



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

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In Reply Refer To: 3WC23

JAN 15 1998

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Robert L. Ritchey
Senior Environmental Control Consultant
E.I. duPont de Nemours & Company
Washington Works
P.O. Box 1217
Parkersburg, West Virginia 26102-1217

Re: RCRA Facility Investigation Work Plan
Notice of Deficiency
Washington, West Virginia Facility
Facility EPA ID #: WVD 045 875 291

Dear Mr. Ritchey:

On September 24, 1997 E.I. duPont de Nemours & Company, Inc. submitted the RCRA Facility Investigation Plan (RFI) for their Washington, West Virginia facility. This document was reviewed to determine if the plan fulfilled the conditions of the RCRA Corrective Action Permit Number WVD 045 875 291.

The attached report summarizes conclusions reached during the review. DuPont shall modify the RFI Work plan to overcome the deficiencies noted in the review and reply to EPA within forty-five (45) calendar days of receipt of this letter.

If you have any questions on this matter please contact me at (215) 566-3431.

Sincerely,

Denis M. Zielinski
RCRA Operations Branch

Attachments

cc: C.P. Wokpara, WV DEP

ASH001991

EID911334

RCRA FACILITY INVESTIGATION WORK PLAN

GENERAL COMMENTS

1. As described on page 2 of the Work Plan, the first purpose of the RFI is to collect data of sufficient quality and quantity that characterizes the nature and extent of contamination from release sources and to determine the rate of migration into groundwater, soil or other media, if applicable. In order to accomplish this purpose the following investigations should be performed as an input of the groundwater flow model and the site conceptual model:

- A. Monitoring Data Evaluation
B. Slope Stability Investigation
C. Leachate and Perched Water Investigation, and
D. Process Lines and Waste Stream Lines Investigation

Not an efficient process

Modeling 1ST.

2. EPA has a different interpretation of the groundwater then DuPont. It appears that the alluvial groundwater flow at the site runs from the local landfill side to the Ohio River side as a discharge zone, therefore, a Monitoring Data Evaluation must take place. The clay layer on the Ohio River bank acts as a lining of the river water to form a barrier between the river and the inland side. Since the production wells were installed, the groundwater level was locally altered, according to the pumping operations, so the groundwater flow model should include the local landfill area, the bedrock aquifer (Attachment A) and the perched water thereby considering the site as a whole. It is important that the input data is accurate, because the simulation can't be more accurate then the data available for the calculations. All existing data should be evaluated before input. For example, the groundwater levels were observed 581.05 and 581.98 respectively in RBLMW-4 and TW-1 of the 1991 sampling program. It indicated a piping phenomenon or cracks which occurred on the clay layer of the river bank which seeped the river water into the RBL area, and not a recharge from the Ohio River. Attachment B gives some suggestions for evaluating the monitoring data along the river side due to groundwater changes.

What data indicates this?

no, it impedes, but does not eliminate

* Look into this

ALL wells in this table don't exist anymore!

3. As described on page 12 of the Work Plan, some slumping of the clay and silt exists along the River's edge, therefore a slope stabilization investigation must take place. The stability of the river bank slope could be undergoing deformation. If the slope fails, it will not only damage the barrier area, but could also damage the plant. A through investigation including the following is suggested:

- Visual inspection of the scrap area surface failures and erosion above the river water level should be conducted. The evidence is often hidden by vegetation.
Careful investigation should be conducted at the Ranney well and other pumping areas because lowering of the groundwater table can lead to land movement.
Evaluation of the ultimate dynamic factors, such as extremely heavy precipitation, 100-year frequency flood and sudden drawdowns, to estimate the future risks should be conducted.

Add to the line

Easy work to do

Save time as field work

4. A leachate and perched water investigation should also be conducted. According to your July 11, 1997 response letter, DuPont has installed, and began operating on April 25, 1991, an activated carbon treatment

3.5.2.1

* Add all applicable items to the line

ASH001992

This work is already proposed in the workplan.

What is the source?

-2-

Want a summary of the system, contamination, status, etc.

system to capture the water leaking in the Fluoropolynes processing area. Through the second quarter of 1997, approximately 2.5 million gallons of seepage have been processed. It is unclear whether or not RBLL-1 is still seeping or not, please confirm. The Work Plan should include the measurement of elevation and quantity of RBLL-1, RBLL-2 (Attachments C and D) and other seeps found. Also, the perched contaminated water should be investigated for the extent and source control.

Doing This!

Sources First!

5. The Verification Investigation laboratory results detected TCE and PCE in the groundwater samples, but not in the soils. (See Attachments E and F) Where is the source(s) of the contamination? An investigation on the process lines and waste stream lines should be conducted. This investigation must be performed prior to conducting the modeling. EPA - Consider wastewater stream lines and process lines as next step
6. The following EPA publications, which are included, should be considered in the sampling. EPA/540/4-91/001 Soil Sampling and Analysis for Volatile Organic Compounds and EPA/540/S-95/504 Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures.

No!

Did they include? No

SPECIFIC COMMENTS

Dan

7. Section 2.3.3 must include the elevation of the 100-year floodplain for the Washington Works.
8. Section 3.5.3 must include language that states that any old monitoring wells designated for closure must have prior approval from the WV DEP as well as the U.S. EPA. *Ok, but why? "If applicable"*
9. Figure 1 should include the structure line of Lock and Dam No. 19 across the Ohio River, and should also include the actual location of the site.

Andrew

10. Figure 2 should include the seepage collection and treatment unit as well as outfall 005.

11. All described locations in the Work Plan, such as Shell Chemicals, Huntsman Chemicals, Amoco, Fluoropolymer Manufacturing area, etc, should appear on a map. *Ok, if possible -> want bigger map or describe location or have arrow pointing to location.*
12. Quarterly progress reports to EPA and the WV DEP must be added to the RFI Implementation Schedule in Appendix A. *OK*

Mike A

13. Table B-2 in Appendix B of the Sampling and Analysis Plan references SW-846 method 8240 for analysis of VOCs. Please note that this method is now obsolete and has been replaced by method 8260. *Yes, we know.*

Send revised pages

14. The Quality Assurance Project Plan (QAPP), Appendix C, proposes validation for 10% of the samples. The plan should include a rationale and criteria for how these samples will be selected. *Mike A answer*
15. In addition to the procedures listed in Section 5.2 of the QAPP in Appendix C, EPA recommends a methanol or reagent grade alcohol rinse for equipment used for collecting organic samples. A dilute nitric rinse should be used for inorganic (metals) sampling equipment. *Ok?*
16. The narrative describing trip blanks in Section 3.7.3 of the Sampling and Analysis Plan, Appendix B, is in error. The language should be consistent with the discussions in the QAPP, Appendix C.

Mike A address.

Time Line - Base on April 1 start.

ASH001993