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STORMWATER SAMPLING PROGRAM - PLANNED BMP ACTIONS

01/26/89

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LETTER

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Jeff Frost
BMP FILE

Department of Energy
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, Tennessee 37831—

January 26, 1989
DOE-475-89

Mr. Thomas Winston
Ohio Environmental Protection Agency
40 South Main Street
Dayton, OH 45402

Dear Mr. Winston:

STORMWATER SAMPLING PROGRAM - PLANNED BMP ACTIONS

References: Letter, Martyn G. Burt, Ohio EPA to James A. Reafsnyder, "Stormwater Sampling Program", dated November 25, 1988.

Letter, James A. Reafsnyder to Thomas Winston, "Proposed Consent Decree: Plan for Phase II Stormwater Runoff Control from Waste Pit Area", dated February 26, 1988.

Letter, James A. Reafsnyder to William D. Franz, U.S. EPA, "USEPA Comments on Surface Water Runoff in the Waste Pit Area", dated February 22, 1988.

Reference 1 requests that DOE provide three information items to [illegible] in order for the stormwater sampling results and [illegible]mpanying conclusions provided in the Stormwater Sampling Program Results to be considered an acceptable component of the Best Management Practices Plan:

- The threshold values which would trigger investigative work and possible corrective actions for each of the storm sewer system, the drainage ditches and fly ash areas.
- A specific list of investigative and/or corrective actions committed to by the Department of Energy as a result of this report, and designed to reduce export of contaminants by rainwater.
- An approximate schedule for performing these actions.

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In response to the above listed items, several correspondences have already been transmitted to U.S. EPA and Ohio EP (References 2 and 3). Reference 2 is the Plan for Phase I Stormwater Runoff Control from the Waste Pit Area that addresses specific corrective actions to be taken in the waste pit area. This plan specifically addresses sampling points DD07, DD12 and DD09 of which particular concern was expressed in Reference 1. The threshold value used to determine which areas are to be collected is the Department of Energy Derived Concentration Guide (DCG) of 0.89 mg/L total uranium. This is based on an annual dose of 100 mrem/year and assumes an equivalent weight composition of 0.00534%, 0.71% and 99.28% for U-234, U-235 and U-238 respectively. A schedule for performing this work is enclosed. The conceptual design report (CDR) for this project was issued in March 1988 and was validated as a Congressional Line Item Project. Currently, this project is in the phase where engineering criteria for project performance are being formulated so that an architect/engineer can perform final design for construction.

Concern was also expressed regarding sampling points Alt 3 and DD14. Investigations into elevated uranium levels in stormwater runoff in these areas have identified the need for corrective actions at a surface and subsurface drainage interception sump located south of the Pilot Plant. The proposed corrective actions will remove from service an open overflow line from this sump, which presently discharges to the tributary in question. This sump overflow will either be tied into the storm sewe system to direct any overflow to the Stormwater Retention Basin or it will be eliminated altogether. Either of these options will remove the potential for contaminated flows to be discharged to the drainage ditch near sample point Alt 3. The existing overflow line will be grouted shut to ensure that no overflow continues to flow to this ditch. Near-term actions that are being taken to mitigate this situation include temporary plugging of the entrance to the overflow line and monthly confirmation that the pumps associated with the sump are operating until the corrective actions have been completed. Permanent corrective actions will be initiated and funding will be identified within ninety (90) days from issuance of this letter.

Other areas of concern center around the two fly ash piles. These two ash piles have influenced the runoff in adjacent drainage ditches as indicated by the results of sample points DD08, DD17 and DD19. The levels of total suspended solids (TSS) found in the BMP Sampling Program for fly ash runoff exceed any reasonable threshold values used to trigger investigative work. Therefore, corrective actions in the fly ash areas will be initiated and no threshold values will be necessary. Currently, there are no remediation projects scheduled to correct the situations created by these piles. The inactive fly ash disposal site is being investigated as part of the sitewide RI/FS. Recommendations for the remediation of this pile will be part o the final RI/FS. A project will be initiated to place a

engineered cover over the existing pile and to continue future fly ash disposal in the same area using standard "celled" landfill construction design. This method allows a cover to be placed over new fly ash piles on a regular basis to control erosion from wind and rain. An estimated schedule to identify funding and initiate corrective actions is one hundred twenty (120) days from issuance of this letter.

Additional concern was expressed in Reference 1 over elevated levels of certain pollutants in the storm sewer system. Further investigations of any contamination in the storm sewer system are being covered in the RI/FS investigations. In addition, several projects are either planned or are underway to control the release of these pollutants. Most of these actions have been previously transmitted to the Ohio EPA as part of the overall site water management plans. These projects and estimated dates for completion are as follows:

1. Stormwater Retention Basin expansion (completed December 28, 1988)

2. Completion of 1 year study of the expanded SWRB to determine the effectiveness of the parallel operation and its ability to reduce uranium discharges (March 1, 1990)

3. Completion of the project to provide continuous TSS monitoring of the Storm Sewer Lift Station (SSLS) and the Stormwater Retention Basin (SWRB). This will allow shutdown of the SSLS and SWRB pumps when TSS is above acceptable levels (April 1, 1989 completion)

4. Shutdown the SSLS discharge to manhole 175 and increase pumpout capabilities to the SWRB to handle the additional flow from the SSLS. Until permanently routed to the SWRB, diversion of the SSLS to the stormwater retention basin will occur at the following levels:

   TSS - > 40 mg/L
   pH - < 7.0 or > 8.5

   These levels are used as an indicator of uranium.

