

November 2, 2010

MEMORANDUM TO: Project File

FROM: Nishka Devaser, Project Manager **/RA/**
Low-Level Waste Branch
Environmental Protection and Performance
Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

SUBJECT: PORFLOW AND GOLDSIM MODEL FILES PROVIDED BY THE U.S.
DEPARTMENT OF ENERGY IN RESPONSE TO A REQUEST BY THE
U.S. NUCLEAR REGULATORY COMMISSION IN ACCORDANCE
WITH ITS MONITORING RESPONSIBILITIES OF THE SALTSTONE
DISPOSAL FACILITY AT THE SAVANNAH RIVER SITE

The U.S. Department of Energy provided model files via removable hard drive storage for the PORFLOW and GoldSim software models developed to support the 2009 Performance Assessment for the Saltstone Facility at the Savannah River Site. The hard drive contains files that support cases A, B, C, D, E, and the synergistic case in the performance assessment. The document(s) were provided to support the U.S. Nuclear Regulatory Commission's (NRC) review of the Saltstone performance assessment under the NRC's monitoring responsibilities as stated in Section 3116(b) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005.

Docket No.: PROJ0734

Enclosure: Index of PORFLOW and GoldSim Model Files

CONTACT: N. Devaser, FSME/DWMEP
(301) 415-5196

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ML103060015

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NAME	NDevaser
DATE	11/02/10

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Model Files Index

PORFLOW and GoldSim Model Files of the Performance Assessment for the Saltstone Facility

Folder on Hard Drive	Contents and Description
E:\Benchmarking Files	
E:\GoldSim Files	
E:\Recycled	
Df2	
E:\Supporting Documents	
E:\Porflow Files	
AquiferGSA	
Transport	CaseA; CaseA_rev1;
Transport_inventory	CaseF
AquiferZ_oxygen	
Transport_100m	CaseJ
Transport_1m	CaseJ
Transport_original	CaseJ
AquiferZ_rev1	
Transport_100m	CaseA_kgrout; CaseA_ox;
Transport_1m	CaseA_kgrout; CaseA_ox;
AquiferZ	
Transport_original	CaseA_kgrout; CaseA_ox;
Transport_inventory_100	CaseF
Transport_inventory_1m	CaseF
Transport_inventory	CaseA_10xsulfate_rev2; CaseA_40k_rev2; CaseA_nocap_rev2; CaseA_nosulfate_rev2; CaseB_rev2; CaseC_rev2; CaseD_rev2; CaseF; CaseF\V2; CaseF\V4; CaseG;
Common	

Folder on Hard Drive	Contents and Description
Decay	
Inventory	
Legacy	
Obsolete	Decay_old; SoilCurves_Round5a
SoilCurves	
ForGlenn	
AquiferGSA	Transport; Transport\CaseA_rev1
General	
Flach	
ForGlenn	Vault1; Vault1\Common; Vault2; Vault2\Common; Vault4; Vault4\Common
KenDixon	Common; Flow; Flow\CaseTest; Tools; Tools\BsplineAverage; Tools\MakeWhole; Tools\Perl; Tools\Vadose
Tools	
GSA_PORFLOW	
GSA_PORFLOW_FTF	Flow; Flow\Fast; Flow\Nominal; Flow\Slow; Tools; Tools\BorderLOCate; Tools\ConvexHull; Tools\CoordTrans; Tools\ExtractLOCate; Tools\Locate3d; Tools\Mesh3d; Tools\PlotConc3d; Tools\PlotHist; Tools\PlotLOCate; Transport; Transport\Fast; Transport\LOCate; Transport\Nominal; Transport\Slow
GSA_PORFLOW_uncert	BCs; FE; Geology; Hydrostrat; Inactive; MatProp; PORFLOW_5.97.0; Run; Stream; Stream\FBRPsurvey; V_V; V_V\Stratigraphy
GSA_PORFLOW_Z	Flow; Flow\Fast; Flow\Nominal; Flow\Slow; Tools; Tools\BorderLOCate; Tools\ConvexHull; Tools\CoordTrans; Tools\ExtractLOCate; Tools\Locate3d; Tools\Mesh3d; Tools\Mesh3d_rev1; Tools\PlotConc3d; Tools\PlotHist; Tools\PlotLOCate; Transport; Transport\Fast; Transport\LOCate; Transport\LOCate_rev0; Transport\Nominal; Transport\Slow
GSA_TRANSPORT_uncert	Flow; Flow\Fast; Flow\Nominal; Flow\Slow; Tools; Tools\AqSrcZone; Tools\BorderLOCate; Tools\ConvexHull; Tools\CoordTrans; Tools\ExtractLOCate; Tools\Locate3d; Tools\PlotConc; Tools\PlotConc_rev; Tools\PlotHis; Tools\PlotHis2; Tools\PlotLOCate; Transport; Transport\LOCate; Transport\LOCate2; Transport\LOCate3; Transport\Nominal
MESH3D_QA	Mesh3d_rev0
porflow_files	

