

## Procurement Specification Cover Sheet

1. Title			<b>UNCLASSIFIED</b> <b>DOES NOT CONTAIN</b> <b>UNCLASSIFIED CONTROLLED</b> <b>NUCLEAR INFORMATION</b>  <b>DC &amp; Reviewing Official:</b> <u>KRIS SRIVASTAVA</u> <i>P.T. Eng.</i> (Name and Title) <b>Date:</b> <u>2/23/11</u>
Specification for Procurement of Portland Type II Cement for the SPF (U)			
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# Standard Procurement Specification Revision History Sheet

[illegible]

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## **1.0 SCOPE**

### **1.1 General Description of the Item**

The Supplier/Vender shall supply Portland Type II Cement to the Saltstone Facility at Savannah River Site with a Certificate of Analysis to ASTM C-150 with an amendment as specified in the 'Item Requirements' section.

## **2.0 REFERENCES**

### **2.1 Definitions**

Batch / Lot	A uniform quantity of material processed or produced
COA	Certificate of Analysis
EDR	Engineering Document Requirements
QVDR	Quality Verification Documentation Requirements
SDDR	Supplier Deviation Disposition Request
SPF	Saltstone Processing Facility
SRS	Savannah River Site
Supplier	An Awardee of this contract

### **2.2 Codes/Standards/Orders/Regulations**

The following codes, standards, and regulations apply to the extent identified in this procurement specification. Supplier use of any other edition, revision, or issue than specified requires the SRS's approval:

- \*ASTM C-150-09 Standard Specification for Portland Cement
- \*ASTM C-114-10 Test Methods for Chemical Analysis of Hydraulic Cement
- \*ASTM C-109-08 Test Method for Compressive Strength of Hydraulic Cement Mortars
- \*ASTM C-191-08 Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
- \*ASTM C-151-09 Test Method for Autoclave Expansion of Hydraulic Cement
- DOT Hazardous Material Regulations, Title 49 (49 CFR), Parts 171 through 180.
- ASME NQA-1-2000, Quality Assurance Requirements for Nuclear Facility Applications.
- ANSI/ISO/ASQ Q9001 2000 or 2008, Quality Management Systems – Requirements.
- ANSI/ASQC E4-2004, Quality Systems for Environmental Data and Technology Programs.

- \* For those codes and standards identified with asterisks (\*), other edition date and or addenda may be used if there is no functional change in the properties of the material type specified to be used. The Supplier is responsible for making this determination.

### **2.3 Applicable Documents**

- SRS Form OSR 45-4, Supplier Deviation Disposition Request (SDDR)
- SRS Form OSR 45-4A, Instructions

### **3.0 ITEM REQUIREMENTS**

The item requirements for the Portland Type II Cement shall not be changed without consultation with subject matter experts at SRS. It is important that any changes to the item requirements be evaluated with respect to impact on Grade Portland Type II Cement performance as well as impacts to downstream processes.

#### **3.1 Performance Requirements**

3.1.1 The supplier shall provide Portland Type II Cement that meets the following chemical and physical requirements:

##### **3.1.1.1 Chemical Requirements**

The Portland Type II Cement shall conform to the requirements as to chemical composition prescribed in Table 1 of ASTM C-150.

##### **3.1.1.2 Physical Requirements**

The Portland Type II Cement shall conform to the requirements to the physical composition prescribed in Table 3 of ASTM C150 with the follow exception: no set time per Gillmore or Vicat test is required.

3.1.2 The supplier shall provide a Certificate of Analysis for each shipment of Portland Type II Cement delivered to SRS.

3.1.3 The Supplier shall inspect each shipping container for cleanliness and shall remove all foreign materials found within the shipping container. Shipping containers shall not be loaded if the inner surfaces are wet and/or liquids are present. The Supplier shall supply a Shipping Container Inspection and Validation Report with each shipment.

3.1.4 SRS will notify the supplier of any out-of-specification condition identified by SRS. The supplier shall be required to take back any out-of-specification material at the supplier's expense and replace it with acceptable material.

3.1.5 The supplier shall provide a shipment record (Bill of Lading) for each shipment.

#### **3.2 Design Requirements**

The Portland Type II Cement shall be ground with proper amount of gypsum and diethylene glycol grinding aid. SRS shall be notified if grinding agents are changed.

#### **3.3 Service Conditions**

The Portland Type II Cement will be stored in an outdoor covered silo at SRS and be kept at the ambient temperature.

