent H. Rosenberger

Signature

Date:

9/1/2015

OSR 46-522
Rev. 3
12/08/2014

LW Form

Savannah
River Site (SRS)

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4. UWMQE AGCC Reviewer

Is there a legal objection to the UWMQEO's
determination?

Yes ☐No ☒

Comment / Justification:

AGCC or Delegate AGCC

VICTOR FRANKLIN

Print

Signature

Date:

9/8/15

5. UWMQE VP/GC Reviewer

a. Will VP/GC participate in the UWMQE?

Yes ☐No ☒

b. If "Yes" to 5a, Does VP/GC concur with the UWMQEO's determination?

Yes ☐No ☐

Comment / Justification:

VP/GC or Delegate VP/GC

VICTOR A. FRANKLIN

Print

Signature

Date:

9/9/15

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6. PARC Chairman

IS the activity consistent with the existing WD?

Yes

☒

No

IS a Special Analysis required?

Yes



No



Comment / Justification:

IF a Special Analysis is required, **INDICATE** the follow-up action by checking one of the following boxes below and return to the UWMQE Originator

- ☐ CANCEL the proposed activity (Document canceled activities as applicable)
- ☐ MODIFY the proposed activity to attempt to eliminate the SA
- ☐ PERFORM SA

**PARC Chairman
or Designee:**

Joel Cantrell
Print

Signature

Date: 9/8/2015