Florida Department of

Memorandum **Environmental Protection**

To: John Griffith, Professional Engineer
Hazardous Waste Permitting Section

From: Andrew R. Tintle, Environmental Specialist
Environmental Assessment Section

Date: December 24, 2003

Subject: Field Sampling Performance Audit Report
St. Marks Powder

Please see the attached report and checklists for the field sampling performance audit at St. Marks Powder on March 13, 2003. The audit was conducted by the Environmental Assessment Section (EAS).

Sampling activities were audited using the DEP SOP ("Standard Operating Procedures for Field Activities", DEP-SOP-001/01), which was published as a final version on January 1, 2002. Some procedures stipulated under the site specific Quality Assurance Project Plan (QAPP) and the 1992 edition of the DEP SOP in effect at the time of QAPP approval may be at variance with requirements of the 2002 DEP SOP. Where QAPP-sanctioned procedures differed from those in the 2002 DEP SOP, the auditors have attempted to clarify the checklist responses. Sampling personnel should notify you of any audit discrepancies in this regard when responding to this report.

At your discretion, the permittee should be asked to respond to the report according to one or more of the following requirements. However, consequences of non-response are herein summarized and should be invoked as necessary for the purposes of this audit and the conditions of the permit.

RESPONSE REQUIREMENTS

(1) The permittee or the permittee's consultant must respond to each specific deficiency listed under the "deficiencies" section of this correspondence and noted in the attached checklists. Deficiencies include specific items detailed in this memo and all items in the checklists for which the auditors could not determine that performance requirements had been met. The response must include the specific measures to be taken in correcting each deficiency, the timetable for implementation of corrective actions and any other information pertinent to the evaluation of the data generated from the audited sampling event for purposes of permit compliance.

(2) The response may include discussion of any items in the report for the purposes of clarification, explanation or rebuttal.

REVIEW OF CORRECTIVE ACTIONS, CONSEQUENCES OF NON-RESPONSE AND RECOMMENDED DEPARTMENT ACTIONS

Failure to respond with a corrective action plan or failure to respond to this audit report may result in a recommendation by the EAS to reject or qualify all or selected portions of the data produced by the permittee through its consultant audited for this report (see item #3 below).

(1) When the corrective action plan and any other responses have been received from the permittee (or its consultant), the EAS will review the proposal to determine if appropriate corrective actions have been taken. If the plan is acceptable and all other response items have been resolved, the EAS will issue a report providing an evaluation of the corrective action responses submitted by the permittee. The final audit report package will consist of the preliminary audit report, the report of proposed corrective actions from the permittee (or consultant) and the EAS evaluation of responses.

(2) If modifications to the proposed corrective actions are required, the permittee will have another opportunity and additional time to propose acceptable corrective actions before the final audit report package is issued.

(3) Where the circumstances of data use and the severity of observed deficiencies warrant, the EAS may recommend that any or all data produced from the audited sampling event(s) or other past sampling events conducted on behalf of the permittee by the audited consultant should be qualified or rejected, based on these audit findings, and regardless of corrective actions currently initiated by the permittee or the consultant. Any such recommendation will be formally communicated to you as the DEP project manager for the permit as well as to any other users of the affected data, as applicable, in accordance with the DEP Quality Assurance rule, 62-160, F.A.C., and all other governing rules, permits or orders in effect at the time of this audit or audit report. Acceptance of data from any future sampling events conducted on behalf of the permittee by the same consultant may be dependent on the implementation of adequate corrective actions satisfactory to the Department.

FIELD SAMPLING PERFORMANCE AUDIT - MAJOR DEFICIENCIES

The major deficiencies in sampling performance noted during this audit are listed below.

(1) Technique for pouring samples into sample container needs to be improved. Care must be taken to avoid sample contact with gloves and the lanyard.

(2) Precautions need to be taken to eliminate the potential for contamination of the sample containers. Placing the sample container caps on the top of the waste drums must be avoided.

(3) The location of the sample collected at the surface water site (OSW-2) needs to be evaluated or alternate sample collection equipment considered such as an extension pole. The sample needs to be collected nearer to the center of the stream to avoid disturbing the sediment at the edge of the stream.

(4) Samples requiring thermal preservation need to be placed on ice within 15 minutes of sample collection.

(5) Equipment blanks need to be collected in the field and not back at the laboratory. Blanks were not collected for all project parameters.

(6) The calibration of the temperature recording device needs to be checked against an NIST traceable thermometer. The results of the initial and continuing checks need to be documented.

(7) The turbidimeter was noted to work fine at the base of operations but was not working at the first sample site. Instrument calibration was not checked after appropriate corrective actions were taken.

(8) Care needs to be taken when sampling with a bailer to avoid excessive disturbance of the water column. It was noted for well MW-25 that the bailer hit the bottom of the well. Bailers are no longer recommended for purging or sampling if they are to be used smaller bailers should be considered to minimize disturbance.

(9) Upon review of the chain of custody form, records indicate that the OSW-2 surface water sample collected on the day of the audit were not delivered to the laboratory until 3/31/03. This delay caused the holding times for the volatile organics and extractable organics to be exceeded. Time of sample collection for this sample was also omitted on the form.

(10) Field measurement calibration records for the samples collected at MW-8 on 3/17/03 were not included in the project records. Only calibration activities on 3/13/03 and 3/30/03 were recorded.

Please call me at (850) 245-8075 or e-mail me at andrew.tintle@dep.state.fl.us if you have any questions concerning the audit report, response requirements or appropriate corrective actions.

Attachments (1): Audit report and checklists (including FQ 1000 checklist)