#### **3.4 Quality Requirements**

The supplier shall implement his standard commercial Quality Assurance Program during the production of cement for the Saltstone Facility. The supplier may choose to develop his program based on ASME NQA-1, or another recognized QA standard such as,

ANSI/ISO/ASQ Q9001, ANSI/ASQC E4, etc. The concrete grout produced by the Saltstone Facility will be used to trap mildly radioactive and hazardous material and is not Safety Related. The cement is expected to have chemical and physical properties defined by the performance requirements of paragraph 3.1 above. A commercial product shipped in a clean truck, with certificate of analysis based on tests as required by paragraph 3.8 is appropriate for this Saltstone use.

The supplier's QA Program or procedures shall describe the supplier's process used to produce a quality product and generate the deliverable documentation required by paragraph 3.8 below. It shall provide information about test methods used, calibration of measurement and test equipment used, and training and qualification of personnel performing tests and approving results. The supplier's record retention process shall be discussed. Deviation requests for nonconforming material are to be processed in accordance with paragraph 3.11 below.

The supplier is to submit his Quality Assurance Program or procedures for review and approval with the bid.

**3.5 SRS Furnished Material, Equipment, Services**

None

**3.6 Schedule**

Estimate three trucks per day two days per week of production. SRS (Saltstone Operations/ Facility Support) will schedule the number of truck loads and delivery dates.

**3.7 Personnel Qualifications/Certification**

Supplier personnel working on production of Portland Type II Cement according to this procurement specification shall be trained and qualified according to the requirements of the supplier's quality control program.

**3.8 Deliverables (includes submittals)**

Items are to be delivered to SRS at the address below:

Savannah River Site  
Saltstone Facility  
Purchase Order # (See SRS Purchase Order)  
Aiken SC 29808

Quality Verification documents, listed in Attachment 2, accompanying the Portland Type II Cement composite lots shall be submitted to SRS at the time of shipment receipt. Documents shall be itemized according to the listing in Attachment 2. Supplier shall include a copy of the QVDR with each shipment. Envelope shall be marked "Receipt Inspection Documentation".

Attachment 2 includes:

- Material Safety Data Sheet (MSDS) for Portland Type II Cement
- Tanker Truck Cleanliness Certificate

- Certificate of Analysis of Portland Type II Cement

This documentation shall be supplied as specified below:

#### 3.8.1 Tanker Truck Cleanliness Certificate

A Certificate of Tanker Truck Cleanliness shall be signed by Supplier attesting to the cleanliness of the Tanker Truck.

Tanker truck cleanliness certificate shall have the following Information typed or legibly written in black, waterproof ink:

- 1) SRS P.O. Number
- 2) Identification of method used to maintain cleanliness
- 3) Tanker truck number
- 4) Certification that the tanker truck was cleaned prior to loading
- 5) Legible signature of the supplier representative

#### 3.8.2 Certificate of Analysis of Grade Portland Type II Cement

The Certificate of Analysis (COA) shall be signed by an authorized person of the Supplier's management staff attesting the validity of the reported information. The COA shall have the following information typed or legibly written in black, waterproof ink:

- SRS P.O. Number.
- Description of the material being documented.
- Certification that material meets the purchase order requirements (chemical requirements, physical requirements, and grinding agents used in manufacturing process)
- Statement that material complies with ASTM C-150.

#### 3.8.3 Certificate of Analysis of Raw Materials

There is no Certificate of Analysis (COA) of Raw Materials required for the procurement of this material.

#### 3.8.4 Delivery Instructions for Portland Type II Cement

Inspect truck hoses to assure no debris are present prior to transferring to silos. |

After shipping containers are loaded, openings into each container shall be closed and sealed using seals to prevent tampering or the inadvertent leakage of rainwater. At a minimum, seals shall be affixed to loading hatches and discharge ports.

Portland Type II Cement shall be delivered in standard truck tankers that are pneumatically discharged through a typical 4" I.D. pipe, by a PTO blower with a muffler mounted on the truck. Truck mounted PTO blowers with a muffler shall have a minimum capacity of 725 ICFM @ 16 psig, by design. The Supplier/Vender may use blowers with a muffler with a capacity of 550 ICM @ 16 psig, if the

Supplier/Vender accepts full responsibility for unsuccessful evolutions to unload the Portland Type II Cement

Disruptions or plugging during off-loading due to truck equipment problems shall be the sole responsibility of the Supplier/Vender.

