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DIOXIN SAMPLING PUBLIC OUTREACH ON ENVIRONMENTAL OPEN HOUSE LOCAL
SCHOOL VISITS AND ENVIRONMENTAL INFORMATION VAN APRIL 1997 NCBC
GULFPORT MS
4/1/1997
NCBC GULFPORT

Dioxin Sampling Public Outreach: Environmental Open House, Local School Visits & Environmental Information Van



April 1997
Gulfport, Mississippi

Dioxin Sampling

- During April and May 1997, the Seabee Center sampled for dioxin on the base and along ditches outside of the base.



Scientists sampling along ditches in the community.

- Onsite sampling began the first week of April. An Environmental Open House, sponsored by the Restoration Advisory Board, was held during that week to discuss the sampling with the community.
- Offsite sampling began the week of April 21st. During the week, two activities to inform the public were conducted:
 - presentations at six local schools were given
 - an Environmental Information Van followed behind the sampling team while they sampled in the community
- The Public Affairs Office distributed press releases to the local news media advertising the open houses, the school visits and the information van. All three events were covered by the television station WLOX and other local news media.

Preparation for the Outreach Activities



RAB focus group meets to discuss presentation materials.



- Restoration Advisory Board members formed a focus group to review and provide input on the materials and displays to be used for the public outreach activities.
- The sampling team received special training for taking samples in the community.



Field crew receives training for sampling in the community

Environmental Open House



Dr. Marland Dulaney, the project's toxicologist, reviews the dioxin health effects display with base personnel outside the Navy Exchange.

- Four open houses were held to allow for a high level of community participation
 - Tuesday April 1, 10:30 am to 1:30 pm, The Navy Exchange
 - » 17 attendees
 - Tuesday April 1, 5:30 to 7:30 pm, Charles Walker Community Center
 - » 14 attendees
 - Wednesday April 2, 10:00 am to 1:00 pm, Gulfport Harrison Public Library
 - » 14 attendees
 - Thursday April 3, 5:30 to 7:30 pm, Isiah Fredericks Community Center
 - » 15 attendees

Open House Displays and Handouts

- Three presentation boards were on display at the open houses. Each display was also presented in handout form.
 - There was a display on the health effects of dioxin which included a discussion of the effects measured in laboratory animals and the effects observed in humans who were accidentally exposed to the chemical.
 - A board describing the Restoration Advisory Board and its members was on display.
 - Information about sampling and the locations of the samples to be taken were presented on the third display.



Art Conrad, the Navy's engineer in charge of Seabee Center's cleanup, explains the sampling approach the team will take.

Open House Evaluation

- All attendees were encouraged to complete an evaluation form.
 - 25 forms were returned
 - All agreed that the information was useful, presented in a professional manner and was adequately explained.
 - All agreed that the location of the meeting was convenient (one person suggested an additional location)

- Advertisement
 - The most effective advertisement was the flyers that were mailed out to the community (13 people)
 - The next most effective means of advertisement was television (6 people)
 - » The open house at the Isiah Fredericks Community Center seemed to be the session advertised the most on the television and radio stations--the majority of the evaluation forms for this session cited these two methods



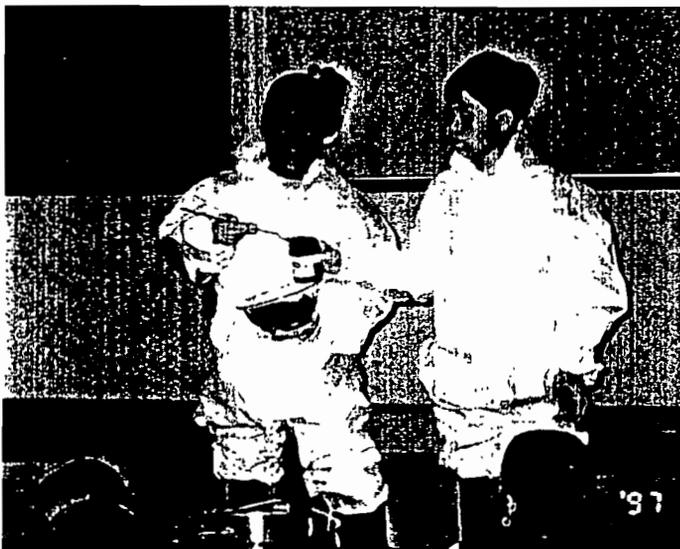
Community members at the Isiah Fredericks Community Center open house.

Local School Visits

- Presentations were given at six local schools. The presenters explained the purpose of the Seabee Center's sampling effort and demonstrated how to take soil samples.
- The students were given the opportunity to don tyvek suits and go through the steps a scientist would take in the field to collect samples.
- The presentations were timed to coincide with the sampling offbase and Earth Week festivities at several of the schools.



Student finds it might take someone taller to operate the auger.



Students at West Elementary try their hand at sampling.

Local School Visits

- Harrison Central High School
(Monday, April 21st)
 - 60 students, two science classes
- West Elementary School
(Tuesday, April 22nd)
 - 225 students, fourth - sixth grade classes
- Gulfport High School
(Tuesday, April 22nd)
 - 20 students, one chemistry class



Even the teachers got in on some of the fun.



