



## February 23, 1999 Public Meeting Summary with Public Comments / Questions & Answers

### Historical Document

**This page is archived for historical purposes and is no longer being maintained or updated.**

(Slides are reproduced from presentation; speaker comments follow.)

(Statements are not direct quotes, they are paraphrased.)

(Public comments and questions made during the meeting are preceded by the word "Public." Response to the questions/comments are preceded by the responder's name when available.)

### Project Introduction

**Time** 5-7 p.m.

**Location** Los Alamos Inn  
Los Alamos, NM

**Speakers** Paul Renard, CDC Project Officer  
Charles Miller, CDC Technical Lead  
Tom Widner, Project Manager

**Summary** Paul Renard opened the meeting. He said the Los Alamos Historical Document Retrieval and Assessment Project was initiated in response to a petition, signed by Rep. Richardson inviting the Centers for Disease Control and Prevention (CDC) to study Los Alamos National Laboratory (LANL). Later, an official Memorandum of Understand (MOU) was signed.

This study is a records retrieval and assessment that promises a deliverable of a database of relevant records.

The contractor for this study was selected through an open competitive bid won by ChemRisk for this phase of the study. ChemRisk performed similar studies satisfactorily at Rocky Flats and Oak Ridge Reservation and provided the best proposal. The States of Colorado and Tennessee provided very good letters of recommendation.

Details regarding the study were provided by Charles Miller and Tom Widner.

The meeting concluded with public comments and questions.

## Presentation (Paul Renard)

**Public involvement activities will include:**

- Periodic public meetings and workshops at varying locations–
  - ❖ progress updates on records review
  - ❖ presentations of findings
- newsletters and fact sheets
- toll-free number, e-mail, and mail
- a Web site with project information

CDC

Slide 1 of 1

**INVITATION:** Do not trust the project personnel--ask a lot of questions, watch us, follow along with us in the process.

The team wants to bring stakeholders to the planning tables. It is not here with an agenda. The team's goal is to do good science and convey the results to public.

CDC is asking what the public desires in the way of a citizens advisory committee. If a committee is formed, there are requirements to strive for balance of representation with regard to geography, ethnicity, gender, etc. What do you (the public) want in the form of committee representation? Any form of representation can be established, from no committee to a formal FACA Charter. Project personnel will meet with various organizations and Native American governments.

The study is just getting started. It is important that groups contribute information; the public is an integral part of study.

**Public Question:** Will we have more opportunities to provide input? Is funding only for three years?

**Paul Renard:** This is the first stage. We may go further. Phase 1 will look at all documents and place the results in a database of relevant documents.

# THE DOSE RECONSTRUCTION PROCESS AT DEPARTMENT OF ENERGY NUCLEAR WEAPONS FACILITIES

Charles W. Miller, Ph.D.  
Radiation Studies Branch  
National Center for Environmental Health  
Centers for Disease Control & Prevention

February 1999



Slide 1 of 18

## Outline of Presentation

- What?
- Why?
- Where?
- How?



Slide 2 of 18

## **Dose Reconstruction**

**is a comprehensive analysis of  
the exposure received by  
individuals in the vicinity of  
facilities that release  
contaminants to the  
environment**

**--real doses to real people**



Slide 3 of 18

Most of the current research into possible releases are done for regulatory purposes and focus on hypothetical situations. This study is very realistic. It will look at what may have happened, where people have lived, where might have there been some releases. This study is trying to find out what happened.

## **Why Do Dose Reconstruction?**

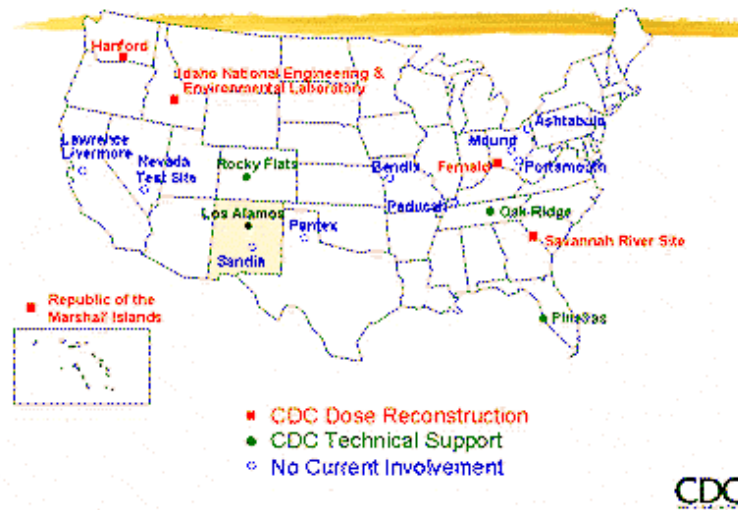
- Integral part of epidemiologic studies;  
e.g., Hanford Thyroid Disease Study
- Provide a comprehensive history of site  
operations, including releases
- Provide an independent, comprehensive  
evaluation of risk
- Provide a baseline for analyzing impacts  
of future activities; e.g., clean-up



Slide 4 of 18

The information that is being gathered during this study will be necessary for additional studies if they are completed. It is providing a good historic picture.

# Dose Reconstruction Activities



Slide 5 of 18

## Basic Assumptions

- There is no standard methodological guide book
- Each site has unique attributes
- There are lessons to be learned from each and every study
- Common approaches can be developed

Slide 6 of 18

## **The Dose Reconstruction Process**

- Retrieval and Assessment of Data
- Initial Source Term Development and Pathway Analysis
- Screening Dose and Exposure Calculations
- Development of Methods for Assessing Environmental Doses
- Calculation of Environmental Exposures, Doses, and Risks



Slide 7 of 18

All available data from the site, state agencies, federal agencies, and other sources will be compiled into one source that will be made available to everyone. The process used at LANL will be different from other studies, as each site has its own unique characteristics. Each also has its own toxicants that were or were not released and different pathways. For example, alligators were identified as a pathway at one site.

## **Implementing the Dose Reconstruction Process**

- Stages of the process may overlap in time
- Stages may be performed iteratively
- All stages may not be necessary at all sites
- Will involve CDC staff, contractors, the public
- The process may require 4-7+ years to complete at each site



Slide 8 of 18

Contractors are used because the CDC does not have a large enough staff to perform the necessary studies.

## Retrieval & Assessment of Data

- Both radionuclides and chemicals
- Effluent and environmental monitoring
- Facility processes
- Release points
- Use primary data sources, e.g. notebooks



Slide 9 of 18

In addition to standard records, the study is examining facility processes to evaluate data and recreate missing information. Primary sources, such as logbooks, which were hand written by people on a day-to-day basis as they performed their work, are often invaluable sources.

## Los Alamos Historical Documents Retrieval and Assessment

- Documents will be retrieved and evaluated for their usefulness for offsite dose assessment
- Relevant documents will be declassified (if necessary), copied, made available to the public
- Relevant documents will be entered into an electronic database
- A prioritized list of contaminant releases from the LANL site will be developed



Slide 10 of 18

This is not a worker study although it will identify records that may be relevant to worker studies conducted by the National Institute of Occupational Safety and Health (NIOSH).

STRESS: All necessary documents will be made unclassified.



## Document Searches

- LANL Central Records Center
- LANL Archives
- Technical Report Library
- Technical Areas
- Work for Others
- Other sites; e.g., Federal Records Center
- **Guiding Principle: No Boxes Left Unopened**



Slide 11 of 18

Other sites will be included in the search, e.g., Dallas Records Center and records related to early nuclear weapon tests in New Mexico at Farmington, NM and the Trinity Site.

STRESS: The guiding principal will be adhered to. If a box is labeled "Purchase Orders," it will be opened to make sure it contains purchase orders.

## CDC Principles

- Scientific integrity
- Open and effective communication
- Collaboration with partners throughout the nation & the world



Slide 12 of 18



## Scientific Integrity

- CDC staff make site visits
- CDC staff review technical reports
- Individual outside reviewers; e.g., chemical toxicity
- Special review panels; e.g., databases developed



Slide 13 of 18

## Scientific Integrity

(continued)

- National Research Council/National Academy of Sciences Committee on an Assessment of CDC Radiation Studies
- Meeting presentations
- Publication in peer-reviewed literature



Slide 14 of 18

## Open and Effective Communication

- All information readily available to all interested parties
- Information may be released on an interim basis
- All data used are declassified
- Active listening to all parties

CDC

Slide 15 of 18

Project contacts promise to give the most correct answers to questions. The contacts are listed on the fact sheet. Please call!

