



CRAB ORCHARD NATIONAL WILDLIFE REFUGE



PCB AREAS OPERABLE UNIT

Fact Sheet Number 5

February 1995

STATUS OF THE PCB OPERABLE UNIT

This fact sheet presents the latest information regarding the cleanup action for the PCB Operable Unit (PCB OU) at the Crab Orchard National Wildlife Refuge (Refuge). Schlumberger Industries Inc., (SII) under the terms of the Consent Decree, signed with U.S. Environmental Protection Agency (USEPA) and Department of the Interior (DOI), SII is currently conducting the remedial activities at the Refuge. The public will find additional information on this project in Information Repositories and in Administrative Record Files listed at the end of this fact sheet. Abbreviations are defined in the text or a Glossary fact sheet which also is available.

STATUS OF PCB OPERABLE UNIT

Since the last public meeting, several studies/plans have been submitted or are planned to be submitted by SII to ensure a safe and effective cleanup. Engineering studies have been conducted to further define the volume of the contamination, the levels of contamination, and other factors which may affect the cleanup activities. USEPA serving as the lead agency along with Federal and State agencies have reviewed all the studies/plans.

A Landfill Siting Assessment was completed to support the location of the RCRA SubTitle D-equivalent landfill. Soils and groundwater were studied to determine a location that could be used as a landfill site. A location, adjacent to the Metals OU

landfill on the Refuge, has been chosen as the site for the PCB OU landfill.

A Treatability Study has been conducted to generate sufficient data to support, develop, and evaluate the performance characteristics for the thermal treatment and stabilization components of the selected remedy. Results of the study show that an operational temperature of 1000 degrees Fahrenheit for a period of 10 minutes was sufficient in reducing the PCB levels to less than 0.5ppm. The stabilization component was shown to be successful in rendering metal containing thermally treated soils, suitable for landfilling with a formulation of 15% portland cement and 20% fly ash.

A Pre-Design Contamination Delineation Report was completed to gather supplemental data to ensure proper remedial design of the excavation, treatment, and handling of contaminated soils and sediments. The report presents the extent and depth of the PCBs, lead, and cadmium exceeding cleanup criteria, it determines the volume and location of contaminated soils at the four sites constituting the PCB OU.

A Remedial Design/Remedial Action Work Plan was submitted to provide a planned approach for completing the remedial design/remedial action at the PCB OU. It is the first step in the design, construction and implementation of the remedial action. The work plan outlines the requirements by

PUBLIC MEETING

THE PUBLIC IS ENCOURAGED TO ATTEND A PUBLIC MEETING ON THURSDAY FEBRUARY 9, 1995, AT 7:00PM AT JOHN A. LOGAN COLLEGE. There will be an Open House Session from 6:00pm - 7:00pm followed by the Public Meeting starts at 7:00pm. The U.S. Fish and Wildlife Service is hosting the meeting, personnel from USEPA, SII and IEPA will be available to answer any questions. Please attend, ask questions, and make comments.



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which the project will be designed prior to the beginning of the remediation activities.

A Pre-Final Remedial Design has been completed, but is continuing to be modified as further information is gathered. The Final Design will describe specific actions that will be taken. With the addition of the Remedial Action Contractor, Maxymillian Technologies (MT), a final detailed design can be completed. The design will include aspects such as excavation of soils, soils management, landfill construction, installation of the TTU and associated buildings, security, air and soil sampling, dust and odor control, health, safety, and emergency response, as well as many more.

A Groundwater and Surface Water Monitoring Report is currently being developed. It will report the current concentrations of contaminants obtained from the quarterly sampling of the groundwater and surface water. Monthly groundwater level measurements are being taken so that the flow of groundwater will be better defined for the future siting of groundwater monitoring wells. This current information will be used to gauge the effectiveness of the remedial action.

A Supplemental Investigation Report is currently underway. It's purpose is to obtain additional data on soils, sediments, groundwater and surface water. This data will be used to assure that the Remedial Action, as designed, will be effective in protecting human health and the environment.

A Trial Burn Plan will be developed so that after the temporary Thermal Treatment Unit (TTU) is assembled on-site, the temporary TTU can be tested to ensure that it will be operated under correct conditions and can meet the 99.9999% destruction and removal efficiency (DRE) required by the USEPA. This plan will also include sampling the exhaust gases and residual ash for several chemical compounds.

