

**FLORIDA DEPARTMENT OF HEALTH
ONSITE NITROGEN REDUCTION STRATEGIES STUDY**

**PROGRESS REPORT NO. 16
(August, 2012)**

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task A – Technology Evaluation for Field Testing: Review, Prioritization, and Development				
Task A.1, Draft Literature Review Report	Task Complete	Task Complete	None	N/A
Task A.2, Final Literature Review Report	Task Complete	Task Complete	None	N/A
Task A.3, Draft Classification of Technologies Report	Task Complete	Task Complete	None	N/A
Task A.4, Draft Technology Ranking Criteria Report	Task Complete	Task Complete	None	N/A
Task A.5, Draft Priority List for Testing Report	Task Complete	Task Complete	None	N/A
Task A.6, Technology Classification, Ranking and Prioritization Workshop	Task Complete	Task Complete	None	N/A
Task A.7, Final Classification of Technologies Report	Task Complete	Task Complete	None	N/A
Task A.8, Final Technology Ranking Criteria Report	Task Complete	Task Complete	None	N/A
Task A.9, Final Priority List for Testing Report	Task Complete	Task Complete	None	N/A
Task A.10, Draft Innovative Systems Applications Reports	Not started	No activity	N/A	N/A
Task A.11, Final Innovative Systems Applications Reports	Not started	No activity	N/A	N/A
Task A.12, Identification of Test Facility Sites	Task Complete	Task Complete	None	N/A
Task A.13, Draft QAPP PNRS II	Task Complete	Task Complete	None	N/A
Task A.14, Recommendation for Process Forward Meeting	Task Complete	Task Complete	None	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task A.15, Final QAPP PNRS II	Task Complete	Task Complete	None	N/A
Task A.16 Materials Testing for FDOH Additives Rule	Task Complete	Task Complete	None	N/A
Task A.17, PNRS Specification Reports	Task Complete	Task Complete	None	N/A
Task A.18, Test Facility Design 50%	Task Complete	Task Complete	None	N/A
Task A.19, Test Facility Design 100%	Task Complete	Task Complete	None	N/A
Task A.20 PNRS II Test Facility Construction Support & Administration	Task Complete	Task Complete	None	N/A
Task A.21 PNRS II Test Facility Construction 50%	Task Complete	Task Complete	None	N/A
Task A.22 PNRS II Test Facility Construction 100%	Task Complete	Task Complete	None	N/A
Task A.23 PNRS II Test Facility Construction Substantial Completion	Task Complete	Task Complete	None	N/A
Task A.24 PNRS II Test Facility Accept Construction	Task Complete	Task Complete	None	N/A
Task A.25 Monitoring & Sample Event Reports	Task Complete	Task Complete	None	N/A
Task A.26 Data Summary Reports	Task Complete	Task Complete	None	N/A
Task A.27 Draft PNRS II Report	Underway	Started work on draft PNRS II report.	None	N/A
Task A.28 Final PNRS II Report	Not started	No activity	N/A	N/A
Task A.31 Change-order Allowance	Underway	FDOH authorized \$19,000 to perform a simulation of bioreactor filtration treatment of onsite wastewater April 4, 2011. The Biotool Task 1a and 1b reports completed on December 8, 2011. Remaining change-order budget = \$ 1000.	None	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task B – Field Testing of Technologies and Cost Documentation				
Task B.1, Identification of Home Sites	Task Complete	Task Complete	None	N/A
Task B.2, Vendor Agreement Reports	Underway	One vendor agreement remains in Ph3A budget to be completed.	None	N/A
Task B.3, Draft QAPP for Field Testing	Task Complete	Task Complete	None	N/A
Task B.4, Recommendation for Process Forward Meeting	Task Complete	Task Complete	None	N/A
Task B.5, Final QAPP Field Testing	Task Complete	Task Complete	None	N/A
