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# INFORMATION SUBMITTAL UNDER PARAGRAPH XII (B) OF THE 1990 CERCLA CONSENT AGREEMENT - GLOVE BOX TREATABILITY TESTING

8-14-90

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[redacted]

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DOE-1722-90

Ms. Catherine A. McCord
Remedial Project Manager
U. S. Environmental Protection Agency
Waste Management Division
Region V - 5HR-12
230 South Dearborn Street
Chicago, Illinois 60604

Mr. Graham E. Mitchell
DOE Coordinator
Ohio Environmental Protection Agency
40 S. Main Street
Dayton, Ohio 45402

**INFORMATION SUBMITTAL UNDER PARAGRAPH XIII (B) OF THE 1990 CERCLA CONSENT AGREEMENT - GLOVE BOX TREATABILITY TESTING**

Dear Ms. McCord and Mr. Mitchell:

Current plans for treatability tests on K-65 Silo residue samples involve the use of a glove box to be installed in the Pilot Plant Maintenance Building at the FMPC. The glove box utilizes carbon absorbers and HEPA filtration (in series) which is considered best available technology (BAT) to control emissions. Therefore, the emissions would be expected to be insignificant. The information obtained from the testing is considered crucial to the remediation effort of the K-65 Silos. These tests may result in air emissions.

Section 121 (e) of CERCLA, the revised NCP 40 CFR 300.400(e) and Section XIII A of the April 1990 CERCLA Consent Agreement, provide an exemption from permitting requirements for removal or remedial actions conducted on site. More specifically, EPA's "Guide for Conducting Treatability Studies Under CERCLA" (EPA/540/2-89/058, December 1989), addresses compliance with Regulatory Requirements in Section 3.9. The Guidance document states:

> "Onsite treatability studies under CERCLA may be conducted without any Federal, State, or Local permits [40 CFR 300.68(a)(3)]; however, such studies must comply

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with applicable or relevant and appropriate requirements (ARARs) under Federal and State environmental laws." (page 62)

Therefore, potential air contaminant sources which are part of treatability studies conducted on-site are exempt from obtaining Federal NESHAP approval and Ohio air permits (i.e. the administrative requirements) although the substantive requirements must still be satisfied.

Section XIII B of the 1990 CERCLA Consent Agreement requires the submittal of certain information for portions of response actions exempted from the administrative requirements. This information, included below, supports the fact that the substantive requirements have been satisfied for the glove box treatability testing.

1. **Identification of each permit that would be required.**

   State Requirements

   Permit to Operate (PTO) - Ohio Administrative Code (OAC) 3745-35-02 requires that the owner/operator apply for and obtain a permit to operate for any air contaminant source. There are currently no exemptions in the PTO rule which would apply to the glove box.

   Permit to Install (PTI) - In 1989, the OAC was revised to exempt a number of air emission sources from requiring Permits to Install (PTI's) prior to construction. Among the exemptions is "laboratory equipment used exclusively for chemical or physical analyses and bench scale laboratory equipment".[OAC 3745-31-03(A)(1)(f)] Therefore, no PTI would be required for this potential source.

   Federal Requirements

   National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR 61.07 requires that the owner/operator submit an application for approval of the modification of any existing source. The FMPC is an existing source subject to the requirements of NESHAP, Subpart H. Therefore, administrative approval for this modification would be required.

2. **Identification of the standards, requirements, criteria, or limitations that would have to be met to obtain each such permit.**

   State Requirements

   OAC 3745-17-11 limits particulate emissions from this operation to .551 pounds per hour.

   OAC 3745-17-07 limits visible emissions to no more than 20% opacity, as a six-minute average.

Federal Requirements

40 CFR 61.92 requires that emissions of radionuclides for a DOE facility shall not cause an effective dose equivalent of 10 mrem/yr or more to any member of the public. The emissions from the glove box treatability testing, when added to all other FMPC site emissions, cannot exceed this standard.

3. **Explanation of how the response action will meet the standard, requirements, criteria, or limitations identified in Item 2 above.**

State Requirements

Since the Glove Box will utilize HEPA filtration to remove particulates, minimal emissions will occur. Additionally, the amount of particulate which will be airborne in the Glove Box is small due to the type of testing involved. The estimated particulate emissions are $2.2 \times 10^{-7}$ pounds per hour, and no visible emissions are expected.

Federal Requirements

The use of the Glove Box for treatability testing will not exceed NESHAP Subpart H criteria. Although detailed analyses were not performed, an engineering estimate was made which considered emission controls and test material amounts. The estimated dose from the emissions from the operation of a glove box would be $1.18 \times 10^{-6}$ mrem. The 1989 estimated FMPC dose was 5.2 mrem, for a combined total of 5.200002 mrem.

If your staff has any questions, please contact Jack Craig at 513 738-6159.

Sincerely,

Jack R Craig

for Bobby Davis
Remedial Action
Project Manager

DP-84:Craig

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