



999999
S-19

SAVANNAH RIVER REMEDIATION LLC



Savannah River Site, Aiken, SC 29808

August 6, 2010

SRR-ESH-2010-00030

Mr. J. M. McCain, Jr
Division of Mining and Solid Waste Management
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1208

SALTSTONE DISPOSAL FACILITY GROUT SAMPLING (U)

References:

1. Class 3 Landfill Permit for Savannah River Site (SRS) Z-Area Saltstone Disposal Facility, Facility ID No. 025500-1603, Aiken County, 9/9/08
2. Saltstone Grout Sampling, ESH-EPG-2004-00318, 12/7/04

The propose of this memorandum is to inform the South Carolina Department of Health and Environmental Control (SCDHEC) of a change in the grout sampling strategy specified in Reference 1.

Tank 241-950H (Tank 50H), located in the H-Area Tank Farm, serves as a collection point and feed storage location for salt solution, which is acceptable for treatment and disposal at the Saltstone Production and Disposal Facility (SPF/SDF). In order to support the Savannah River Site (SRS) tank closure mission, Tank 50H must be returned to higher curie waste service. The SPF process will be modified, in accordance with a SCDHEC Industrial Wastewater Treatment Facility Construction Permit to support Tank 50H being returned to higher curie waste service.

The proposed industrial wastewater treatment facility modifications to the SPF process include:

- Installation of two 60,000 gallon (working capacity) Salt Solution Receipt Tanks (SSRTs) to replace Tank 50H and to receive salt solution,

WWW.SRREMIATION.COM
BUILDING 730-4B
TEL 803.952.6560
FAX 803.952.7982

- Installation of necessary ancillary equipment to transfer salt solution to the SPF process,
- Installation of an enclosure structure to provide shielding for tanks and ancillary equipment, and
- Establishment of the existing Salt Feed Tank (SFT) as the primary tank to receive drain water from the SDF, flush water, and other SPF process drains.

At the present time salt solution sampling is conducted, as required by the Class 3 Landfill Permit for the Savannah River Site (SRS), Z-Area Saltstone Disposal Facility, General Condition B.1(g) and B.6 (References 1 and 2), at Tank 50H. Since Tank 50H is being returned to higher curie waste service the sampling location will be changed. The sample location will now be the SSRTs located at the SPF. The frequency of salt solution sampling for the chemical and radionuclide constituents will remain unchanged at the SSRT location. The Toxicity Characteristic Leaching Procedure (TCLP) sample frequency using grout prepared in the lab from SSRT salt solution in accordance with SPF specifications will remain unchanged at the SSRT location.

In addition to the sampling conducted at the SSRTs, sampling will also be completed at the Effluent Treatment Project (ETP). The Waste Concentrate Hold Tank (WCHT) is a new tank being installed at the ETP to minimize the number of annual transfers to SPF. Due to the installation of the WCHT, transfers from ETP to SPF may be reduced to approximately four times per year. Sampling the WCHT will ensure that the ETP waste stream is acceptable for treatment and disposal at the SPF/SDF. The WCHT will be sampled on a quarterly basis for the chemical constituents and a semi-annual basis for the radionuclide constituents. As is done with the SSRT sample, each quarter, grout will be prepared in the lab from a WCHT salt solution sample in accordance with the SPF specifications.

This sampling strategy is considered an appendix to Reference 2, that will be initiated when Tank 50 is returned to higher curie service, which is projected to occur in October 2011 per SRS Liquid Waste System Plan – Revision 15 dated January 2010.

If you have any questions, please contact Keith Liner at (803) 208-6466.

Sincerely,



P.M. Allen
Manager,
Environmental, Safety, Health, Quality Assurance,
And Contractor Assurance
Savannah River Remediation, LLC

cc:

M.D. Wilson, SCDHEC, Columbia SC
J.R. Hughes, SCDHEC, Aiken SC
J.F. Litton, SCDHEC, Columbia, SC
J.M. McCain Jr., SCDHEC, Columbia SC

cc, electronic copy:

T.J. Spears, DOE, 704-S, Rm. 29
P. Giles Jr., DOE, 704-S, Rm. 39
P.C. Suggs, DOE, 704-S, Rm. 37
S.R. Ross, DOE, 704-S, Rm. 52
J.K. Seitz, DOE, 704-S, Rm. 50
C.H. Pang, DOE, 704-S, Rm. 53
S.L. Southern, DOE, 730-B, Rm. 326
D.F. Hoel, DOE, 730-B, Rm. 3425
A.I. Watson, DOE, 730-B, Rm. 3429
L.D. Olson, SRR, 766-H, Rm. 2407
S.W. Wilkerson, SRR, 704-S, Rm. 19
L.K. Sonnenberg, SRR, 704-S, Rm. 7
A.F. Ingram, SRR, 704-S, Rm. 9
K.A. Hauer, SRR, 766-H, Rm. 2003
K.D. Harp, SRR, 766-H, Rm. 2010
K.H. Subramanian, SRR, 766-H, Rm. 2204
J.E. Dickenson, SRR, 730-4B, Rm. 333
E.R. Selden, SRR, 704-Z, Rm. 6
B.E. Long, SRR, 704-Z, Rm. 17
J.R. Cantrell, SRR, 766-H, Rm. 2311
O.D. Stevens, SRR, 766-H, Rm. 2440
D.P. Skiff, SRR, 766-H, Rm. 2470
K.R. Liner, SRR, 704-S, Room 83
C.J. Winkler, SRR, 766-H, Rm. 2406
D.B. Little, SRR, 766-H, Rm. 2404
J.E. Occhipinti, SRR, 704-S, Rm. 13
D.C. Sherburne, SRR, 704-S, Rm. 18
P.W. Norris, SRR, 704-Z Rm. 4
V.G. Dickert, SRR, 705-1C, Rm. 18
L. B. Romanowski, SRR, 705-1C, Rm. 19
T.F. England, SRR, 705-1C, Rm. 17
N.L. Bethurem, SRR, 705-1C, Rm. 6
W.C. Clark, SRR, 704-56H, Rm. 103
M.N. Borders, SRR, 704-56H, Rm. 101

J. M. McCain, Jr
SRR-ESH-2010-00030
Page 4 of 4

B.L. Green, SRR, 704-26F, Rm. 2
R.R. Salmon, SRR, 704-26F, Rm. 5
E.J. Freed, SRR, 704-56H Rm. 164
D.J. Martin, SRR, 241-152H, Rm. 8
J.E. Hyatt, SRNS, 705-3C, Rm. 134
E. Saldivar Jr, SRNS, 705-3C, Rm. 106

File Info:

SCDHEC, Saltstone
10666, DOE/ADM
16-1.5(a) Permanent