When reports, including drafts, are released, they will be made available to the public.

If relevant information is found in a classified document, that can not be declassified, the public will be informed that this type of problem has been reached.

## Collaboration with Partners

- Other Federal agencies; e.g., DOE, NIOSH, Agency for Toxic Substances and Disease Registry (ATSDR)
- State and local officials
- Current and former site employees
- Members of the general public

CDC

Slide 16 of 18

## Collaboration with Partners

(continued)

- Public meetings & workshops, including Federally-chartered Health Effects Subcommittees
- Newsletters and Fact Sheets
- Toll-free telephone number
- Education activities
- Active listening



Slide 17 of 18

The Director of CDC and the Administrator for ATSDR is the same person, although these are two separate agencies.

STRESS: Public is a partner in the process. Please ask questions. Project personnel are accountable to the public.

STRESS: How much collaboration will occur between project personnel and the public will depend on public direction. However, the budget is not unlimited, but project personnel will do their best to meet public need.

## Conclusions

- Dose reconstructions are an integral part of analytic epidemiology and risk assessment
- Dose reconstructions are scientifically-challenging
- Scientific integrity of these studies must be maintained
- Public credibility is an equally important requirement



Slide 18 of 18

STRESS: The key is public acceptance.

## PLANS FOR FINDING AND EVALUATING INFORMATION RELATED TO OFF-SITE RELEASES AT LOS ALAMOS

Thomas E. Widner, MS, CHP, CIH  
Project Manager  
ChemRisk, a Service of McLaren/Hart

February 1999



Slide 1 of 12

## Our assignment—

To collect and evaluate information  
relevant to the assessment of  
off-site releases or health effects  
from Los Alamos operations.



Slide 2 of 12

The study will focus on records that are likely important. It won't catalog all records, but focus on public health and off-site health effects. Hundreds of thousands of cubic feet of records need to be evaluated.

## **Requirements for credibility–**

- an independent project team
- qualified and experienced project team members
- full access to records
- open and effective public involvement
- peer review



Slide 3 of 12

ChemRisk is an independent project team that does not have close ties to the Department of Energy (DOE) and other federal agencies.

STRESS: The team is being granted access to records that are unavailable to the public. Many are classified. It will be granted full access. If the team is told it can not go into a particular place or review particular records, that will raise a red flag. They will find a method, whether by receiving special permission or special clearance for a particular team member, to go examine those records.

The team desires to communicate its findings and discuss the concerns of the public and the information that members of the public might have.

## **Groups involved in the project:**

- CDC's National Center for Environmental Health
- ChemRisk, a service of McLaren/Hart, Inc. (prime contractor to CDC)
  - ❖ Shonka Research Associates, Inc. (document review, database and records management)
  - ❖ Tech Reps (communications)
  - ❖ Several local consultants to the project team (assistance with public involvement)



Slide 4 of 12

ChemRisk has worked with Shonka for years on similar studies.

Tech Reps will provide support in preparing and reviewing documents including newsletters and fact sheets. Consultants Nadine Tafoya and Toby Herzlich will help facilitate public involvement.

In terms of public involvement, the project team is not looking for public relations. It wants to establish two-way communications--share with the public--obtain information that can not be found in written records.

The team is experienced and represents a variety of fields of expertise. It is good at honing in on what is important.

## **Products of the project include:**

- a database of records related to off-site doses or health effects,
- a summary of historical operations,
- a list of materials likely released off site,
- a prioritization of those releases, and
- a set of copies of documents most useful in estimating releases and health effects.



Slide 5 of 12

The study will examine the big picture. It will identify materials that were probably released off site and prioritize the releases. The prioritized list and documents will be made available in town. The scope of the project is records focusing on LANL activities in New Mexico, including Trinity Site, Farmington, and Carlsbad. The team will also identify records related to other weapons complex sites.

## **Information will be gathered from:**

- documents on paper and microform,
- technical reports,
- technical notebooks,
- interviews of active & retired workers and members of the public, and
- photographs and motion pictures.



Slide 6 of 12

Technical reports will included those released internally and externally.

TERMINOLOGY CLARIFICATION: Logbooks and Technical Notebooks are the same thing. Typically they are a very valuable resource.

