

December 6, 2007

Task Order ST08-02-5-506  
Control Number 1000-T08-0197

Ms. TuTu Rosanwo  
Ohio EPA  
1571 Perry Street  
Columbus, OH 43201

SUBJECT: Contract No. DE-AC01-02GJ79491, Stoller  
Task Order Number ST08-02-5-506 LTS&M  
DMR-QA Study Results – Fernald Preserve – NPDES Permit No. OH0009580

Dear Ms. Rosanwo:

**DMR-QA STUDY 27 RESULTS – FERNALD PRESERVE – NPDES PERMIT NO. OH0009580**

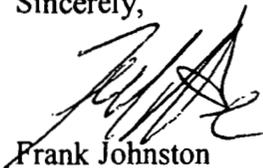
This letter provides S. M. Stoller's explanation related to the "not acceptable" ratings for ammonia and copper analyses completed under DMR-QA Study No. 27.

The ammonia and copper analyses were conducted at an offsite laboratory. General Engineering Laboratory (GEL), is under contract to S. M. Stoller. S. M. Stoller requested that the offsite laboratory conduct an investigation, identify the problems, and implement any applicable corrective actions to the rating of "not acceptable" result for ammonia and copper for this study. The investigation conducted by the laboratory's Quality Department included review of all sample preparation and analytical processes. This included a review of reagents and standards used in the sample preparation steps, the initial and continuing verification of the instrument calibration, process control samples, and interviews with the analysts.

Based on the laboratory's investigations and the years of successful DMR-QA PT analyses of these analytes, we believe the "not acceptable" results are most likely isolated incidents. As part of the corrective action, the laboratory ordered remedial performance test (PT) samples that were analyzed for the deficient analytes. The preliminary results show an "Acceptable" rating for both analytes. A copy of the GEL corrective action report is enclosed for your information.

If you have any questions, please contact Ms. Mary Sizemore at 513-648-3166.

Sincerely,



Frank Johnston  
Fernald Preserve Site Manager

Ms. TuTu Rosanwo  
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FLJ/MES:dsm

Enclosure

c: S. Donovan, Stoller  
K. Gunter, USEPA – Region V  
J. Powell, DOE-LM  
M. Sizemore, Stoller  
C. White, Stoller  
AR Coordinator (Thru W. Sumner)  
Correspondence Control File (Thru D. Crawford)  
Project File RFO 120.02 (Thru W. Sumner)

COMPANY WIDE  
CORRECTIVE/PREVENTIVE ACTION REQUEST AND REPORT  
(Instructions Follow)

(REV 12/2006)

1. Date Requested: October 30, 2007	2. CA Requester: Jannie Shaw-Busby
3. Nonconformance, Audit Finding, Problem, Complaint or Improvement Opportunity Description: General Engineering Laboratory, LLC. (GEL) received a rating of "Not Acceptable" for Copper, ortho-Phosphate as P (EPA 300.0), Ammonia as N and Settleable Solids.	

Quality Assurance Team Completes Items 4-6 & forwards to responsible Leader

4. CARR No. 071030-338

5. CA Title: DMR-QA 27 Failures

6. Leader Assigned Responsibility for Implementation: Jamie Johnson

7. Team Members:

Jannie Shaw-Busby ext. 4287

Jamie Johnson ext 4299

8. Proposed Implementation Date: 11/27/07

9. Quality Systems Director Approval:

Date: 11/27/07

**BEGIN CORRECTIVE/PREVENTIVE OR IMPROVEMENT OPPORTUNITY ACTION**

Complete Items 10-17 and Return to Quality Systems for Closure.

10. Containment Actions, if any:

An investigation by our Quality Department included review of all sample preparation and analytical processes. This included review of reagents and standards used in the sample preparation steps, the initial and continuing verification of the instrument calibration, process control samples, and interviews with the analysts. The investigation found that the laboratory met all quality control criteria for instrument and process controls specified in each method. Additionally, all internal procedures and policies were performed as required.

11. Root Cause(s):

Copper by 200.8

After a thorough review of all data, a definite reason for the failure could not be determined. The laboratory recovered 89.1% of the known value of the performance test (PT) sample. The acceptance criterion for the PT was 90% - 110% recovery of the known value. This acceptance range is tighter than those identified in the EPA methods for routine laboratory control samples (85% - 115% recovery). In fact, they are equal to those recoveries specified for initial and continuing instrument calibrations standards (which are not subject to the sample preparation/digestion procedures). The Trace Metals sample from WP-153 was analyzed as a remedial PT. Preliminary results show that an "Acceptable" rating was obtained for Copper.

ortho-Phosphate as P

After a thorough review of all data, a definite reason for the failure could not be determined. The laboratory recovered 126% of the known value of the performance test (PT) sample. The acceptance criterion for the PT was 81.6% - 119% recovery of the known value. The Laboratory Control Sample (LCS) and the Matrix Spike (MS) for the batch recovered at 90.85% and 99.5%, respectively. The Simple Nutrients sample from WP-153 was analyzed as a remedial PT. Preliminary results show that an "Acceptable" rating was obtained for ortho-Phosphate as P.

Ammonia as N

After a thorough review of all data, a definite reason for the failure could not be determined. The laboratory recovered 71.2% of the known value of the performance test (PT) sample. The acceptance criterion for the PT was 73.3% - 126.6% recovery of the known value. The Laboratory Control Sample (LCS) and the Matrix Spike (MS) for the batch recovered at 97.6% and 90.8%, respectively. The Simple Nutrients sample from WP-153 was analyzed as a remedial PT. Preliminary results show that an "Acceptable" rating was obtained for Ammonia as N.

Settleable Solid

After a thorough review of all data, a definite reason for the failure could not be determined. However, it is suspected that the PT sample was switched with a Quality Control sample during the process. A Single blind Quality Control (QC) Standard was analyzed for this test. The laboratory recovered 95.2% of the known value.

12. Actions to Prevent Potential Occurrence or Recurrence:

Based on our investigation, it is believed the unacceptable ratings were isolated incidents. As a corrective action, the laboratory ordered remedial PT samples for Copper, Ammonia and ortho-Phosphate. A single blind Quality Control Standard was analyzed for Settleable Solid. The PT samples were analyzed and reported to the PT provider on November 26, 2007. Preliminary results show that an "Acceptable" rating was obtained for all analytes. The QC Standard results also fell well within the acceptance limits.

13. Implementation of Permanent Corrective/Preventive Actions or Improvements: NA

14. Verify Corrective/preventive Action(s) or Improvement(s): NA

15. Lessons Learned. Who can benefit from Lessons Learned?

The importance of attention to detail has been emphasized to everyone. The importance of providing accurate data has also been reiterated to all.

16. Preparer's Name(s):



Date: 12/4/07

17. Approval of Leader Responsible for implementation:

Date:

Supplemental Pages Attached? Yes  No

18. Reviewed and Approved by Quality Systems Director:

