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G-000-104.186

DRAFT NPDES PERMIT NO. 1LO00004*ED

09/18/95

C:EC:95-0125
FERMCO OEPA
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LETTER



Restoration Management Corporation P.O. Box 398704 Cincinnati, Ohio 45239-8704 (513) 738-6200

September 18, 1995

Fernald Environmental Management Project
Letter No. C:EC:95-0125

Mr. Mark B. Enochs
Division of Surface Water
Ohio Environmental Protection Agency
P. O. Box 1049
Columbus, Ohio 43216-1049

Dear Mr. Enochs:

DRAFT NPDES PERMIT No. 11000004*ED

- Reference:
1. Letter, Mark B. Enochs, OEPA to Terence D. Hagen, FERMCO, "Draft NPDES Permit No. 11000004*ED Comments," dated September 6, 1995
 2. Letter, C:EC:95-0122, Terence D. Hagen, FERMCO to Mark B. Enochs, OEPA, "Draft NPDES Permit No. 11000004*ED Comments," dated September 12, 1995

The FEMP appreciates your quick response to our request (Reference 2) for the opportunity discuss the subject proposed permit. The September 13, 1995 conference call, which included representatives of OEPA, U.S. DOE, and FERMCO, provided FEMP with an understanding of the concerns on which OEPA's proposed stormwater monitoring requirements are based. We appreciate the willingness of OEPA to consider a reduced monitoring frequency as evidenced by your offer to reduce the monitoring to once per month. As indicated during the conference call, however, many of the concerns expressed by FEMP with OEPA's original proposal remain with the latest proposal. By this letter, FEMP would like to describe our remaining concerns and to suggest a proposal that addresses both the needs of OEPA and the FEMP's concerns.

The FEMP position is that the sampling conducted for the September 29, 1992 "Application for Permit to Discharge Stormwater Discharges Associated with Industrial Activity" remains representative of conditions at the FEMP, and that compliance monitoring at a frequency significantly above that reflected in OEPA's General Permit for Stormwater Discharges is not necessary. Specifically, the nature of ongoing activities, site topography, and structural features at the FEMP has not changed appreciably since 1992. Significant waste excavation and disposal facility construction activities will not initiate until 1997 at the earliest.



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The potential impact of new excavation activities during the relatively short term proposed for the renewal permit will be adequately addressed though the stormwater pollution prevention measures specified by the proposed permit, augmented by confirmatory sampling as discussed later in this letter. The FEMP position remains that sampling conducted to confirm effectiveness of control measures, or to support environmental monitoring studies, should be separated from NPDES permit compliance monitoring. FEMP is confident that the alternate option discussed during the conference call to separate NPDES compliance monitoring from stormwater pollution prevention control confirmatory sampling is the most effective means to address the concerns of both FEMP and OEPA.

During the September 13 conference call, FEMP requested clarification of the concerns on which OEPA's proposal of a monitoring frequency significantly greater than that specified by OEPA's General Permit for Stormwater Discharges is based. OEPA stated two primary concerns as the basis for the current proposal: future pollutant loading to Paddy's Run from these four drainage areas associated with site remedial activities; and the desire to assemble a database of 'baseline data' against which to evaluate the impact of future remedial activities. The FEMP's response to each of these issues is provided below, as well a more detailed description of the alternative monitoring strategy proposed by FEMP during the conference call.

Pollutant Loading to Paddy's Run

OEPA indicated that a monitoring frequency above that specified by the general permit was based upon levels of oil & grease and heavy metals above 'levels of concern' in the data for the four outfalls to Paddy's Run provided in the September 1992 application. OEPA explained that their concern was based upon the fact that the application showed detectable levels of these pollutants and that an anticipated "significant gear-up" in excavation activities in these areas could cause a significant increase above these levels. The data supplied with the application indicate that only one detection was observed for oil and grease; the majority of the detectable levels of heavy metals which were observed were only slightly above the detection limit and all were significantly below the discharge limits proposed in the draft permit.

Review of RI/FS soil data, which include data for a wide range of metals and organics, demonstrates that the majority of the areas of significant soil contamination at the FEMP occur in the former production area and other areas which do not drain to the four outfalls to Paddy's Run. Soil contamination data for the areas drained by the four outfalls to Paddy's Run does not indicate the presence of a sufficient level of contamination to support OEPA's assumed significant increase in pollutant loading during remedial activities. During the conference call you indicated that OEPA has access to the soil contamination data contained in the Operable Unit 5 Remedial Investigation Report; we invite your review of these data.



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As you are well aware, the proposed permit requires development of a Stormwater Pollution Prevention Plan (SWPPP) which must be implemented in response to any excavation activities which will occur in these four drainage areas. Compliance with this provision of the proposed permit will assure that activities occurring during the term of the permit do not cause a significantly increased loading of the regulated pollutants which are present in the soil.

