R-014-401.1

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POTENTIAL ARARS K-65 DECANT SUMP TANK REMOVAL ACTION

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ENCLOSURE

FEED MATERIALS PRODUCTION CENTER

POTENTIAL ARARs

K-65 DECANT SUMP TANK REMOVAL ACTION

Chemical, Location, or Action	Citation	ARAR/TBC	Rationale for Implementation	Compliance Strategy
Radionuclide Emmissions (except Radon)	40 CFR 61, Subpart H Emissions of radionuclides to the ambient air from DOE facilities shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/yr.	Applicable	Plant 8 stack (equipped with a continous sampler) could contribute to to the dose to members of the public from the air pathway (NESHAPS).	NESHAP compliance for Plant 8 stack is documented in the FMPC sitewide U.S. EPA approved NESHAP document.
Radiation Doses, Levels and Concentrations in Restricted and Unrestricted Areas.	10 CFR 20.101-105 Radiation doses, levels and concentrations for restricted and unrestricted areas shall not exceed specified limits.	Relevant and Appropriate	Radioactive materials from this Removal Action could contribute radiation doses, levels, and concentrations to individuals in restricted and unrestricted areas, which could exceed the specified limits.	Protective measures will be implemented in accordance with the task specific Health and Safety Plan for the K-65 Decant Sump Tank Removal Action.
Treatment, Storage, and Handling	40 CFR 264, General Standards •40 CFR 264.13 (Waste Analysis) - Operators of a facility must obtain a detailed chemical and physical analysis of a representative sample of each hazardous waste to be treated, stored, or disposed of at the facility prior to treatment, storage, or disposal.	Relevant and Appropriate Relevant and Appropriate	The liquid removed from the K-65 decant sump tank must be handled, stored, and inspected with the liquid removed being managed as a hazardous waste.	As outlined in the Removal Action Work Plan, samples will be taken prior to the liquid being transferred to the tanks in Plant 2/3. Samples will analyzed for HSLs.

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	•40 CFR 264.14 (Security) operators of a facility must prevent the unknowing or unauthorized entry of persons or livestock into the active portion of the facility, maintain a 24-hour surveillance system, or surround the facility with a controlled access barrier and maintain appropriate warning signs at facility approaches.	Relevant and Appropriate		In addition to the FMPC sitewide security measures, the specific access control measures for the K-65 Decant Sump Tank Removal Action are outlined in the task specific Health and Safety Plan, section 6.1.
	•40 CFR 264.15 (Inspections) Operators of a facility must develop a schedule and regularly inspect monitoring equipment, safety and emergency equipment, security devices and operating and structural equipment that are important to preventing, detecting or responding to environmental or human health hazards, promptly or immediately remedy defects, and maintain an inspection log.	Relevant and Appropriate		Inspections of Plant 2/3 storage area and the FMPC water treatment facilities will be in accordance with the FMPC Waste Management Plan, the Waste Analysis Plan, and Standard Operating Procedures.

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	•40 CFR 264.16 (Training) Operator must train personnel within 6 months of their assuming duties at a facility in hazardous waste management procedures relevant to their positions including emergency response training.	Relevant and Appropriate		All FMPC personnel are trained in accordance with 29 CFR 1910.120. Personnel involved with this Removal Action will be trained on the applicable operating procedures and K-65 Emergency Procedure.
Discharge of Treatment System Effluent	40 CFR 122.41 (i) OAC 3745-33-05 <u>Monitoring requirements</u> Discharges must be monitored to assure compliance. Discharges will be monitored for: -the mass of each pollutant -the volume of each pollutant -frequency of discharge and other measurements as appropriate.	Applicable	Required of all direct discharges to waters of the U.S.. The effluent as a result of the treatment of the liquid removed will be discharged to the Great Miami River.	Effluent from the treatment of liquid removed from the K-65 decant sump tank will be monitored according to the requirements in the FMPC NPDES permit.
	40 CFR 136.1-136.4 Approved test methods must be followed for waste constituents to be monitored. Detailed requirements for analytical procedures and quality controls are provided.	Applicable		Same as above.

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	40 CFR 136.1-136.4 (Cont'd) Sample preservation procedures, container materials, and maximum allowable holding times are prescribed.			
	40 CFR 122.41 (i) Comply with additional substantive conditions such as: -Duty to mitigate any adverse effect of any discharge; and -Proper operation and maintenance of treatment systems.	Applicable		Same as above.
Chemicals in Drinking water	40 CFR 141.12 The following MCLs for organic chemicals are the the maximum levels of a contaminant in water which is delivered to a free flowing outlet of the ultimate user of a public water system: - Chloroform 0.1 mg/l -Ethyl-benzene 0.7 mg/l* -Pentachlorophenol 0.2 mg/l* -PCBs 0.0005 mg/l* -Tetrachloroehtylene 0.005 mg/l*	Relevant and Appropriate	The requirement is not applicable since no public water system is involved. It is relevant and appropriate to protect drinking water from the contaminants listed. These contaminants may mitigate or leach into the underlying aquifer.	The MCLs specified will be met by the use of centralized VOC treatment facility at Plant 8 which was installed as part of the Consent Agreement Removal No. 1.

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Chemicals in Drinking Water	40 CFR 141.12 (Cont'd) -Toluene 2.0 mg/l* -Trichloroethylene 0.005 mg/l* -1,1,1 Trihloroethane.2 mg/l -Xylene 10.0 mg/l* *Proposed	Relevant and Appropriate		
Radiation Dose Limit (Drinking Water pathway)	DOE Order 5400.5, Chapter II, Section 1.a The exposure of members of the public to radiation sources as a consequence of all routine DOE activities shall not cause, in a year, an effective dose equivalent greater than 100 mrem from all exposure pathways.	To Be Considered	The radioactive constituents of the liquid removed from the decant sump tank could contribute to the dose to members of the public from drinking water.	The DCGs established by the referenced DOE Order can not be met with the current FMPC available waste water treatment facilities. The established DCGs will be attained when the AWWT is operational in 1993.