Section	Paragraph	2009 NOV 30 PM 4:31 Description
13210	*3A.BA.b*	Water Tank Tightness Test Procedure

OSR 45-11 (Rev 10-22-2009)

Savannah River Site

Supplier Document Status

1. ☒ Work may proceed,

2·0 Sul:mit Final Document work may proceed.

3 D Revise and Resubmit. Work may proceed 'subject to Resolution of Comments.

4.0 Revise and Resubmit. Work may not proceed.

5. ☐ Permission to proceed is not required.

Pkg 27947

Permission to proceed does not constitute aecsptance or approval of design details, calculations, test methods, analysis or materials developed or selected by the supplier, and doas not relieve supplier from full compliance with contractual obligations or release of any 'holds' placed on the contract.

WB00001K-041-B-MDM

Document Category	Date
24.0	11-30-09

Reviewer Ramesh Patel

ENGINEERING DOC. CONTROL - SRS

208 - 3488

Transmittal Letter

Contract # WB00001 K
Submittal No.: **13210-11**
SUbmitlaJ **Date:** *10/20/09*

To: **Westinghouse** Savannah River Company.
Building **730-4B**
Aiken. SC 29808

PROJECT SUMMARY

Project Name: Z Area Vaulls Project
Owner: U.S. Department of **Energy**
Contractor: MOM **Services** Corporation
Contractors Rep.: Martin lunn

A/E Name: **BSRI**
A/E Rep.:
AlE ProJeot:
STR.: Karl WeJs

Submittal **Summary**
Water **Tank** Test Prooedure

Section	Paragraph	Item	Description	Remarks
13210	3.4 B, 4.b	1	Water Tank Test Procedure	3 Copies

Date: 1 By:

THE CROM CORPORATION
PRESTRESSED COMPOSITE TANKS
BUILDING TANKS SINCE 1953

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Joseph C.Swann, PE | J. Brandon Lawhern, PE

November 23, 2009

Mr. Martin Lunn
MDM Services Corporation
227 Gateway Drive
Suite 116C
Aiken, SC 29803

Re: Vault Water Tightness Test Procedure
Two 2,900,000-Gallon Saltstone Storage Vaults
Inquiry No. 4Q9027WA Vault-2 (V-2)
Bechtel Savannah River, Inc.
Savannah River Site
Aiken, South Carolina
Cram Job No. 2008-M-084

Dear Martin,

Below is our proposed leak test procedure as per ACI 350.1-01 Tightness Testing of Environmental Engineering Concrete Structures:

1. Fill vaults through pipe line. Daily check the pipe line for leaks during the filling operation.
2. During the filling operation, visually examine vault walls and footing daily. Record daily examination observations noting the date, time, water depth in vaults, climate conditions, and dampness (if observed) around vaults. The Examiner is to initial the report daily and sign upon completion. The report will be turned in as part of the Water Tightness Test Report (WTIR). If dampness is observed, notify the STR immediately.
3. Once the tank has been filled to the nominal level of 22 feet, allow it to stand for 24 hours, then record depth and date. Seal all roof penetrations to prevent intrusion and minimize evaporation. Over a period of three days, daily record the liquid level using a liquid level measuring device graduated in. increments no greater than 1/8 of an inch. At the same time, visually examine vault walls and footing and record observations. Inspections will include notation of ambient temperature, cloud cover, relative humidity, and surface wind. Record level measurements and visual observations in the WTIR. If the water level drops greater than one increment, immediately notify the STR. The test period may be extended if the level drops by one graduation. Should heavy precipitation occur during the three day period, the test may also be extended or suspended and resumed until precipitation is no longer an issue. Should the liquid level drop more than acceptable and be undetectable by visual means (damp spots), alternate methods to determine the source of a leak will be developed by MDM/Crom and approved by SRR prior to proceeding.
4. Upon achieving a successful test, defined as zero (0) evidence of "wet spots" and zero (0) decrease in water level other than that attributed to evaporation or gage adjustment, provide the Water Tightness Test Report (WTIR) to STR which will include all examination records and any leak repairs that were done to achieve a successful water tightness test.

Sincerely,

THE CROM CORPORATION

Lars Balck, Jr., PE
Senior Vice President

Idas

250 S.VV. 36TH TERRACE. GAINESVILLE, FLORIDA 32607-2889
PHONE 352-372-3436 • FAX 352-372-6209 • wvvvv.cr-orrrc o r-p.c o rri

vault#1
Observations by:

Filling Date-	Weather	Water Level	Observations *

Full vault Date	Weather	Float Level	Observations *

* Note standing water, damp spots. Locate based on clockwise distance from the closest point between the two vaults.

Signature _____
Name _____
Date _____

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