

**SECOND QUARTER 2005 PROGRESS REPORT
VERNAY LABORATORIES, INC.
PLANT 2/3 FACILITY
Yellow Springs, Ohio**

Project No. 0292.11.26

July 14, 2005

Prepared For



VERNAY LABORATORIES, INC.
Yellow Springs, Ohio

Prepared By



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VIA FEDERAL EXPRESS
AM Priority

July 14, 2005

United States Environmental Protection Agency
Region 5
Corrective Action Section, DW-8J
77 West Jackson
Chicago, Illinois 60604

Attention: Ms. Patricia J. Polston, Project Manager
Waste Management Branch

Reference: Quarterly Progress Report (Second Quarter 2005)
Administrative Order on Consent
Vernay Laboratories, Inc.
Yellow Springs, Ohio
Project No. 0292.11.26

Dear Ms. Polston:

The Payne Firm, Inc. (Payne Firm) is pleased to submit, on behalf of Vernay Laboratories, Inc. (Vernay), the attached Progress Report for the Second Quarter 2005, as required by the Administrative Order on Consent (AOC) journalized by the United States Environmental Protection Agency (U.S. EPA) on September 27, 2002.

We understand that the U.S. EPA may provide this quarterly progress report on the U.S. EPA's website at www.epa.gov/region5/sites/vernay. The electronic version of this quarterly progress report is also included on a CD-Rom in Appendix I.

Should you have any questions regarding the enclosed document, please contact either of us at (513) 489-2255 or via e-mail at dcc@paynefirm.com or ddw@paynefirm.com.

Sincerely,

The Payne Firm, Inc.

David C. Contant, L.G.
Project Manager

Daniel D. Weed, C.P.G.
Principal

cc: Mr. Doug Fisher – Vernay Laboratories, Inc.
Mr. Joseph Lonardo – Vorys, Sater, Seymour and Pease
Mr. Rob Hillard – Village of Yellow Springs
Ms. Connie Collett – Yellow Springs Community Library

PROGRESS REPORT – SECOND QUARTER 2005
Vernay Laboratories, Inc. RCRA Corrective Action
Yellow Springs, Ohio

A. IDENTIFICATION OF FACILITY AND ACTIVITY

Vernay Laboratories, Inc. (Vernay) agreed to an Administrative Order on Consent (AOC), journalized September 27, 2002, to complete a United States Environmental Protection Agency (U.S. EPA) Resource Conservation and Recovery Act (RCRA) Corrective Action for the Vernay Facility located at 875 Dayton Street in Yellow Springs, Ohio.

B. STATUS OF WORK AT THE FACILITY AND PROGRESS DURING THE QUARTER

The status of the work at the Facility and a summary of the progress made during the quarter are presented below.

1. Technology Screening for Treatability/Pilot Study Evaluation

Vernay is evaluating data generated from treatability sampling and ground water field measurements performed at the Facility in March and April 2005. Samples were collected to evaluate soil and ground water parameters which can influence the effectiveness of remediation technologies that may be implemented for corrective measures at the Facility. Ground water samples for treatability analysis and field measurements were summarized in the First Quarter 2005 Progress Report and Statement of Work #18, "Evaluation of Need for Treatability/Pilot Study Ground Water Monitoring." During the second quarter 2005, additional ground water field parameter measurements were repeated on April 12, 2005. Ground water sampling locations are shown on Figure 1 and results are presented on Tables 5 and 6.

Soil samples were also collected from representative areas beneath the Facility, as outlined in SOW #20, "Treatability/Pilot Study Soil Sampling" to determine specific parameters for the potential injection of oxidants, reducing agents or biodegradation enhancements. The purpose of the sampling was to determine characteristics of the soil matrix (e.g. moisture content, organics, pH) beneath the Facility which could impact potential selected treatment options. The parameters for which samples were analyzed are summarized on Table 7; final soil results are pending. Locations and sampling intervals were focused on their proximity to impacted areas that will likely require treatment.

2. Vernay's Response to U.S. EPA partial comments on Phase II RFI Report.

A conference call with the U.S. EPA was held on May 3, 2005 to discuss the U.S. EPA January 31, 2005 Memorandum ("Review of Section 6, Eco Risk") and the March 24, 2005 Memorandum ("Review comments of "U.S. EPA RCRA Corrective Action Facility Investigation, Phase II Report"). These memoranda present preliminary draft comments to the Vernay Phase II RCRA Facility Investigation Report. Vernay prepared responses to these preliminary draft comments in two documents entitled "Responses to U.S. EPA's March 24, 2005 Draft Comments" dated June 7, 2005, and "Responses to U.S. EPA's January 31, 2005 Draft Comments on Ecological Risk Assessment", also dated June 7, 2005. These two documents were submitted to the U.S. EPA on June 8, 2005 and are included in Appendix III.