3.8.5 All transmittals, EDR submittals, and SDDR correspondence shall be sent to:

Savannah River Site  
Document Control Center, Bldg. 704-1N  
Aiken, SC 29808  
Purchase Order (See SRS Purchase Order)

3.8.6 All transmittals, submittals, and correspondence shall be uniquely identified and reference the following information:

Supplier's Order Number  
SRS Purchase Order Number  
Project Number: (See SRS Purchase Order)  
Project Title (See SRS Purchase Order)

3.8.7 All other communications shall be directed to:

Savannah River Site  
Building 730-4B  
Aiken, SC 29808  
Attention: Linda Smith

3.8.8 Engineering Document Requirements (EDR), Attachment 1, shall be submitted prior to start of work.

Attachment 1 includes:

- 1) Certificate of Analysis of Portland Type II Cement.
- 2) Supplier's Quality Assurance Program (Section 3.4)

Engineering documents will be reviewed and processed by SRS within 10 calendar days from the date of receipt. The documents will be returned to the supplier with the status as follows:

Status 1: Work may proceed  
Status 2: Submit final documentation. Work may proceed  
Status 3: Revise and resubmit. Work may proceed subject to resolution of indicated comments.  
Status 4: Revise and resubmit. Work may not proceed.  
Status 5: Permission to proceed not required.



- 3.8.9 The supplier shall incorporate changes, as required per SRS comments, and resubmit corrected Engineering Documents for review within **10** calendar days from the date of receipt. The supplier shall not change Status 1 Engineering Documents without notifying SRS and resubmitting the Engineering Document.
- 3.8.10 Assignment of Status 1 to the Engineering Documents by SRS will not relieve the supplier of any part of their obligation to meet all requirements of the specification. In addition, the same will not relieve the supplier of their responsibility for the correctness of such Engineering Documents, and the adequacy and suitability of material and equipment represented thereon for the intended function.
- 3.8.11 The Supplier shall retain copies of the following documents for the production of the Portland Type II Cement for a minimum of three years from the date of shipment:
- a) Certificates of Analysis.
  - b) Contract documents including this specification and any associated SDDR.
  - c) Engineering or quality documents required as submittals by this specification.
  - d) Any log, test, examination, nonconformance, etc. document generated for this specification and not required as a submittal.
  - e) Any other documents identified in this specification for retention.

All retained records shall be accessible to SRS upon request. Disposition of record copies after the retention period shall be in accordance with the Supplier's records management program.

If the delivered Portland Type II Cement does not meet the procurement specification per this document, and the Supplier wishes to rework it to the specifications, he shall submit a written rework plan along with a SDDR to SRS for approval prior to implementing the plan. SRS reserves the right to refuse to accept any Portland Type II Cement that has been reworked without written approval from SRS.

- 3.8.12 The use of 100% recycled paper for engineering submittals is strictly prohibited. Recycled content up to 25% is acceptable.

### **3.9 Packaging, Handling, Shipping, and Storage Requirements**

#### **3.9.1 Packaging for Shipment**

The Portland Type II Cement shall be delivered in clean tanker trucks.

The supplier shall be responsible for inspecting each tanker truck before filling to ensure that it is clean, contains no debris, visible liquid or other contamination. The Supplier shall include a tanker truck cleanliness certificate with the shipment as required in Section 3.8.1 above.

#### 3.9.1.1 Verification of Tanker Truck Cleanliness

A signed statement that each of the tanker trucks used to store and delivery the Portland Type II Cement was clean of all contaminants is required with the shipment.

#### 3.9.2 Handling

The Supplier shall be responsible for the tanker trucks until the finished product is delivered to SRS.

#### 3.9.3 Storage (For SRS information only)

The Portland Type II Cement will be stored outdoors in closed silo to prevent water intrusion.

#### 3.9.4 Shipping

Portland Type II Cement shipped in tanker trucks shall be in accordance with the DOT Title 49 regulations.

#### 3.9.5 Savannah River Site Access

Trucks without badged drivers must report to the Badging Facility located on Savannah River Site Road "A-1" to receive a badge before entering the Site Gate located on Hwy 19. The badging process will take an additional 60-90 minutes at the Site. Drivers not receiving a permanent badge must also report to the Badging Facility to receive a temporary badge and will require an escort at all times while on the Savannah River Site.