Task B.6 Field Systems Installation Report (per system)	Underway	Design and permitting of B-HS2, located in Hillsborough County, completed in August 2012. Construction scheduled for the week of September 10, 2012. Started design of B-HS3, located in Seminole County.	None	N/A
Task B.7 Field Systems Monitoring Report (per event)	Underway	Fifth B-HS1 sample event conducted August 6, 2012. B-HS1 Monitoring Report (MR) completed on: 3. June 8, 2012 4. July 30, 2012 5. September 28, 2012	None	N/A
Task B.9, Technical Description of Nitrogen Reduction Technology Report	Not started	No activity	N/A	N/A
Task B.11, LCCA Template Report (draft)	Not started	No activity	N/A	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task B.12 LCCA Template Report (final)	Not started	No activity	N/A	N/A
Task B.16 Change-order Allowance	Underway	Remaining change-order budget = \$39,448.95.	None	N/A
Task C – Evaluation of Nitrogen Reduction Provided by Soils and Shallow Groundwater				
Task C.1, Draft Literature Review on Nitrogen Reduction in Soils & Shallow GW Report	Task Complete	Task Complete	None	N/A
Task C.2, Final Literature Review on Nitrogen Reduction in Soils & Shallow GW Report	Task Complete	Task Complete	None	N/A
Task C.3, Draft QAPP Evaluation of Nitrogen Reduction Provided by Soils & Shallow GW	Task Complete	Task Complete	None	N/A
Task C.4, Recommendation for Process Forward Meeting	Task Complete	Task Complete	None	N/A
Task C.5, Final QAPP Evaluation of Nitrogen Reduction Provided by Soils & Shallow GW	Task Complete	Task Complete	None	N/A
Task C.6, S&GW Test Facility Design 50%	Task Complete	Task Complete	None	N/A
Task C.7, S&GW Test Facility Design 100%	Task Complete	Task Complete	None	N/A
Task C.8, S&GW Test Facility Design Final	Task Complete	Task Complete	None	N/A
Task C.9, S&GW Test Facility Construction Support & Administration	Task Complete	Task Complete	None	N/A
Task C.10, S&GW Test Facility Construction 50%	Task Complete	Task Complete	None	N/A
Task C.11, S&GW Test Facility Construction 100%	Task Complete	Task Complete	None	N/A
Task C.12, S&GW Test Facility Construction Substantial Completion	Task Complete	Task Complete	None	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task C.13, S&GW Test Facility Accept Construction	Task Complete	Task Complete	None	N/A
Task C.14, Soils & Hydrogeologic & Monitoring Plan for S&GW Test Facility	Underway	Started work on soils, hydrogeologic and monitoring plan for S&GW test facility.	None	N/A
Task C.15, Tracer Testing at GCREC	Underway	A second tracer test for the S&GW test facility was started November 9, 2011. Tracer Test Memo No. 2 completed on July 26, 2012. There is one remaining tracer test at GCREC to be completed with Phase 3A budget.	None	N/A
Task C.16 S&GW Sample Event Report	Underway	S&GW Test Facility Sample Event Report (SER) No. 1 completed on July 30, 2012. Sample Event No. 2 conducted August 20 through 27, 2012.	None	N/A
Task C.17 S&GW Data Summary Report	Underway	Started work on S&GW Test Facility Data Summary Report (DSR) No. 1.	None	N/A
Task C.18 Test Facility Closeout Report	Not started	No activity	N/A	N/A
Task C.19 Field Site Selection	Task Complete	Task Complete	None	N/A
Task C.20 Instrumentation of GCREC Mound System	Task Complete	Task Complete	None	N/A
Task C.21 GCREC Mound Sample Event Report	Task Complete	Task Complete	None	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task C.22 GCREC Mound Data Summary Report	Task Complete	Task Complete	None	N/A
Task C.23 Instrumentation of Remaining Field Sites	Underway	Instrumentation at C-HS3 located in Polk County completed in June 2012. Instrumentation report completed July 30, 2012. Started instrumentation at C-HS4 located in Hillsborough County in August 2012.	None	N/A
