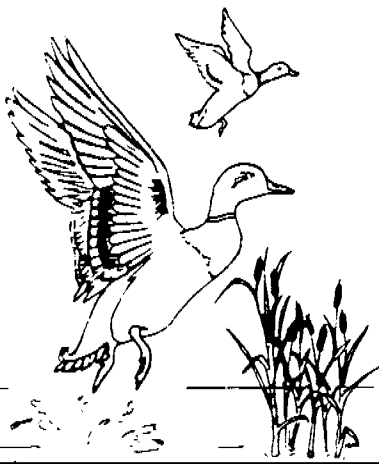


Crab Orchard National Wildlife Refuge

Explosives/Munitions
Manufacturing Areas
Operable Unit



Fact Sheet

November 1994

CRAB ORCHARD NATIONAL WILDLIFE REFUGE EXPLOSIVES/MUNITIONS MANUFACTURING AREAS OPERABLE UNIT

This fact sheet includes the latest information on the environmental investigation of the **Explosives/Munitions Manufacturing Areas (EMMA)**

Operable Unit (OU) at the **Crab Orchard National Wildlife Refuge (Refuge)**.

Background information, the status of recent analytical data, and the next stage in the investigation are addressed. To obtain additional information, contact people/agency names are provided at the end of this fact sheet.

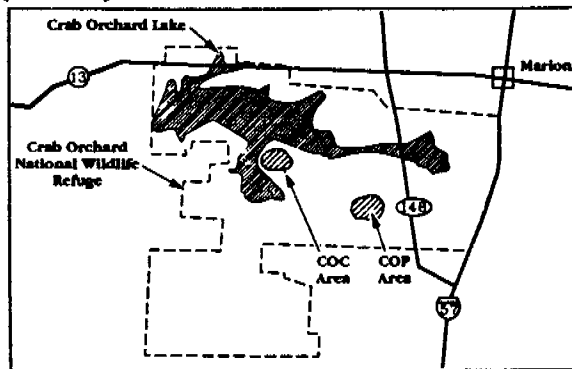
SITE HISTORY

The Refuge is run by the **U.S. Fish and Wildlife Service (Service)**, an agency of the U.S. Department of the Interior. From 1941 to 1945, several manufac-

turers of explosives and other military supplies occupied portions of the present Refuge; including the Illinois Ordnance Plant. These wartime manu-

facturers fell under the jurisdiction of the War Department. After World War II, other industries moved onto the Refuge to occupy buildings formerly used by the wartime companies. These industries manufac-

tured products such as automobile parts, plated metal parts, tape, flares, jet engine starters, fiberglass boats, and electrical components. The types of materials disposed of on the Refuge reflect the broad range of substances used in various industrial and Refuge activities.



CRAB ORCHARD WILDLIFE REFUGE SITE MAP

THE PUBLIC IS ENCOURAGED TO ATTEND AN AVAILABILITY SESSION AND A PUBLIC MEETING on November 1, 1994, at the Crab Orchard National Wildlife Refuge Visitor's Center. The Availability Session will be open from 3:00 p.m. to 6:45 p.m. and will include exhibits describing the history and status of the project. Technical personnel will be present at the exhibits. The Public Meeting will begin at 7:30 p.m. Preliminary results regarding the Explosives/Munitions Manufacturing Areas Operable Unit of the Superfund Project at the Refuge will be discussed by personnel from the U.S. Fish and Wildlife Service, The Omaha Corps of Engineers, the U.S. Environmental Protection Agency and the Illinois Environmental Protection Agency. Please attend, ask questions, and make comments.



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Sample analyses results indicate that three sites show the highest concentrations of explosives; two sites are in the COC area (COC-3 and COC-4) and one site is in the COP area (COP-4). Munitions were disposed of at these sites; therefore, explosives and metal concentrations in soil, sediment, surface water, and groundwater were observed in the samples.

Groundwater data show that the distribution of chemicals and metals in the groundwater is confined to specific areas. Analytical results for the biological samples show that animals are not being affected by site-related metal constituents.