### 3.10 Marking and Identification Requirements

3.10.1 Each tanker truck shall be clearly marked in accordance with the DOT Title 49 regulations.

3.10.2 Supplier shall provide instructions, if any, for storage and use of the Portland Type II Cement at the SRS facility.

### 3.11 Deviations

3.11.1 After procurement has been awarded, the Supplier shall submit to SRS, for review and approval, a "Supplier Deviation Disposition Request" (SDDR) form for each exception taken to this specification. Whenever the Supplier identifies a nonconforming condition for which the Supplier's recommended disposition is "use-as-is" or "repair", the Supplier shall also document the condition using the SDDR form. The Supplier shall submit SDDR forms to SRS Document Control, for review and approval, as stated in the Deliverables Section (Section 3.8.6).

3.11.2 For each exception, the Supplier shall:

- 1) identify the specification and revision number;
- 2) identify the criteria that cannot be met by item and section number;
- 3) present an explanation for the deviation,
- 4) present a proposal for resolution of the deviation and,
- 5) present a price adjustment for resolution of the deviation.

3.11.3 The Supplier shall not perform any work or make delivery of any item for which an SDDR is submitted until written authorization is received from SRS. A nonconformance shall be identified on a SDDR. Supporting technical justification shall be included when requesting approval of a "Use-as-is" or "Repair (Rework)" disposition from SRS.

#### **4.0 ACCEPTANCE OF ITEM**

##### **4.1 SRS Inspection, Testing, and Surveillance Requirements**

SRS shall be provided reasonable access to the Supplier's facilities for the purposes of inspections, surveillances, and audits. Accessibility includes reviewing, monitoring, and auditing of contracted in-progress work, including associated documentation.

##### **4.2 Final Acceptance Method**

Prior to unloading the shipment, SRS Receiving Inspection (RI) will grant final acceptance after the following is confirmed:

- All documentation, as listed in Section 3.8 has been received, reviewed, and accepted.
- The quantity of Portland Type II Cement ordered.

#### **5.0 ATTACHMENTS**

1. Engineering Documents Requirements Form with Instructions (2 pages)
2. Quality Verification Document Requirements Form with Instructions (2 pages)
3. Supplier Quality Assurance Program Requirements (1 page)

Attachment No. 1  
Revision No. 3  
Spec/Req'n No. X-SPP-Z-00004  
Page 1 of 2

# Engineering Document Requirements Form Instructions

**Purpose** The Engineering Document Requirements (EDR) form is prepared by the originator, establishes a basis for actions required of a Supplier and provides the schedule for the submittal of engineering documents by the Supplier.

## Legend Entry

No.	Information Required
1	Document category number – see below.
2	Applicable specification number and appropriate paragraph.
3	Description corresponding to document category number.
4	Permission to proceed with fabrication or other specific processes is marked yes, if required.
5	List a milestone after award i.e., prior to fabrication, prior to test, prior to shipment, or with shipment that the listed document is to be submitted by Supplier.
6	Number of copies required for submittal.
7	Reproducible, Mylar, Vellum, etc.
8	Enter remarks when appropriate.