Task C.24 Field Sites Sample Event Reports (SER)	Underway	<u>C-HS2</u> : SER No. 3 completed on June 8, 2012. SER No. 4 completed on August 14, 2012 <u>C-HS3</u> : Sample Event No. 1 conducted on August 28, 2012.	None	N/A
Task C.25 Field Sites Data Summary Report (DSR)	Underway	<u>C-HS2</u> : DSR No. 3 completed on June 8, 2012. DSR No. 4 completed on September 28, 2012.	None	N/A
Task C.26 Draft Site Summary and Close-out Report (per site)	Not started	No activity	N/A	N/A
Task C.27 Final Site Close-Out Report (per site)	Not started	No activity	N/A	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task C.30 Change-order Allowance	Not started	No activity	N/A	N/A
Task D – Nitrogen Fate and Transport Modeling				
Task D.1, Draft Literature Review on Nitrogen Fate & Transport Model Report	Task Complete	Task Complete	None	N/A
Task D.2, Final Literature Review on Nitrogen Fate & Transport Model Report	Task Complete	Task Complete	None	N/A
Task D.3, Selection of Existing Data Set for Calibration Report	Task Complete	Task Complete	None	N/A
Task D.4, Draft QAPP N Fate and Transport Modeling	Task Complete	Task Complete	None	N/A
Task D.5, Recommendation for Process Forward	Task Complete	Task Complete	None	N/A
Task D.6, Final QAPP N Fate and Transport Modeling	Task Complete	Task Complete	None	N/A
Task D.7 Simple Soil Tools	Underway	FDOH and project team conference call (July 18, 2012) to discuss model conditions. Soil parameters have continued to be statistically evaluated incorporating the soil series with the highest number of permits.	Further progress and final deliverable depends on agreement between FDOH, H&S, and CSM on the conditions to be represented. Departure of Mia Tuchloke at CSM has delayed finalization of soil parameters.	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task D.8 Complex Soil Model	Underway	Task is 80% complete with continued model development coding and preliminary testing of incorporating a shallow groundwater table.	Finalization of soil parameters is required for completion.	N/A
Task D.9 Complex Soil Model Performance Evaluation	Not Started	No activity	N/A	N/A
Task D.10 Validate/Refine Complex Soil Model	Not Started	No activity	N/A	N/A
Task D.11 Aquifer Model Combined with Complex Soil Model Development	Not Started	No activity	N/A	N/A
Task D.12 Aquifer-Complex Soil Model Performance Evaluation	Not Started	No activity	N/A	N/A
Task D.13 Validate/Refine Aquifer-Complex Soil Model with Data Collection from Task C	Not Started	No activity	N/A	N/A
Task D.14 Development of Aquifer-Complex Soil Model for Multiple Spatial Inputs	Not Started	No activity	N/A	N/A
Task D.16 Task D Guidance Manual (Draft)	Not Started	No activity	N/A	N/A
Task D.17 Task D Guidance Manual (Final)	Not Started	No activity	N/A	N/A
Task D.18 Change-order Allowance	Not Started	No activity	N/A	N/A
Task E – Project Management, Coordination and Meetings				
Task E.1, Project Kick-off Meeting	Task Complete	Task Complete	None	N/A

Task	Task Status	Activity this Period	Technical, Schedule, or Budget Problems Encountered	Recommended Methods to Resolve Problems
Task E.2, PM-Project Progress Report	Underway	The August 2012 bimonthly progress report (this report) was completed September 28, 2012.	None	N/A
Task E.3, RRAC or TRAP Presentation	Underway	No activity	None	N/A
Task E.4 RRAC or TRAP Meeting Attendance	Underway	No activity	None	N/A
Task E.4, PAC Meeting	Not started	No activity	N/A	N/A