3. Monthly Operation and Maintenance Activities

Data associated with the existing ground water interim measure were collected monthly during the second quarter. These data include water samples analyzed for VOCs from the ground water treatment systems of the capture zone and the utility tunnel sump operating on the Facility. Water level measurements from the entire RFI monitoring well network are collected on a quarterly basis during the post-RFI. Quarterly water level elevations are summarized in Table 4. Potentiometric contour maps generated for the Cedarville Aquifer during the second quarter are presented in Appendix II.

Water samples collected from the Ground Water Capture Treatment System (GWCTS) included: 1) a sample at each wellhead (CW01-01 and CW01-02); 2) a sample after the first carbon vessel; and 3) a system effluent sample after treatment. Likewise, samples collected from the Utility Tunnel Sump Treatment System (UTSTS) included: 1) a pre-treatment sample; 2) a sample after the first carbon drum; and 3) a sample after the second carbon drum. The VOC data collected from the two treatment systems are summarized on Tables 8 and 9, respectively. Electronic copies of the laboratory analytical reports are included on a CD-Rom in Appendix I.

4. Water Well Survey Follow Up, Sampling and Abandonment

Similar to the first quarter 2005, in order to support the conclusions of the CA725 and the risk assessment, Vernay followed-up with known water well owners within a defined survey area. The purpose of this follow-up is to confirm whether or not any change in well use had occurred since the last survey conducted in late 2003/early 2004. Vernay also began to determine the property transactions that occurred within the well survey area, and began following-up with these new owners (if any) to document any changes that may have occurred with respect to the original well survey response that was obtained (i.e. was a water well installed by the new owner?). Vernay expects this follow-up to be completed in the third quarter 2005.

Vernay re-sampled those water wells that were identified during the 2003/2004 survey as currently being used for potable or non-potable purposes within the defined survey area downgradient from the Facility. As reported in the First Quarter 2005 Progress Report, water wells identified during the 2003/2004 survey as currently being used downgradient from the Facility were sampled during the March 2005 semi-annual sampling event with the exception of 850 Dayton Street, where access was not obtained at that time. In the second quarter 2005, access was obtained and the water well in use at 850 Dayton Street was sampled on April 26, 2005. A description of the field collection methods and procedures used by the Payne Firm to obtain water well samples was included with Statement of Work # 19.

In cooperation with Greene County Combined Health District (GCCHD), Vernay abandoned the residential water wells located at 825 and 775 Dayton Street and 401 Suncrest Drive on June 13 thru June 15, 2005. Vernay had voluntarily disconnected these water wells in 2004 and connected the properties to the Village of Yellow Springs public water system. Prior to abandoning the unused water well at 401 Suncrest Drive, Vernay collected a water sample from inside the well casing as described in Statement of Work #16b, "Water Well Location, Sampling and Closure 401 Suncrest/550 Green Street Property." Samples from the wells located at 825 and 875 Dayton Street were previously collected during the RCRA Facility Investigation.

The water well sampling locations and the current use of all identified water wells are shown on Figure 3. Results of all VOCs from water wells sampled in the second quarter 2005 are summarized on Table 1. Detected concentrations of VOCs from aqueous QA/QC samples are

also summarized on Table 2. Electronic copies of the laboratory analytical reports, data validation memoranda and ground water sampling forms are included on a CD-Rom in Appendix I. A list of data validation qualifiers assigned by the laboratory and/or the Payne Firm is included on Table 3. The Payne Firm water well abandonment forms and the ODNR well abandonment logs are included in Appendix IV.

5. Evaluation of Corrective Measures Objectives and Preliminary Remediation Goals

Vernay continued the process of determining corrective measures objectives (CMOs) consisting of goals for protecting human health or the environment.

C. PROBLEMS ENCOUNTERED DURING THE QUARTER

No difficulties were encountered during this quarter.

D. ACTIONS TAKEN TO RECTIFY PROBLEMS

No actions to rectify problems were required this quarter.

E. PROJECT SCHEDULE

Based on the information presented in the RFI Phase II report and the requirements of the AOC, the following activities are planned for next quarter (Q3-2005).

- Continue monthly monitoring of existing interim measures and quarterly water level measurements.
- Determine the property transactions that occurred within the well survey area, and follow up with these new owners (if any) to document any changes that may have occurred with respect to the original well survey response that was obtained in 2003/2004.
- Continue the determination of preliminary remediation goals and corrective measures objectives for the Facility.
- Continue corrective measures evaluation and, if needed, commencement of potential treatability pilot studies.

Future SOWs will be based on the project schedule presented on Table 10 and on potential U.S. EPA comments to the RFI Phase II report.

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List of Appendices

- I: CD-Rom Containing Adobe Acrobat® Documents:
 - A. Second Quarter 2005 Progress Report (excluding laboratory analytical reports)
 - B. Second Quarter 2005 Laboratory Analytical Reports
 - C. Second Quarter 2005 Data Validation Memoranda
 - D. Second Quarter 2005 Ground Water Sampling Forms
- II: Second Quarter 2005 Potentiometric Contour Maps for the Cedarville Aquifer
- III: Responses to U.S. EPA's Draft Comments to Phase II RFI Report
- IV: Payne Firm Well Abandonment Forms and ODNr Well Abandonment Logs