## Document Category Number and Descriptions

- 1.0 Drawings
  - 1.1 Outline Dimensions, Services, Foundations and Mounting Details – Drawings providing external envelope, including lugs, centerline(s), location and size for electrical cable, conduit, fluid, and other service connections, isometrics and details related to foundations and mountings.
  - 1.2 Assembly Drawings – Detailed drawings indicating sufficient information to facilitate assembly of the component parts of an equipment item.
  - 1.3 Shop Detail Drawings – Drawings which provide sufficient detail to facilitate fabrication, manufacture, or installation. This includes pipe spool drawings, internal piping and wiring details, cross-section details and structural and architectural details.
  - 1.4 Wiring Diagrams – Drawings which show schematic diagram equipment, internal wiring diagrams, and interconnection wiring diagram for electrical items.
  - 1.5 Control Logic Diagrams – Drawings which show paths which input signals must follow to accomplish the required responses.
  - 1.6 Piping and Instrumentation Diagrams – Drawings which show piping system scheme and control elements.
- 2.0 Parts Lists and Costs – Sectional view with identified parts and recommended spare parts for one year's operation and specified with unit cost.
- 3.0 Complete SRS Data Sheets – Information provided by Supplier on data sheets furnished by SRS.
- 4.0 Instructions
  - 4.1 Erection/Installation – Detailed written procedures, instructions, and drawings required to erect or install material or equipment.
  - 4.2 Operations – Detailed written instructions describing how an item or system should be operated.
  - 4.3 Maintenance – Detailed written instructions required to disassemble, reassemble and maintain items or systems in an operating condition.
  - 4.4 Site Storage and Handling – Detailed written instructions, requirements and time period for lubrication, rotation, heating, lifting or other handling requirements to prevent damage or deterioration during storage and handling at jobsite. This includes shipping instruction for return.
- 5.0 Schedules: Engineering and Fabrication/Erection – Bar charts or critical path method diagram which detail the chronological sequence of activities, i.e., Engineering submittals, fabrication and shipment.
- 6.0 Quality Assurance Manual/Procedures – The document(s) which describe(s) the planned and systematic measures that are used to assure that structures, systems, and components will meet the requirements of the procurement documents.
- 7.0 Seismic Data Reports – The analytical or test report which provides information and demonstrates suitability of material, component or system in relation to the conditions imposed by the stated seismic criteria.
- 8.0 Analysis and Design Reports – The analytical data (stress, electrical loading, fluid dynamics, design verification reports, etc.) which demonstrate that an item satisfies specified requirements.
- 9.0 Acoustic Data Reports – The noise, sound and other acoustic vibration data required by the procurement documents.
- 10.0 Samples
  - 10.1 Typical Quality Verification Documents – A representative data package which will be submitted for the items furnished as required in the procurement documents.
  - 10.2 Typical Material Used – a representative example of the material to be used.
- 11.0 Material Descriptions – The technical data describing a material which a Supplier proposes to use. This usually applies to architectural items, e.g., metal siding, decking, doors, paints, coatings.
- 12.0 Welding Procedures and Qualifications – The welding procedure, specification and supporting qualification records required for welding, hard facing, overlaying, brazing and soldering.
- 13.0 Material Control Procedures – The procedures for controlling issuance, handling, storage and traceability of materials such as weld rod.
- 14.0 Repair Procedures – The procedures for controlling materials removal and replacement by welding, brazing, etc., subsequent thermal treatments, and final acceptance inspection.
- 15.0 Cleaning and Coating Procedures – The procedures for removal of dirt, grease or other surface contamination, and preparation and application of protective coatings.
- 16.0 Heat Treatment Procedures – The procedures for controlling temperatures and time at temperature as a function of thickness, furnace atmosphere, cooling rate and methods, etc.
- 19.0 UT – Ultrasonic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by the use of high frequency acoustic energy.
- 20.0 RT – Radiographic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by x-ray or gamma ray expose of photographic film.
- 21.0 MT – Magnetic Particle Examination Procedures – Procedures for detecting surface or near surface discontinuities in magnetic materials by the distortion of an applied magnetic field.
- 22.0 PT – Liquid Penetrant Examination Procedures – Procedures for detecting discontinuities in materials by the application of a penetrating liquid in conjunction with suitable developing materials.
- 23.0 Eddy Current Examination Procedures – Procedures for detecting discontinuities in materials by distortion of an applied electromagnetic field.
- 24.0 Pressure Test – Hydro, Air, Leak, Bubble or Vacuum Test Procedures – Procedures for performing hydrostatic or pneumatic structural integrity and leakage tests.
- 25.0 Inspection Procedures – Organized process followed for the purpose of determining that specified requirements (dimensions, properties, performance results, etc.) are met.
- 26.0 Performance Test Procedures – Test performed to demonstrate that functional design and operational parameters are met.
  - 26.1 Mechanical Tests – e.g., pump performance, data, valve stroking, load, temperature rise, calibration, environmental, etc.
  - 26.2 Electrical Test – e.g., impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.
- 27.0 Prototype Test Reports – Reports of a test which is performed on a standard or typical examination of equipment or item, and which is not required for each item produced in order to substantiate the acceptability of equal items. This may include tests which result in damage to the item(s) tested.
- 28.0 Personnel Qualification Procedures – Procedures for qualifying welders, inspectors and other special process personnel.
- 29.0 Supplier Shipping Preparation Procedures – Procedures used by a Supplier to prepare finished materials or equipment for shipment from its facility to the jobsite.

