

UNCLASSIFIED  
Design Change Form (DCF)

Change Section	DCF No. C-DCF-F-01576			Rev. 0	Functional Classification GS	
	Area F	Building 241905	System WTE		Project No. N/A	
	Approved Documents (No. ; Rev.) Requiring Change C-SPP-F-00055;4				Title REVISE ZERO AMMONIA REQUIREMENT IN SRR TANK CLOSURE GROUT SPECIFICATION - SECTION 3.2.3.4	MT Number N/A
	Reason for Change To incorporate SDDR # 12348, which revised the following requirements in the current SRR Tank Closure Grout Specification #C-SPP-F-00055, Revision 4, Section 3.2.3.4. This section of the specification requires zero ammonia content in the fly ash for the tank closure grout mix. However, "zero" Ammonia is not an achievable acceptance criteria based on standard industry tests (i.e. ASTM C618-12a). Test results show trace amount of ammonia.  To set an achievable acceptance criteria as well as to comply with SRR Engineering document # X-ESR-F-00176, Revision 0, which evaluated the impact of Ammonia in the grout fly ash, the zero Ammonia test requirement needs to be revised.  Justification: The SRR document # X-ESR-F-00176, Revision 0, show that due to such processing (i.e., removal of ammonia through a high temperature treatment of the fly ash), the fly ash in the grout mix will contribute insignificant quantities to the flammable vapor space concentration.					
Related/Reference Documents (No. & Rev.) SDDR 12348		Description of Change 1) Revised Section 3.2.3.4 of the Specification C-SPP-F-00055, Revision 4. See attached DCF Continuation Sheets (2-3) for details.				
If Yes, DCF cannot be invalidated or modified without CQF approval or reissue of an NCR.  NCR <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      NCR No. N/A			Originator GANGULY, AMITAVA      Date 8/8/2013			
			Physical Work Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      ALARA Review Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Is this a WA DCF? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Additional Reviews			
WA Concurrence, Responsible Engineering Manager N/A		Date 8/8/2013	Org / Dept      Date			
Design Authority N/A		Date 8/8/2013	NARROWS, WILLIAM EDWAR      WRE312      8/9/2013			
Trend Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			HINDS, ROBERT N, JR      WRL200      8/9/2013			
Trend No.      N/A			CHANDER, VIJAYA A      WRJ270      8/8/2013			
Responsible Engineer GANGULY, AMITAVA      Date 8/8/2013			N/A      8/8/2013			
Verifier / Checker TANAYDIN, HALIT EYYUP      Date 8/9/2013			N/A      8/8/2013			
DATR/USQ/TRP No.      USQ-FTF-2013-00283			N/A      8/8/2013			
Design Authority CARROLL, PAUL EUGENE      Date 8/9/2013			N/A      8/8/2013			
Responsible Engineer Manager GUPTA, SURENDRA K      Date 8/9/2013			N/A      8/8/2013			
			FOSC      N/A      8/9/2013			
			UNCLASSIFIED - Does Not Contain Unclassified Controlled Nuclear Information			
			DC/RO      N/A      Date      8/9/2013			
			Guidance / Exemption:      N/A			
<p style="margin: 0;"><b>UNCLASSIFIED</b> DOES NOT CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION</p> <p style="margin: 0;">ADC &amp; Reviewing Officer: <u>David H. Chew</u> Name and Title: <u>David H. Chew</u> Date: <u>August 20, 2013</u></p>						

## DCF CONTINUATION SHEET

**DCF # C-DCF-F-01576, Rev.0**

**Sheet 2 of 3**

Furnishing and Delivery of Tank Closure Grout - Specification # C-SPP-F-00055, Revision 4

### BEFORE CHANGE

#### 3.2.3.4 Fly Ash

- A. Provide a fly ash that meets the requirements of ASTM C 618, Class F except that the loss on ignition shall not exceed six (6) percent. The Ammonia content in the Fly Ash shall be zero.
- B. For each shipment of fly ash used, obtain and retain documentation, such as laboratory test results, showing conformance to the chemical requirements and physical requirements of ASTM C 618 for the Class F fly ash.
  - 1. Documentation shall also show the loss on ignition for the fly ash and the Ammonia content.
  - 2. Submit Standard Fly Ash Documentation.
- C. For the first shipment of fly ash from a manufacturer, obtain and retain documentation, such as laboratory test results, showing conformance to the reactivity with cement alkalis of the supplementary optional physical requirements of ASTM C 618 for the fly ash.
  - 1. Previous laboratory testing, field performance records or equivalent documentation are acceptable.
  - 2. Submit Initial Fly Ash Documentation.

DCF CONTINUATION SHEET

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Sheet 3 of 3

Furnishing and Delivery of Tank Closure Grout - Specification # C-SPP-F-00055, Revision 4

AFTER CHANGE

THIS DCF

3.2.3.4 Fly Ash

- A. Provide a fly ash that meets the requirements of ASTM C 618, Class F except that the loss on ignition shall not exceed six (6) percent. **The fly ash supplier shall ensure that the fly ash is processed to remove Ammonia, using a high temperature treatment [for example, Carbon Burn-out (CBO) process or equivalent process] used as a standard industry practice.**
- B. For each shipment of fly ash used, obtain and retain documentation, such as laboratory test results, showing conformance to the chemical requirements and physical requirements of ASTM C 618 for the Class F fly ash.
  - 1. Documentation shall also show the loss on ignition for the fly ash.
  - 2. Submit Standard Fly Ash Documentation. **The Standard Fly Ash Documentation shall also include fly ash supplier's certification that the supplied fly ash has been processed to remove Ammonia, using a high temperature treatment [for example, Carbon Burn-Out (CBO) process or equivalent process].**
- C. For the first shipment of fly ash from a manufacturer, obtain and retain documentation, such as laboratory test results, showing conformance to the reactivity with cement alkalis of the supplementary optional physical requirements of ASTM C 618 for the fly ash.
  - 1. Previous laboratory testing, field performance records or equivalent documentation are acceptable.
  - 2. Submit Initial Fly Ash Documentation.