Folder on Hard Drive	Contents and Description
porflowlinux	
porflowlinux1	
timelines	
TimelineTransport_oxygen	
TimelineTransport_rev1	
TimelineTransport_rev2	
Tools	
Aquifer	GoldSimExcel; GoldSimExcel\from_larry; PlotConc_rev; PlotConc3d; PlotStat; PlotStat_old; SpecsSum; SpecsSum\from_larry
BsplineAverage	
KornShell	
Make	
MakeWhole	
Perl	IO-stringy-2.110; IO-stringy-2.110\blib; IO-stringy-2.110\lib; IO-stringy-2.110\t; OLE-Storage_Lite-0.16; OLE-Storage_Lite-0.16\blib; Spreadsheet-ParseExcel-0.32; Spreadsheet-ParseExcel-0.32\blib; Spreadsheet-ParseExcel-0.32\lib; Spreadsheet-ParseExcel-0.32\sample; Spreadsheet-ParseExcel-0.32\t
Python	xlrd-0.6.1; xlrd-0.6.1\build; xlrd-0.6.1\xlrd
Vadose	compileFlux; Mesh2d; PlotConc; PlotFlow2D; PlotFlow2D_fcnet; PlotFlux; PlotFlux_massBal; PlotFlux_rev; SpecsSum; SpecsSum\from_larry
Vault1_oxygen	
Common	
Flow	CaseJ
Transport	CaseJ; CaseJ\Vault1
Vault1_rev1	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_curie_ox; CaseA_kgrout; CaseA_nocap; CaseA_nosulfate; CaseA_ox; CaseA_v5_ox; CaseC; CaseE
Transport	CaseA_kgrout; CaseA_kgrout\Vault1; CaseA_ox; CaseA_ox\Vault1

Folder on Hard Drive	Contents and Description
Vault1	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_40k; CaseA_40k_rev1; CaseA_nocap; CaseA_nocap_rev1; CaseA_nosulfate; CaseA_rev1; CaseC; CaseC_rev1; CaseE; CaseE_rev1; CaseG; CaseZ
Transport	CaseA; CaseA_10xsulfate; CaseA_10xsulfate\Vault1; CaseA_40k; CaseA_40k_rev1; CaseA_40k_rev1\Vault1; CaseA_40k\Vault1; CaseA_nocap; CaseA_nocap_rev1; CaseA_nocap_rev1\Vault1; CaseA_nocap\Vault1; CaseA_nosulfate; CaseA_nosulfate\Vault1; CaseA_rev1; CaseA_rev1\Vault1; CaseA\Vault1; CaseC; CaseC_rev1; CaseC_rev1\Vault1; CaseC\Vault1; CaseE; CaseE_rev1; CaseE_rev1\Vault1; CaseE\Vault1; CaseG; CaseG\Vault1; Plots; Plots\xlrd-0.6.1
Vault2_flatRoof	
Common	
Flow	CaseE
Vault2_oxygen	
Common	
Flow	CaseJ; CaseJ_wrong
Transport	CaseJ; CaseJ\Vault2; LFRG
Vault2_rev1	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_kgrout; CaseA_nocap; CaseA_nosulfate; CaseA_ox; CaseB; CaseC; CaseD; CaseE
Transport	CaseA_curie_ox; CaseA_curie_ox\Vault2; CaseA_kgrout; CaseA_kgrout\Vault2; CaseA_ox; CaseA_ox\Vault2; CaseA_v5_ox; CaseA_v5_ox\Vault2
Vault2	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_10xsulfate_rev2; CaseA_40k; CaseA_40k_rev1; CaseA_40k_rev2; CaseA_nocap; CaseA_nocap_rev1; CaseA_nocap_rev2; CaseA_nosulfate; CaseA_nosulfate_rev2; CaseA_rev1; CaseB; CaseB_rev1; CaseB_rev2; CaseC; CaseC_rev1; CaseC_rev2; CaseD; CaseD_rev1; CaseD_rev2; CaseE; CaseE_rev1; CaseF; CaseG; CaseZ