BASELINE RISK ASSESSMENT

The Baseline Risk Assessment:

-  Evaluated data from the RI,
-  Selected potential constituents of concern,
-  Evaluated the movement of these constituents and where exposure to these constituents could occur,
-  Determined the amount of exposure to humans and wildlife (receptors), and
-  Characterized actual or potential effects on human health and the environment.

This information will be used in the FS to help in determining the most effective cleanup technologies.






The Baseline Risk Assessment determined that three sites pose potential unacceptable risks to human health and wildlife because of the concentrations of explosives present. Unacceptable risks are risks higher than those considered as

the "natural incidence" in the United States. Activities such as too much exposure to the sun, occupational exposures, or dietary or smoking habits contribute to this "natural incidence".

The three sites (and the explosives indicated as posing unacceptable risks), **COC-3** (*Trinitrobenzene-TNB and Trinitrotoluene-TNT*), **COC-4** (*TNB, TNT and Dinitrotoluene-DNT*), and **COP-4** (*TNB, TNT, High Melting Explosive-HMX, Research-Developed Explosive-RDX, and DNT*), will be further evaluated in the FS.

NEXT STEPS

The next steps in this process include:

-  Preparation of the FS,
-  Proposed remedial action plan,
-  Public participation activities,
-  The record of decision, and
-  The schedule.

These steps are outlined in the following paragraphs.

Feasibility Study, or FS

An FS will be conducted to develop, screen, and evaluate potential cleanup technologies. The Service, IEPA, EPA, and the Public will be involved in the evaluation of these technologies. Based on the results of the Baseline Risk Assessment and RI, nine basic criteria, mandated by CERCLA, will be applied

CERCLA CRITERIA

- Overall protection of human health and the environment
- Compliance with applicable or relevant and appropriate requirements (ARARs)
- Long-term effectiveness
 - State acceptance
 - Public acceptance
- Short-term effectiveness
 - Implementability
- Reduction of mobility, toxicity, and volume (MTV)
 - Cost





Information Repositories

U.S. FISH AND WILDLIFE SERVICE
ATTN: Mary Monett
RR 3, Box 328
Marion, IL 62959, (618) 997-5491

MARION CARNEGIE PUBLIC LIBRARY
206 South Market St.
Marion, IL 62959
Contact: Ronald Reed, (618) 993-5935
or 964-1441

CARBONDALE PUBLIC LIBRARY
405 West Main St.
Carbondale, IL 62901
Contact: Jim Guneter, (618) 457-0354

MARION FEDERAL PENITENTIARY LIBRARY
U.S. Department of Justice
Bureau of Prisons
ATTN: Steve Fawl
Rt. 5, Little Grassy Road
Marion, IL 62959, (618) 964-1441

Community Relations Coordinators

Questions regarding the Superfund activities can be addressed to Mary Monett at the address and phone number listed below. Each Federal and State agency also has a Community Relations Coordinator who serves as a primary point of contact for the public.

These coordinators are:

Eileen Deamer (PS19J)
EPA, Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590, (312) 886-1728

Michelle Nickey-Tebrugge
IEPA
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794, (217) 524-4825
Betty White
U.S. Army Corps of Engineers
215 North 17th St.
Omaha, NE 68102-4978, (402) 221-3916

Project Managers

Each agency has assigned Project Managers to the Crab Orchard environmental studies to serve as key team members. These Project Managers are:

Nan Gowda, EPA
Steve Nussbaum, IEPA
Frank Fischer, USACE
Leanne Moore, and
Mark Sattelberg, Service

These individuals can be contacted through the Community Relations Coordinators.

(over)

Please place my name on the mailing list for the Crab Orchard National Wildlife Refuge Superfund Investigations. Please send information to the following address:

Name/Title _____
Organization _____
Street Address _____
City/State/Zip _____
Phone Number (optional) (Work) _____ (Home) _____
Date _____

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

Mary Monett
Crab Orchard National Wildlife Refuge
RR 3, Box 328, Marion, IL 62959, (618) 997-5491