In response to the significant increase in excavation activities that you indicated was assumed by OEPA in drafting the proposed permit, FEMP has reviewed current schedules for near-term remedial activities and other major projects in these areas. As requested during the conference call, a summary of this review is attached to this letter. The schedules provided in the attachment are estimates based upon current planning scenarios and represent the earliest initiation dates for the various activities. Any activities that occur during the term of the proposed permit will be implemented in compliance with the SWPPP, which will minimize the potential for a significant increase in pollutant loading as assumed by OEPA.

The FEMP agrees that sampling to confirm the effectiveness of stormwater pollution prevention efforts is appropriate. Conducting this monitoring as part of the SWPPP maximizes the flexibility to tailor the sampling times and methods to fit the project involved, weather conditions, and other logistical and safety considerations.

Proposed Alternate Monitoring Strategy

As you recall, FEMP's proposal was to separate sampling for NPDES compliance monitoring purposes from sampling for other purposes. FEMP proposed to make available existing environmental monitoring data for use as baseline information and to continue to use this environmental monitoring program to assess Paddy's Run during remedial activities. FEMP also proposed to conduct confirmatory sampling specific to individual intrusive remedial activities to ensure that implemented controls are functioning properly. With these activities properly implemented, the monitoring frequency for NPDES permit compliance should be consistent with that required under a General Stormwater Permit. The FEMP recommends biannual compliance sampling for outfalls 4003, 4004, 4005, and 4006 for those pollutants currently listed in the proposed permit.

In addition to the biannual compliance sampling at the four outfalls, FEMP proposes that confirmatory sampling to provide assurance of the effectiveness of stormwater pollution controls be incorporated into the SWPPP required under the proposed permit. Confirmatory sampling will be tailored to recognize the specific area of activity and the control measures implemented. Specific locations, frequencies, and durations of sampling will be identified on a project-specific basis, considering factors such as the area of construction and the associated grading plan, and the controls in use. For example, if a specific activity is located some two-thousand feet from an outfall, it may be appropriate to sample a point within a sub-basin closer



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to the activity. In an instance where several projects drain to a common outfall, only one sampling point may be appropriate. Where possible FEMP will tie areas of runoff into the controlled stormsewer. Other control devices, such as sediment basins, are more conducive to sampling compared to areas that are not drained by a discreet conveyance (i.e. overland flow). SWPPP requirements will be addressed in the design of any remedial activity conducted in an area subject to the SWPPP. The project-specific stormwater pollution prevention measures, including confirmatory inspection and monitoring requirements, will be documented in the remedial design submittals which are be subject to OEPA review through the ongoing CERCLA process.

Implementation of the Proposed Monitoring Requirements

During the September 13 conference call OEPA expressed the opinion that the proposed monitoring could be relatively easily implemented with automatic samplers using methods currently employed for FEMP environmental monitoring studies. As FEMP indicated during the conference call, monitoring conducted for NPDES compliance, to be certified and submitted as part of the Discharge Monitoring Reports, is subject to significant requirements above those impacting confirmatory sampling as part of the SWPPP or sampling conducted for other purposes. Compliance with 40 CFR 136 requirements would necessitate refrigeration, and thereby electric power, which is not currently available in the vicinity of any of the four outfalls to Paddy's Run. Permanent installation meeting these requirements at locations as remote as the four outfalls to Paddy's Run would necessitate a significant capital expense and would prevent automatic sampling from being available until well after the effective date of the proposed permit; thus making manual sampling the only means of compliance for a significant portion of the term of this permit.

As has been indicated by FEMP, manual sampling on a monthly basis would require frequent mobilization of personnel to remote locations during inclement weather and nighttime conditions in order to assure that either a sample or positive evidence of no discharge is obtained each month. This effort would pose significant personnel safety concerns. Monitoring conducted as part of the SWPPP is more readily limited to daylight and less severe weather conditions.

Collection of Baseline Environmental Data

In addition to the collection of data to address the NPDES concerns discussed above, OEPA has expressed the desire to assemble a body of baseline data on stormwater runoff to Paddy's Run to form a basis for comparison with data during and after remedial action implementation. The FEMP environmental monitoring program, which is conducted with input from and involvement of OEPA, currently includes sampling at various onsite and offsite locations along Paddy's Run. Historical data from this program, and from other sources such as the OU5 Remedial



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Investigation, provides a significant body of data for the contaminants of concern in the drainage areas proposed for regulation under the NPDES permit. In addition, sampling of these outfalls for the next NPDES Permit renewal, assuming the March 31, 1998 expiration date reflected on the proposed permit, will begin as soon as 18 months from now.