Folder on Hard Drive	Contents and Description
Transport	Case_test; Case_test\Vault2; CaseA; CaseA_10xsulfate; CaseA_10xsulfate_rev2; CaseA_10xsulfate_rev2\Vault2; CaseA_10xsulfate\Vault2; CaseA_40k; CaseA_40k_rev1; CaseA_40k_rev1\Vault2; CaseA_40k_rev2; CaseA_40k_rev2\Vault2; CaseA_40k\Vault2; CaseA_nocap; CaseA_nocap_rev1; CaseA_nocap_rev1\Vault2; CaseA_nocap_rev2; CaseA_nocap_rev2\Vault2; CaseA_nocap\Vault2; CaseA_nosulfate; CaseA_nosulfate_rev2; CaseA_nosulfate_rev2\Vault2; CaseA_nosulfate\Vault2; CaseA_rev1; CaseA_rev1\Vault2; CaseA\Vault2; CaseB; CaseB_rev1; CaseB_rev1\Vault2; CaseB_rev2; CaseB_rev2\Vault2; CaseB\Vault2; CaseC; CaseC_rev1; CaseC_rev1\Vault2; CaseC_rev2; CaseC_rev2\Vault2; CaseC\Vault2; CaseD; CaseD_rev1; CaseD_rev1\Vault2; CaseD_rev2; CaseD_rev2\Vault2; CaseD\Vault2; CaseE; CaseE_rev1; CaseE_rev1\Vault2; CaseE\Vault2; CaseF; CaseF\ShotcreteFix; CaseF\Vault2; CaseF\Vault2_rev0; CaseG; CaseG\Vault2; CaseG\Vault2_rev0
Vault4_oxygen	
Common	
Flow	CaseJ
Transport	
Transport_old	CaseJ; CaseJ\Vault4; CaseJ\Vault4
Vault4_rev1	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_kgrout; CaseA_nocap; CaseA_nosulfate; CaseA_ox; CaseB; CaseC; CaseD; CaseE
Transport	CaseA_kgrout; CaseA_kgrout\Vault4; CaseA_ox; CaseA_ox\Vault4
Vault4	
Common	
Flow	CaseA; CaseA_10xsulfate; CaseA_40k; CaseA_40k_rev1; CaseA_nocap; CaseA_nocap_rev1; CaseA_nosulfate; CaseA_rev1; CaseB; CaseB_rev1; CaseC; CaseC_rev1; CaseD; CaseD_rev1; CaseE; CaseE_rev1; CaseG; CaseQ; CaseX; CaseZ
Transport	CaseA; CaseA_10xsulfate; CaseA_10xsulfate\Vault4; CaseA_40k; CaseA_40k_rev1; CaseA_40k_rev1\Vault4; CaseA_40k\Vault4; CaseA_nocap; CaseA_nocap_rev1; CaseA_nocap_rev1\Vault4; CaseA_nocap\Vault4; CaseA_nosulfate; CaseA_nosulfate\Vault4; CaseA_rev1; CaseA_rev1\Vault4; CaseA\Vault4; CaseB; CaseB_rev1; CaseB_rev1\Vault4; CaseB\Vault4; CaseC; CaseC_rev1; CaseC_rev1\Vault4; CaseC\Vault4; CaseD; CaseD_rev1; CaseD_rev1\Vault4; CaseD\Vault4; CaseE; CaseE_rev1; CaseE_rev1\Vault4; CaseE\Vault4; CaseG; CaseG\Vault4