1. Document Category Number	2. Specification Paragraph Reference	3. Document Description	4. SSR Release	5. SRS Receipt Inspection Check-In	6. Remarks	7. DOC Supplier Page Count
17.1	3.8	MSDS for Portland Type II Cement			To be submitted with shipment	
15.0	3.8	Tanker Truck Cleanliness Certificated			To be submitted with shipment	
28.0	3.8	Portland Type II Cement COA			To be submitted with shipment	
8. Supplier's Order No.		9. Supplier's Part		10. Supplier's Part Name		11. Quantity
12. PO No.		13. SRS Line/Equip Tag or Code No.		14. SRS Part Name		
15. Supplier's Conformance Statement We certify that the work and required documents meet the requirements of the procuring documents.						
<div style="display: flex; justify-content: space-between;"> <span>_____</span> <span>_____</span> <span>_____</span> </div> <p style="text-align: center;">Authorized Supplier Signature                      Title                      Date</p>						
16. Source Surveillance Representative at Supplier's Facility  Work was released based on satisfactory completion of quality surveillance and review of documentation. <div style="margin-left: 20px;"> <input type="checkbox"/> With Authorized Deviations Noted in Column 6  <input type="checkbox"/> No Deviations           </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <span>_____</span> <span>_____</span> </div> <p style="text-align: center;">Signature of SSR                      Date</p>						
17. Receiving Inspection at SRS  This form and the quality verification documents referenced hereon have been received and their relationship to the hardware verified. <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <span>_____</span> <span>_____</span> </div> <p style="text-align: center;">Signature of SRS Inspector                      Date</p>						

# Quality Verification Document Requirements Form Instructions

Attachment No. 2  
Revision No. 3  
Spec/Req'n No. X-SPP-Z-00004  
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**Purpose** The Quality Verification document Requirements (QVDR) is initiated by SRS and completed by the Supplier when providing quality verification documents. The QVDR is a multipurpose form to

Transmit quality verification documents from the Supplier,  
Provide evidence of SSR release of documentation and /or work, and  
Provide evidence of an SRS inspection check of documentation received at SRS.

## SRS Entries

Entry No.	Information Required
1	Enter Document Category Number – see below.
2	Enter Specification Number and Paragraph Reference.
3	Enter Description corresponding to the Document Category Number.
4	SSR to initial upon item release.
6	Enter "Remarks: as appropriate.
16	SSR and dates release.

## Field Entries

Entry No.	Information Required
5	SRS inspector at the jobsite to complete check-in.
17	The SRS inspector will review the quality verification documentation package. If found satisfactory, he signs and dates the check-in statement.

## Supplier Entries

Entry No.	Information Required
7	Enter number of pages of quality verification document being submitted.
8	Enter information required.
9	Enter information required.
10	Enter information required.
11	Enter the quantity of units covered by the documents submitted. For each item on Entry No. 12 being released, provide a separate copy of this completed form and the supporting quality verification documents.
12	Enter information required.
13	Enter information required.
14	Enter information required.
15	Supplier – Signature of an employee authorized to sign such documents.

