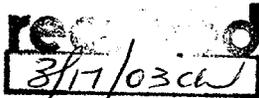


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SECRETARY



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MAR 10 2003 (4)

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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February 27, 2003

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Mr. Don Seaborg, Site Manager
US Department of Energy
Paducah Site Office
PO Box 1410
Paducah, Kentucky 42001

Mr. Gordon L. Dover, Paducah Manager of Projects
Bechtel Jacobs Company LLC
761 Veterans Avenue
Kevil, Kentucky 42053

RE: Environmental Monitoring Plan Calendar Year 2003, PGDP, Paducah, KY,
BJC/PAD-285/R1.

Gentlemen:

The Kentucky Division of Waste Management (Division) has reviewed the Environmental Monitoring Plan Calendar Year 2003 (EMP), which it received on December 12, 2002. Please find the Division's comments attached.

Substantive changes to the EMP to address watershed-monitoring deficiencies identified last year were absent. This omission was unexpected given the multi-agency effort to produce a list of changes that addressed those deficiencies and DOE's apparent support of those changes. The Division is aware that watershed-monitoring activities are also addressed in the Watershed Monitoring Plan (WMP) and that DOE is working on a new WMP that will be submitted for approval this April to Kentucky Division of Water (DOW), as part of the issuance of a new KPDES permit. Thus, it was expected that DOE would acknowledge and reference the multi-agency list of recommendations for improving watershed-monitoring activities in the 2003 EMP as a precursor to incorporation into the new WMP. The list of recommendations is attached for your convenience.

Additionally, several revisions that were to be incorporated into the 2003 EMP according to the EMP Comment Response Summary submitted to the Division by DOE on June 11, 2002 were absent.



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A-00005-2746



Thank you for the opportunity to review the 2003 EMP. Please direct any questions or comments to Janet Miller of my staff at (270) 441-5279.

Sincerely,



Michael V. Welch P.E., Manager
Hazardous Waste Branch

MVW/jkm

attachment

cc: Steve Alexander, USFWS
Dianna Feireisel, DOE-PGDP
Wayne Davis, KDFWR-Frankfort
Tony Hatton, DWM-Frankfort
Laila Lienesch, USFWS-Frankfort
Janet Miller, DWM-PGDP
Bruce Scott, DOW-Frankfort, KPDES
Tuss Taylor, DWM-Frankfort
David Tidwell, DOE-PGDP
DOE Reading File
DWM File 970

General Comments on the Environmental Monitoring Plan Calendar Year 2003, PGDP, Paducah, KY, BJC/PAD-285/R1.

•The 2003 EMP reflects the same watershed-monitoring deficiencies, as were identified in the 2002 EMP by the Division. During 2002 personnel from the U.S. Department of Energy, Bechtel Jacobs, CDM, Division of Water, U.S. Fish and Wildlife Service, Kentucky Department for Fish and Wildlife Resources, and Division of Waste Management discussed ways to correct watershed-monitoring deficiencies. Emphasis was placed on sampling site selection and the type of sampling necessary at each site to ensure the best assessment of Bayou and Little Bayou Creeks without creating the need for additional funding. Following months of discussions the following list of recommendations was produced in May 2002. It was understood that DOE would be supportive of each recommendation because the changes would incur no additional expense and would provide a better assessment of environmental conditions.

Recommendation 1: Move Bayou Creek site BM 5.55 downstream to approximately BM 4.6.

Rationale: BM 5.55 is an old site that has historically been used for evaluating impacts from outfall 001. A new site, BM 5.85 has been selected for that purpose. It is suggested that BM 5.55 then be used as an indicator of stream recovery by placing it further downstream. In order to keep the sampling site in the same ecoregion as the other Bayou Creek sampling sites, it is suggested that BM 5.55 be moved no farther than 1.0 river mile downstream. By utilizing a site further downstream, it will be possible to evaluate the recovery of the stream and obtain a more comprehensive picture of the Bayou Creek system.

Recommendation 2: Move FC (fish community) and BMI (benthic macroinvertebrate inventory) from LUM 5.0 to LUM 2.7 on Little Bayou Creek.

Rationale: FC and BMI are scheduled for 3 of the 4 sites on Little Bayou Creek: the headwaters at LUM 6.6, downstream at LUM 5.0 and LUM 4.5, but not at LUM 2.7. Previous data suggest no difference in the macroinvertebrate and fish communities between LUM 5.0 and LUM 4.5. Since no differences have been noted, it is suggested that FC and BMI be moved from LUM 5.0 and picked up at LUM 2.7.

Recommendation 3: Collect fish for bioaccumulation every other year (even numbered years) and analyze for PCBs (polychlorinated biphenyls) and metals, including mercury.

Rationale: Sampling fish for bioaccumulation every other year will give the fish population time to rebound and will allow older, larger fish to be analyzed. Older, larger fish are better candidates for bioaccumulation.

Recommendation 4: Exchange UTM 6.9 site on the unnamed tributary for a new reference site on the West Fork of Massac Creek.

Rationale: A more comparable reference site in terms of habitat, watershed size and floodplain influence was identified along the West Fork of Massac Creek. Previous comparative analyses for the six study sites used a reference site (MAM 8.6) that is similar in habitat to only one of the six sites. The revised 2002 plan calls for the additional sampling of macroinvertebrates and fish communities at four new sites, which underscores the importance of incorporating an appropriate reference site. The inclusion of a second reference site in the Massac Creek system will allow similar habitats to be compared, and potential impacts will be better identified and measured.

Recommendation 5: Refer to the Bayou Creek site at BM 7.6 as a sampling site rather than a reference site.

Rationale: Past WMPs have referred to BM 7.6 as a reference site, yet studies (Birge, et al), suggest impacts to fish and sediment at this location. "Reference" indicates a site that has not been impacted by COCs and one that is similar in habitat to the study sites so that comparative analyses can be made. (COCs = contaminants of concern)

Specific Comments on the Environmental Monitoring Plan Calendar Year 2003, PGDP, Paducah, KY, BJC/PAD-285/R1.

1. Appendix C, page C-32, Map of watershed monitoring locations.
It was anticipated that an additional map would be included that identified potential changes to the watershed monitoring locations and sampling parameters as a result of the new KPDES permit. Such changes would have included moving BM 5.55 to BM 4.6, moving FC & BMI from LUM 5.0 to LUM 2.7, and replacing UTM 6.9 with a reference site on the West Fork of Massac Creek.