Interviews are valuable in that they provide additional information and interpretation. During the course of the study, the project team will seek special permission from LANL to talk to former employees (who held security clearances) about laboratory activities that may have classified aspects.

Photographs and motion pictures will be a particular challenge in determining relevancy.

The team expects to find some well-organized records, while others will be just "dumped" materials. A small fraction will probably be relevant. The challenge is to find the significant documents.

## Documents will be categorized

- 1 Documents that a could be used in estimating off-site releases or effects,
- 2 Documents that could we useful in *confirming* off-site releases or effects,
- 3 Documents relevant to releases from other weapons complex sites, and
- 4 Documents that are not relevant.

CDC

Slide 7 of 12

## Notes

- Category 1 documents will normally be included in the database, copied, and released.
- Category 2 documents will normally be included in the database, but not copied.
- Category 3 documents will normally be included in the database, but not copied.
- Review of boxes of Category 4 documents will be documented (e.g. in "box logs"), but they will not copied or entered into the database.



## **We seek descriptions of:**

- materials that were used at LANL,
- facilities they were used in,
- processes they were subjected to,
- measures taken to contain materials,
- monitoring of wastes and effluents,
- environmental measurements, and
- locations and activities of residents.



Slide 8 of 12

## **Operations, activities, or events of interest include—**

### ■ Routine operations

nuclear weapon development, production, and testing; machining and fabrication; chemical processing; criticality experimentation; nuclear reactor development; accelerator applications; fusion research; plasma thermocouple; high explosives development and testing; waste management; biological research; nonproliferation; space programs.

### ■ Accidents or incidents



Slide 9 of 12

Between routine operations and accidents and incidents, it is hard to predict what will dominate off-site exposures. The team is entering the project with no preconceived notions.

## Releases will be prioritized based on:

- The toxicity of each material,
- Quantities that were present, and
- Potential for (or evidence of) off-site transport and public exposure.



Slide 10 of 12

### Notes

- Toxicity: includes carcinogens, developmental or reproductive hazards
- Key in evaluation of potential for off-site transfer: measurement in environment or effluents

## This project...

- will study uses and releases of both chemicals and radioactive materials.
- is focusing on *off-site* exposures.
- is mainly concerned with releases in the past.
- will not likely provide many specific answers in this early stage.

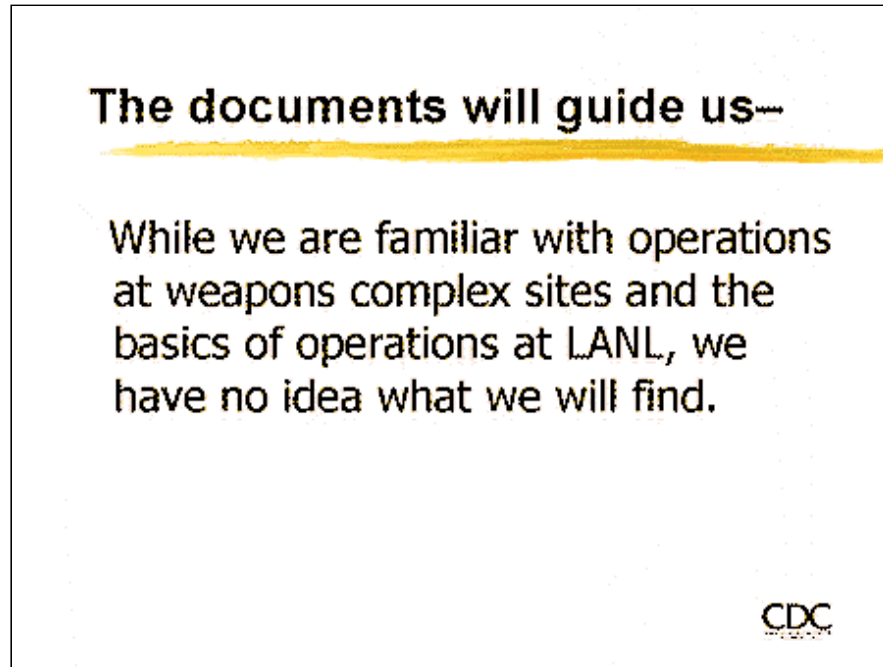


Slide 11 of 12

The study will focus on both chemicals and radionuclides. The project team has a lot of experience with both, using methods that allow comparison of risks.

