


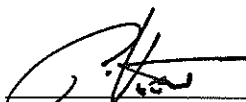



**SRR Subcontractor Surveillance Plan**  
**Furnishing and Delivery of Tank Closure Grout (TK 16)**  
**(P.O. No. SRRA-064184-1)**

Prepared By:  Date 5/26/2015  
Harish Sareen  
SRR Quality Assurance Engineer

Approved By:  Date 6/1/15  
P. R. Wiggins  
SRR Construction Quality

Approved By:  Date 5/27/15  
B. A. Dragon  
Manager, SRR Construction Quality

Approved By:  Date 5/27/15  
R.O. Voegtlen  
SRR Design Authority

Approved By:  Date 6/1/15  
J. W. Rush  
SRR Control Account Manager

**Purpose:**

This plan describes the method SRR Construction Quality Services will use for performing oversight of the subcontractor during furnishing and delivery of tank closure grout for Tank 16 in H Area. This plan does not relieve the subcontractor of any responsibility but is intended to help assure satisfactory completion of this project. This plan will be revised, as need, to reflect changes scope or field conditions and will remain in effect until project close-out.

**Scope:**

SRR Construction Quality Services will monitor subcontractor activities associated with contractual requirements and procurement specification C-SPP-F-00055, Furnishing and Delivery of Tank Closure Grout. Requirements are selected from the contract specification sections, related subcontractor approved submittals, approved DCFs, and reference National Codes and Standards. SRR Construction Quality Services will review or inspection subcontract personnel activities, material, equipment, test results, and documentation at select stages of tank grouting.

The Plan is divided in two sections, Section 1 – QC Surveillance, and Section 2 QA assessments. QC will perform surveillance activities and Quality Assurance Engineering (QEA) will perform the QA assessments.

**Section 1      QC Surveillance**

SRR QC Engineer(s) will perform surveillance activities in accordance with contractual requirements and procurement specification C-SPP-F-00055. Surveillances will be performed initially and/or on a random basis on the following attributes to verify conformance to the procurement specification, procedures, applicable codes and standards and submittals. The numbers in parenthesis are the applicable sections of Procurement Specification, C-SPP-F-00055. SRR QC will develop inspection records, as needed, to document these surveillances.

Surveillance consist of monitoring or observing work-in-progress to verify whether an item or activity conforms to specified requirements, and to identify any process improvements. These activities require that QC Engineer(s) be present in the work area in order to effectively monitor the designated activity for compliance with prescribed requirements.

**SRR QC will perform surveillance of the following attributes (as applicable):**

- 1) Inspection of Production Mixes
  - Verify batch ticket grout mix matches specification requirements (3.1.2, Attachment 5.5)
  - Verify point of delivery water and admixture additions do not exceed the maximum (3.2.1.2.C, D, and E, Attachment 5.5)
  - Verify grout discharge is complete within 90 minutes and before 300 revolutions (4.1.4.1.D)
- 2) Grout Inspection and Testing,
  - Verify grout samples are taken as required (4.1.4, 4.1.5)
  - Verify grout testing is performed as required (Attachment 5.3)
  - Verify testing personnel are qualified and test equipment is calibrated as required (4.2.1)

- 3) Material Testing and Control  
Verify Supplier is testing fine and course aggregate as required (4.1.3.1, 4.1.3.2)
- 4) Batch Procedures  
Verify truck revolution counter is reset to zero at the batch plant (3.1.2)  
Observe truck washing at Batch Plant as necessary to verify remnants of previous batches and wash water is discharged (4.1.4.3)  
Verify admixtures introduced to mix after initial truck loading are correct quantity and properly added (3.2.1.2)
- 5) Receipt inspection  
Verify grout receipt and placement is monitored and pertinent data is recorded  
Verify grout testing is conducted to meet RICP requirements  
Verify that grout testing results meet requirements of specification

## **Section 2      QA ASSESSMENT**

SRR QAEs will perform assessment activities in accordance with contractual requirements and procurement specification C-SPP-F-00055. Assessments will be performed initially and/or on a random basis on the following attributes to verify conformance to the procurement specification, procedures, applicable codes and standards and submittals. The numbers in parenthesis are the applicable sections of Procurement Specification, C-SPP-F-00055. SRR QA will develop assessment checklists and reports, as needed, to document these assessments.

Assessment will consist of review or oversight by QAE personnel of subcontract personnel activities, material, equipment, test results, and documentation at select stages of tank grouting.

### **SRR QA will perform assessments of the following attributes (as applicable):**

- 1) National Ready Mixed Concrete Association (NRMCA) Certification  
Verify Batch Plant Certification to NRMCA is kept current (3.1.1.2)
- 2) SRR Testing Laboratories Services  
Verify testing is performed as required in Attachment 5.3
- 3) Batch Tickets  
Periodically review documentation for compliance to requirements (3.1.2, 3.2.1.2.C, 3.2.2, 4.1.4.1)
- 4) Material Testing and Control  
Verify Supplier is testing material in accordance with requirements (3.2.3, 4.1.3.1, 4.1.3.2)
- 5) M&TE  
Verify M&TE are calibrated in accordance with requirements (4.1.1.2)

- 6) Report Requirements  
Periodically verify inspection reports and test results are maintained and submitted to SRR (Attachment 5.2)
- 7) Quality Control Plan  
Verify Vendor Quality Control Plan has been approved for this project (3.4.2)
- 8) Flow down of requirements  
Verify proper flow down of technical requirements from the Grout Supplier to subcontractors (Section 3.4.2.5)

**Discrepancies:**

Discrepancies found during performance of surveillances/assessments will be documented and processed in accordance with Construction Manual 1E6, CMP 10-1.15, Subcontractor Surveillance or Assessment Reports.

**Documentation:**

Contractor records will be reviewed to verify compliance with C-SPP-F-00055, Furnishing and Delivery of Tank Closure Grout. Documents generated will be processed in accordance with Construction Manual 1E6, CMP 10-1.15, Subcontractor Surveillance and if applicable CMP 10-01.7, Control of Quality Assurance Records.

**References:**

C-SPP-F-00055, Furnishing and Delivery of Tank Closure Grout  
Construction Manual 1E6, CMP 10-1.15, Subcontractor Surveillance  
Construction Manual 1E6, CMP 10-01.7, Control of Quality Assurance Records  
Manual 1Q, Quality Assurance Manual  
SRR-LWE-2014-00150, Tank 16 Closure Assurance Plan