5. Complete the upgrades of the various controlled storage pads as part of the EHSI Line Item Project:

   a) Plant 1
   b) Plant 5
   c) Plant 8 East and West

   (See attached schedule entitled "Wastewater Treatment Improvements" for project completion date)

If you have any questions or require additional information, please contact Mary Stone, of my staff, at (513) 738-6656.

Sincerely,

James J. Reafsnyder
Site Manager

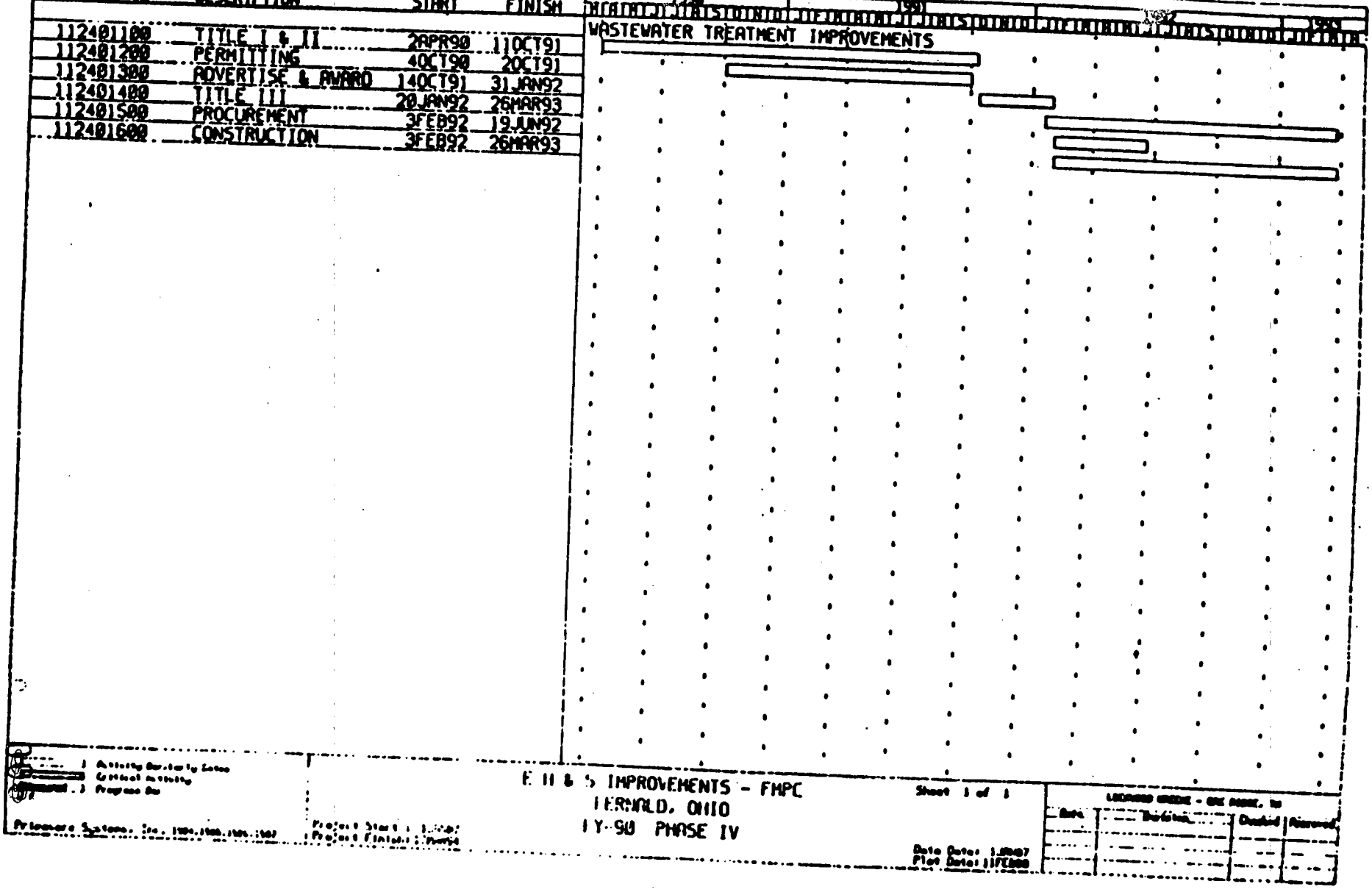
DP-84:Stone

Attachments: As stated

cc w/attachments:
J. L. Sager, SE-31, ORO
L. M Sparks, SE-31, ORO
C. McCord, USEPA-5
M. G. Burt, OEPA/Dayton
L. C. Bogar, WMCO
H. D. Christiansen, WMCO
L. Clausing, WMCO
M. J. Galper, WMCO
L. A. Griffin, WMCO
J. P. Hopper, WMCO
R. C. Kispert, WMCO

ATTACHMENT

ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH
112401100	TITLE I & II	2APR90	11OCT91
112401200	PERMITTING	4OCT90	2OCT91
112401300	ADVERTISE & AWARD	14OCT91	31JAN92
112401400	TITLE III	20JAN92	26MAR93
112401500	PROCUREMENT	3FEB92	19JUN92
112401600	CONSTRUCTION	3FEB92	26MAR93



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