As indicated during the September 13, conference call, FEMP is receptive to considering expansion of this program to address OEPA's desire for baseline data. As we have stated, data for this purpose is most effectively, and most appropriately, collected as part of the environmental monitoring program, and not within the scope of the NPDES permit. Conducting this monitoring as part of the routine environmental monitoring program will provide FEMP and OEPA with greater flexibility to change the monitoring frequency, locations, or parameters to fit changing FEMP activities without the time and effort involved in the NPDES permit modification process. For this reason, this type of monitoring will provide greater ability to track the water quality of Paddy's Run on an ongoing basis.

We acknowledge your clarification of OEPA's intent to issue a final permit which is effective by September 30, 1995 and remain encouraged by your willingness to consider our concerns. FEMP requests the opportunity to discuss our proposal with OEPA before the permit is issued. Again, your willingness to work cooperatively with the FEMP to reach a final resolution is greatly appreciated. If you have any questions, please contact Frank Johnston at (513) 648-5294.

Sincerely,

A handwritten signature in black ink, appearing to read "Terence D. Hagen", is written over a horizontal line.

Terence D. Hagen
Director
Environmental Compliance

TDH:SMB:mhv
Attachment

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c: S. M. Beckman, FERMCO
S. L. Bogart, DOE-FN
D. J. Carr, FERMCO
R. V. Holmes, FERMCO
F. L. Johnston, FERMCO
W. J. Quaider, DOE-FN
J. Richie, OEPA-SWDO
T. A. Schneider, OEPA-OFFO
E. P. Skintik, DOE-FN
AR Coordinator
AWP Files
File Record Storage Copy 108.13

ATTACHMENT

PROJECTED ACTIVITIES WITH POTENTIAL STORMWATER DISCHARGES

OPERABLE UNIT 1

The primary components of the selected remedy for the Operable Unit 1 area of the site include the excavation of the waste pit contents, waste processing and treatment by thermal drying, and off-site disposal at a permitted commercial disposal facility. Stormwater discharges associated with construction activity are anticipated from the following remedial activities:

- Construction of Phase 1 Dryer Facility - Construction is scheduled to begin in May, 1996 and terminate in June, 1998.
- Construction of Rail Lines - Construction of additional rail lines is scheduled to begin in November, 1995 and terminate in March, 1998.
- Construction of Phase 2 Dryer Facility - Construction is scheduled to begin in November, 2000 and terminate in September, 2004.
- Site Restoration - Restoration of the Operable Unit 1 area of the site is schedule to begin in April, 1998 and terminate in March, 1998.

OPERABLE UNIT 2

The primary components of the selected remedy for the Operable Unit 2 area of the site include the excavation of all waste materials and soils with COCs above the cleanup levels, material processing for size reduction and moisture control if required, on-site disposal in an engineered disposal facility, off-site disposal of a small fraction of the excavated material that exceeds the waste acceptance criteria of the on-site disposal facility, and continued federal ownership of the FEMP. Stormwater discharges associated with construction activity are anticipated from the following remedial activities:

- Construction/Operation of Haul Road - Construction of the haul road is scheduled to begin in September, 1996 and terminate in August, 1997.
- Removal of Haul Road - Removal of the haul road is scheduled to begin in July, 2000 and terminate in March 2001.
- Test Pads - Startup is scheduled to be begin in January, 1996.
- On-site Disposal Facility - Site preparation for the on-site disposal facility is scheduled to begin in March, 1997 and terminate in July, 1997.
- Excavation Activities- Site preparation for excavation of Operable Unit 2 waste units is scheduled to begin in June, 1997 and terminate in December, 1998.
- Site Restoration - Restoration of the Operable Unit 2 area of the site is scheduled to begin in March, 1999 and terminate in November, 1999.

OPERABLE UNIT 3

Stormwater discharges associated with activities within the Operable Unit 3 Area of the site are currently controlled and discharged through the existing FEMP NPDES permitted wastewater treatment system. Therefore these discharges will not impact water quality at NPDES permitted stormwater outfalls along Paddy's Run.

OPERABLE UNIT 4

The selected remedy for Operable Unit 4 involves the removal and vitrification of the K-65 silo materials and the demolition and removal of the silo structures. Stormwater discharges associated with construction activity are anticipated from the following remedial activities:

- Vitrification Plant Construction - Construction of the vitrification plant is scheduled to begin in July, 1995 and terminate in September, 1997.
- Excavation/Restoration - Excavation and restoration activities within the Operable Unit 4 area are scheduled to begin in October, 2000 and terminate in September, 2002.

OPERABLE UNIT 5

The selected remedy for Operable Unit 5 involves the excavation of contaminated soil and placement in on-property disposal facility and the restoration of the Great Miami Aquifer to its full beneficial use. Stormwater discharges associated with construction activity are anticipated from the following remedial activities:

- AWWT Phase III Construction - Construction is scheduled to begin in October, 1996 and terminate in September, 1998.
- Construction of South Field Recovery Wells - Construction is scheduled to begin in April, 1997 and terminate in December, 1997.
- Excavation Activities - Excavation activities are scheduled to begin in July, 1997 and terminate in August, 2002.

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