
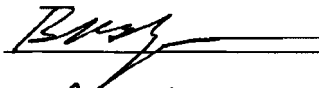


**BSRI SUBCONTRACTOR SURVEILLANCE PLAN
(VAULT 2, P.O. WB00001K)**

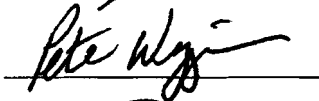
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 Date 12/18/08

BSRI SUBCONTRACTOR SURVEILLANCE PLAN

(VAULT 2)

Purpose:

This plan describes the method BSRI Quality will use for performing oversight of the subcontractors during construction of the Vault 2 project until project turnover. This plan may be revised as needed to reflect job conditions and scope changes as necessary

Scope

BSRI Quality will monitor construction subcontractor's implementation of the requirements in accordance with contractual requirements. The Vault 2 Project is Functional Design Class Production Support (PS) therefore a formal quality program is not required, however individual sections define the quality requirements including quality plans, qualifications, submittals etc, to meet national and state codes and requirements. This plan does not relieve the contractor of any responsibilities but was requested by the Subcontractor Technical Representative (STR) to provide additional assurance of satisfactory project completion.

Requirements

C-SOW- Z-00001 Storage Tanks

C-SPP-Z-00006 Saltstone Vault 2 including Excavation, Liner & Backfill

SURVEILLANCE/OVERSIGHT ACTIVITIES

BSRI will provide oversight of the following activities as a minimum:

Surveillances of the initial activity performance are provided, with follow-up surveillances to be performed on a random basis as determined by project personnel later in the activity to verify continuing quality compliance.

Note: Numbers in (xxxxx) are applicable specification sections

*** Site prep. – (02310)**

Review documentation generated

Verify excavation elevation in accordance with design

*** Mud Mats - (03300)**

Verify lower mat types, sizes, location, elevations, thickness (including fringe configuration of lower mat), concrete correct and properly placed, finished and cured.

Verify performance of concrete receipt testing by the Independent Test Agency (ITA)

Review Batch tickets for correctness, verify formwork erection, concrete placement activities, finishing and curing meet specification requirements.

Review ITA reports for concrete receipt and compressive strength testing to verify specification compliance.

*** HDPE/GCL – (02378 & 02379)**

Verify correct materials and undamaged and properly stored.

Verify installation between mud mats and other locations meets requirements of spec. and manufacturer by surveillance of installation activities to include handling, placement, anchoring to prevent water intrusion, seaming, seam testing and protection.

Review documentation and test reports for spec. compliance.

Batch Plant Activities- (C-SOW-Z-00001)

Verify at the batch the batch plant that materials for type V concrete mixes conform to spec. by review of documentation. Also verify accuracy, calibration status, tolerances, etc of weighing and batch control apparatus and instruments. Monitor batching processes.

Prior to batching, inspect trucks for cleanliness and no excess water at random.

*** Tank erection and Fabrication– (13210)**

Verify materials meet specification requirements.

Verify formwork erection and placement of rebar, water stops and other embedded items are correct.

Verify ITA performs required tests during concrete receipt for 1st pour-each tank and at random thereafter. Verify truck tickets, placement activities, curing and finishing for 1st pour-each tank and at random thereafter.

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Monitor concrete placement activities including lift height, free drop, and flow distance, vibration, finishing and curing as applicable to verify specification compliance.

Review ITA reports for concrete receipt and compressive strength testing.

Verify minimum compressive strength is achieved prior to wall panel erection.

Monitor tank erection activities to verify correct installation of precast sections, seals, closure strips, steel diaphragm, water stops, caulk, rubber pads and prestress wire, etc. Randomly inspect welding to verify specification compliance if performed.

Monitor prestress wire tensioning activities to verify compliance to manufacturer/specification requirement.

Verify correct tension measurement devices are used and are calibrated.

Verify leak testing of completed tanks meets requirements and if required, repairs are performed correctly.

*** Coatings/Shotcrete- (13210)**

Verify correct materials, surface preparation, environmental conditions and installation activities for coatings. Review installer's qualification records.

Verify areas around hilti-bolts are properly sealed.

***Final backfill – (02320)**

Randomly verify placement activities to include material types, placement lift heights and compaction methods and compaction testing.

Monitor compaction activities adjacent to tank walls to verify that correct equipment/techniques are utilized to prevent damage to tanks or HDPE/GCL.

Verify final placement elevation and contours are complete and correct for each tank.

DEFICIENCIES

Deficiencies found during oversight activities will be immediately submitted to the Subcontractor Technical Representative for resolution in accordance with program requirements.

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DOCUMENTATION

Contractor generated records will be reviewed to verify specification compliance during the above activities. All subcontractor quality records submitted per the Quality Verification Documentation Records (QVDR) will be reviewed.

All documentation generated will be processed in accordance with the requirements of site procedures. Documentation generated as a result of this plan will be provided to the Subcontractor Technical Representative for inclusion in the project files.

REFERENCES

CMP-10-1.15 Subcontractor Surveillance

1Q Quality Assurance Manual