An Air Monitoring Plan will also be developed so that air at the perimeter of the Refuge and other various locations off the Refuge can be monitored before and during thermal treatment to ensure that regulatory standards such as the National Ambient Air Quality Standards for particulate matter and lead are not exceeded. Additional monitoring for cadmium, PCBs and dioxins will be conducted.

USEPA will conduct a preliminary screening analysis to ensure that there is no unacceptable risk

to the human health due to the potential release of dioxins, furans, PCBs, and other products of incomplete combustion from the thermal treatment of soils at the Crab Orchard Superfund Site. This analysis is essentially a risk assessment which will take into account the effects from both direct and indirect exposures to dioxins, furans, PCBs and other products of incomplete combustion. Direct exposures include inhalation exposure whereas indirect exposures include the consumption of both above ground and root vegetables, beef, fish, milk and other dairy products which are directly affected by the site's thermal treatment activities.

USEPA will impose additional restrictions, including dioxin emission limits, if the risk assessment shows that such additional restrictions are necessary to protect the human health. During the trial burn test for this project, dioxins, furans, PCBs, and other hazardous contaminants will be measured to ensure that these limits are not exceeded.

At the Crab Orchard Superfund Site, the TTU, will be regulated under the Toxic Substances Control Act, would be assembled at the site. This mobile unit will be used only to treat the contaminated soils and sediments from this specific site. This temporary unit will not operate as a commercial facility which accepts hazardous waste material from any outside source. After the treatment activities are completed at the site, this mobile unit will be taken off the Refuge. Please be assured that this mobile unit would not remain permanently at the site and operate as a commercial waste disposal facility.

NEW CONTRACTOR

MT has been chosen by SII as the Thermal Treatment contractor for the Crab Orchard PCB Operable Unit. MT is an environmental clean-up firm headquartered in Pittsfield, Massachusetts. MT provides environmental cleanup services with an emphases in contaminated soil and water treatment, site remediation, and facility decontamination and rehabilitation. Along with their affiliate company, J.H. Maxymillian, Inc., they have been involved in hazardous waste cleanup operations for over twenty years. They have progressive programs for hiring local labor and subcontractors.

Under the guidance of USEPA, MT has used its TTU on another very similar Superfund site. From January to June 1994, MT decontaminated approximately 50,000 tons of PCB contaminated soil at the F.T. Rose Superfund Site in Lanesboro,

Massachusetts. This site was in a sensitive area surrounded by wetlands, a deciduous forest in Balance Rock State Park and a residential neighborhood. The TTU successfully performed a Trial Burn to prove that it decontaminated the soil while maintaining strict air pollution controls. The TTU decontaminated all the soil well below the cleanup criteria established for the site. All TTU operations were completed in a little over 4 months. The F.T. Rose Superfund Site is similar to the Crab Orchard PCB Superfund Site in that both require excavation, preparation and thermal destruction of PCB contaminated soils. The rotary kiln incineration system operated by MT met all the criteria of the emission requirements set forth by USEPA and the Commonwealth of Massachusetts.

BACKGROUND INFORMATION

The Refuge was established in 1947 by Congress with a mission to support the natural habitat, recreational activities, agricultural needs and industrial activities. The industrial activities on the Refuge prior to environmental laws, often used unlined landfills and dumps to dispose of the waste generated by their operations. The PCB OU contains 4 sites on the Refuge they are: 1) Site 17, Job Corps Landfill, 2) Site 28, Water Tower Landfill, 3) Site 32, Area 9 Landfill and 4) Site 33, Area 9 Building Complex.

IMPORTANT ESTIMATED MILESTONES:

Construction of Roads and Berms -
Winter/Spring 1995
Remedial Action Activities Begin -
Spring/Summer 1996

Trial Burn Activities - Winter 1996
Remedial Action Complete - Fall/Winter 1997

FOR FURTHER INFORMATION

Two Administrative Record Files have been established to provide public access to the legal documents on which the final remedy selection was based. In addition, there are four Information Repositories which have further information such as brochures and other fact sheets available for public information. These documents are available at the following locations during normal business hours. The reports/plans listed above and several other reports/plans that are currently being developed and should be finalized in the near future. They will be available in the Information Repositories as they come final.