## Document Category Numbers and Descriptions

- 12.0 Welding Verification Reports – Reports of welding performed to include weld identification, and certification that qualified welding procedures and welders were used.
- 13.0 Material Verification Reports – Reports relative to material which confirm, substantiate or assure that an activity or condition has been implemented in conformance with code and material specifications imposed by the procurement documents.
- 14.0 Major Repair Verification Reports – Reports may include weld repair locations (maps), material test reports for filler metal, pre- and post-weld heat treatment records, NDE records, etc. The resolution of whether a repair is major or not is an SRS responsibility.
- 15.0 Cleaning and Coating Verification Reports – Reports include a certification of visual examination for surface preparation, surface profile, materials, etc.; and also humidity data, temperature data and coating thickness data as required by the procurement documents.
- 16.0 Heat Treat Reports – Reports normally include furnace charts and similar records which identify and certify the item(s) treated, the procedure used, furnace atmosphere, time at temperature, cooling rate, etc.
- 17.0 Material Property Reports
  - 17.1 MTR (Material Test Reports) – These reports include all chemical, physical, mechanical, and electrical property test data required by the material specification and applicable codes. These are applicable to cement, concrete, metals, cable jacket materials, rebar, rebar splices, etc.
  - 17.2 Impact Test Data – Reports of Charpy or drop weight tests including specimen configuration, test temperature and fracture data.
  - 17.3 Ferrite Data – Reports of the ferrite percentage for stainless steel materials used, including castings and welding filler metals as deposited.
  - 17.4 Materials Certificate of Conformance – Documents which certify conformance to the requirements of the applicable material specification.
  - 17.5 Electrical Property Reports – Reports of electrical characteristics, e.g., dielectric, impedance, resistance, flame tests, corona, etc.
- 18.0 Code Compliance – Verifying documents (such as data Forms U-1, M-2, State, etc.), which are prepared by the manufacturer or installer and certified by the Authorized Code Inspector.
- 19.0 UT – Ultrasonic Examination and Verification Reports – Examination results of certain characteristics of discontinuities and inclusions in material by the use of high frequency acoustic energy.
- 20.0 RT – Radiographic Examination and Verification Reports – Examination results of certain characteristics of discontinuities and inclusions in materials by x-ray or gamma ray exposure of photographic film, including film itself.
- 21.0 MT – Magnetic Particle Examination and Verification Reports – Examination results of surface (or near surface) discontinuities in magnetic materials by distortion of an applied magnetic field.
- 22.0 PT – Liquid Penetrant Examination and Verification Reports – Examination results of surface discontinuities in materials by application of a penetrating liquid in conjunction with suitable developing techniques.
- 23.0 Eddy Current Examination and Verification Reports – Examination results of discontinuities in material by distortion of an applied electromagnetic field.
- 24.0 Pressure Test – Hydro, Air, Leak, Bubble or Vacuum Test and Verification Reports – Results of hydrostatic or pneumatic structural integrity and leakage tests.
- 25.0 Inspection and Verification Reports – Documented findings resulting from an inspection.
- 26.0 Performance Test and Verification Reports – Reports of Test Results
  - 26.1 Mechanical Test, e.g., pump, performance data, valve stroking, load, temperature rise, calibration, environment, etc.
  - 26.2 Electrical Tests, e.g., load, impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.
- 27.0 Prototype Test Report – Report of the test which is performed on a standard or typical example of equipment, material or item, and which is not required for each item produced in order to substantiated the acceptability of equal items. This normally includes tests which may, or could be expected to, result in damage to the item(s) tested.
- 28.0 Certificate of Conformance – A document signed or otherwise authenticated by an authorized individual certifying the degree to which items or services meet specified requirements.

# Supplier Quality Assurance Program Requirements

## Note to the CTF/CQF:

Level 1 - Procurements require verification of the supplier's quality program through the performance of an evaluation or audit that compares against the national or international consensus standard designated in Section A.

Level 2 - Procurements that invoke a supplier quality assurance program, may apply the same consensus standard verification process as designated in Section A, otherwise designate evaluation methods in Section C. (Ref. 1Q, 7-2; 1Q, 18-3; and 3E, 1.1)

## Section A

National Consensus Standards for Supplier Quality Program Requirements are identified, but not limited, to the ones below:

- ☐ ASME/NQA -1 Part 1 - Nuclear Quality Assurance Program Requirements (Pages 2-4 must be completed)
- ☐ ISO 17025 (Calibration/Testing Standard)
- ☐ NQA-1, Part II, Subpart 2.7 (Computer Software)
- ☐ ASME Section VIII Division I (Appendix 10)
- ☐ Other \_\_\_\_\_
- ☐ Other \_\_\_\_\_
- ☐ Other \_\_\_\_\_

## Section B

### Clarifications/Exceptions (as needed)

Compliance with ASME NQA-1 is not required for this contract. The supplier's standard commercial Quality Assurance Program may be based on ASME NQA-1, or another recognized QA standard such as, ANSI/ISO/ASQ Q9001, ANSI/ASQC E4, etc. The concrete grout produced by the Saltstone Facility will be used to trap mildly radioactive and hazardous material and is not Safety Related. The product is expected to have chemical and physical properties defined by the performance requirements of paragraph 3.1. A commercial product shipped in a clean truck, with certificate of analysis based on tests as required by paragraph 3.8 is appropriate for this Saltstone use. Supplier Surveillance activities will be optional.

## Section C

For Level 2 procurements, methods of evaluating supplier's quality assurance program are:

1. The supplier will provide a copy of their Quality Assurance Manual for an adequacy/concurrence review, and
2. One or more of the boxes marked below will also be applied.

- ☐ Performance of an audit as defined in Section A
- ☒ Document submittals identified on EDR document (e.g., process procedures, welder qualifications, etc.)
- ☐ Submittal of current applicable ASME certificate
- ☒ Supplier surveillance activities
- ☒ Receiving Inspection
- ☐ Other \_\_\_\_\_
- ☐ Other \_\_\_\_\_