The tyvek suits were a big hit!

- 28th Street Elementary School
(Wednesday, April 23rd)
 - 100 students, fourth and fifth grade classes
- Gaston Point Elementary School
(Thursday, April 24th)
 - 75 students, third and fourth grade classes
- Bayou View Junior High School
(Friday, April 25th)
 - 800 students, all classes attended

School Handouts and Display

- A display board showed the locations of the sampling on and offsite and pictures of samples being taken and tested. Handouts were available with the same information as well as some questions and answers.
- Activity sheets were developed for the primary school students and for the junior high and high school students
 - word games and mazes tested the students knowledge of dioxin and the sampling process
- Students received “Celebrate Earth Day” pencils and “Environmental Detective, Junior Scientist” badges at the end of the presentations.



Sampling at the Seabee Center

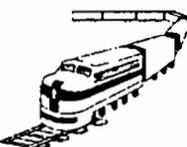
What is dioxin? In basic terms it is a chemical that can be harmful to humans and animals. Dioxin can come from Herbicide Orange. Herbicide Orange was used to kill plants during the Vietnam war.

Herbicide Orange was stored in drums (barrels) on base. Some of the drums leaked. Dioxin from the leaked Herbicide Orange stuck to the soil near the drums.

Herbicide Orange was on a train and taken off and burned.

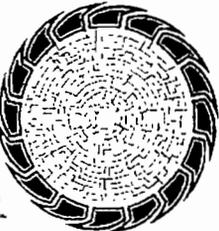
Some drums stuck to it.

Scientists are collecting samples of soil and water to be tested for dioxin.




INTO THE LABYRINTH...

After the key is solved a number is written where to start. Numbers leading to 1 is the 1. Then you go to the number where 2 leads. Then you go to the next one and so on. You will find the word.



Word and Match

Match the words on the left with the definitions on the right.

1. Leak	2. A small amount of something that has escaped from a container.
2. Dioxin	3. A chemical that can be harmful to people and animals.
3. Herbicide	4. A chemical that can be harmful to people and animals.
4. Sample	5. A small amount of something that has escaped from a container.
5. Soil	6. A chemical that can be harmful to people and animals.
6. Water	7. A chemical that can be harmful to people and animals.
7. Dioxin	8. A chemical that can be harmful to people and animals.
8. Herbicide	9. A chemical that can be harmful to people and animals.
9. Sample	10. A chemical that can be harmful to people and animals.
10. Soil	11. A chemical that can be harmful to people and animals.
11. Water	12. A chemical that can be harmful to people and animals.

Dioxin comes from what kind of chemical?

METAL ORGANIC PLANT ANIMAL

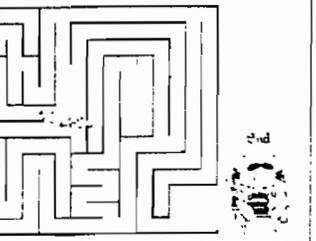
Match-Up

Match each word to the picture it matches.

Safety suit	
Soil and water samples	
Drums	
Hard hat	
Logbook	

Sampling Maze

Start at the Seabee Center and find the dioxin sample in the maze. (Don't go to the end!)



School Visit Feedback

- Teachers from the schools were contacted after the visits to get feedback on the usefulness of the presentations.
- All of the feedback was very positive.
 - “The information was very useful and fit right into the material we were studying at the time. It was very nice to have it about something that was going on in the community so the students could relate to it, instead of being from somewhere distant. The activity sheets were good, but an activity during the presentation would have been even better.” --teacher, Harrison Central High School
 - » The suggestion from the teacher at Harrison Central High School about more hands-on activities, such as having the students don tyvek, was incorporated into subsequent presentations.
 - “The hands-on format was great for getting the message across to the children. It was very informative” --principal, 28th Street Elementary School
 - “The children loved to dress up! The participation was great! The children really enjoyed it. The information was extremely useful and interesting. We would love to have you back in the fall!” --teacher, Bayou View Middle School
- All teachers were receptive to similar presentations in the fall. One teacher suggested having longer presentations.



“The hands-on format was great!”

Environmental Information Van

- The Environmental Information Van followed the sampling team as they are took samples to test for dioxin in streams and ditches offbase. Dr. Marland Dulaney, ABB's technical lead for the project, was in the van ready to talk to community members who had questions about the sampling or would just wanted to get more information.
- The van allowed the sampling team to work uninterrupted by curious passerby's.
- The van was visited by 3-4 adult community members, 7-8 school children, and the film crew for the local news.



Lt. Carol Womack answers questions from a community member as the local news crew looks on.

Information Van Handouts and Display

- A display board showed the locations of the sampling on and offsite and pictures of samples being taken and tested. Handouts were available with the same information and answers to some commonly asked questions.
- “Celebrate Earth Day” pencils were handed out to visitors.



Dr. Marland Dulaney explains the dioxin sampling to children on their way home from school.