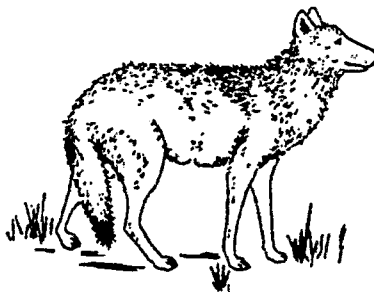
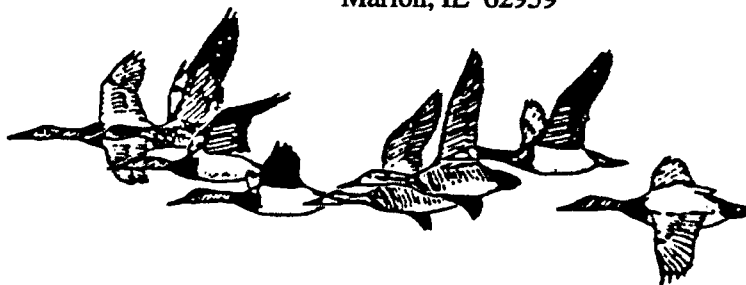
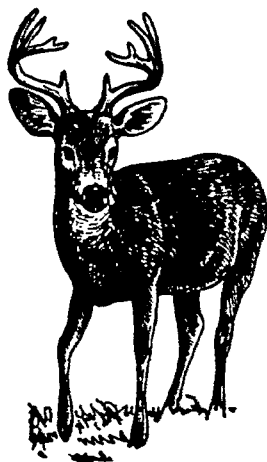
ADMINISTRATIVE RECORD FILES

Morris Library - Fifth Floor
Southern Illinois University-Carbondale
Carbondale, IL 62901
Contact: Reference Librarian (618)453-2683

USEPA, Region V
Attn: Eileen Deamer (PS19J)
77 W. Jackson Blvd
Chicago, IL 60604-3590

INFORMATION REPOSITORIES

USFWS
Attn: Leanne Moore
RR 3 Box 328
Marion, IL 62959



Marion Carnegie Public Library
206 S. Market St
Marion, IL 62959

Carbondale Public Library
405 W. Main St
Carbondale, IL 62901
Contact: Jim Gunether (618)457-0354

Marion Federal Penitentiary Library
Department of Justice, Bureau of Prisons
Attn: Steve Fawl
Rt 5 Little Grassy Rd
Marion, IL 62959

USEPA offers TECHNICAL ASSISTANCE GRANTS (TAGS) to community groups who wish to obtain qualified technical support in reviewing technical study documents generated for a Superfund site. Information about TAGs is available in the Information Repositories or through the TAG Coordinator, USEPA, Region V at (800) 621-8431.

COMMUNITY RELATIONS COORDINATORS

Inquiries regarding the Superfund activities can be sent or called to Leanne Moore at the address and phone number at the end of this fact sheet. In addition, each Federal and State agency has a

Community Relations Coordinator who serves as a primary point of contact who is also available to assist you. The project managers can be reached through their agencies community relations coordinators.

USEPA, Region V
Attn: Eileen Deamer (PS19J)
77 W. Jackson Blvd
Chicago, IL 60604-3590

IEPA
Public Relations
Attn: Michelle Nickey-Tebrugge
2200 Churchill Rd
P.O. Box 19276
Springfield, IL 62794-9276

USACE
Community Relations
Attn: Betty White
215 N 17th Ave
Omaha, NE 68102-4978

Each agency has assigned Project Managers to the Crab Orchard Superfund studies who serve as key team members. Those Project Managers are: Nan Gowda, USEPA; Stephen Nussbaum, IEPA; Frank Fischer, USACE; Leanne Moore, Mark Sattelberg and MaryGail Scott, Service.

If you wish to be placed on the mailing list for the Superfund activities at the Crab Orchard National Wildlife Refuge, please complete the form below and mail to:

Attn: Leanne Moore, U.S. Fish and Wildlife Service
RR 3, Box 328 • Marion, IL 62959 • (618) 997-5491

I wish my name to be placed on the mailing list for the Crab Orchard National Wildlife Refuge Superfund Site. Please send information to the address listed below.

Name/Title _____

Organization _____

Street Address _____

City/State/Zip _____

Date _____