STRESS: This is not a worker study. It is a study of off-site releases. However, there is not always a clear distinction between the two. For example, a worker may have taken home contaminants on clothing, and workers make up a large fraction of local residents.

Research will look at the past--what has happened. It looks at real not hypothetical or projected releases.



Slide 12 of 12

Documents will serve as a guide for the effort. The team will strive to not be influenced by preconceived notions. It will let the data show what is important.

## Public Comments / Questions and Answers

("Team" refers to either one or more members of the project team who responded to a questions or comment. )

**Public:** Is this study separate from the human radiation studies project?

**Team Response:** Yes

**Public:** Are you going to use the records identified by this group (human radiation studies project team). It seemed like a comprehensive study.

**Team Response:** We will hopefully avoid duplication of effort, but will have access to all records, and will probably use some of their work.

**Public:** Is the size and make up of this audience typical?

**Team Response:** Yes and no. Affiliations of most audience members are unknown. Usually a large number of people from the site attend the first meeting. As the study proceeds they expect to attract a wider audience.

**Public:**Woman is concerned about study. She conducted this kind of work from 1973-80. Based on her experience, she doesn't think the team will be able to come up to speed fast enough to LANL. For example, there are many acronyms and place name changes. It will take 2-3 years to make associations. Her work involved site-specific monitoring. Doesn't know how the team can complete the study in three years and obtain appropriate conclusions.

**Team Response:** This is a cost reimbursement type of contract. At Hanford and Fernald, contractors performed directed searches to locate documents related to specific topics. The result was not satisfactory from a public credibility standpoint. To start, the LANL study will be a systematic look at all records. The team doesn't know what

they will find or how many records there are. The government and contractors will make adjustments as necessary.

The study will begin with initial prioritization of records. No releases will be discarded- all data will be kept. Then the team, working with public, will make decisions. If the team is going down the wrong road the public, who knows that, needs to point this out. Prioritization is important but not the final answer. It is also important to determine what is "off site." "Off site" is hard to define for Los Alamos, and has changed over the years.

**Public:** How do you handle data from interviews and personal comments as compared to historical documents?

**Team Response:** Anonymity maintained when necessary. Interviews can fill holes in paper trails. For example, when procurement records couldn't be found, and interview explained that a blanket contract was in place. Interviews can tell where to go look for the appropriate written documentation.

**Public:** How do you evaluate the data? Memory vs. records?

**Team Response:** Gaps appear. Won't be able to get all answers. Will characterize findings based on uncertainties.

Interviews may point to a set of records or information that we may not have thought to pursue, such as personal office records.

**Public:** The way I addressed quality of information from an interview was to keep comments in mind. Didn't report information until I found a paper trail. Another method was to take a bunch of people to the site and let them bounce ideas off each other.

**Public:** EPA and NRC have addressed prioritization of information, placing on a scale such qualities as trustworthiness and good recollection to poor recollection.

**Team Response:** Never used a formal process for evaluating interviews. Will consider your process.

**Team Response:** The team as a neutral agenda. It wants to do good science and make the information available.

**Public:** How far are you going to go in the screening process? Will you identify source terms at this point?

**Team Response:** The actual source term will be identified in the second phase, if it is conducted. This first phase is a qualitative at this stage. The second stage (if done) will be more quantitative. It is too big of a job to do at this point. Can't go into great detail at this point. This is a general screen. If nothing else is done, providing the project database itself will have been a good service. Useful documents. Capture relevant documents before they are possibly destroyed. Safeguard information in case of fire or other problem. Even after this information gathering phase, if further work is done we will not stop looking for records. The nature of things is that something will be missed. Always continue to look.

**Public:** Is there a way you will measure credibility and public acceptance? Do you have experience that you achieved the public acceptance?

**Team Response:** The Fernald job is almost completed, and a formal evaluation is now planned. Feels that the community believes we've done the very best job possible. It's not perfect.

Can put you in touch with subcommittee members. This area needs to decide what it wants to do. The Fernald committee had decided it didn't need to spend more money (such as for epidemiologic studies) based on the CDC work.

**Public:** Can the committee have options between an epidemiologic study and health services, or is it an option to do both?

**Team Response:** It wasn't an either/or question. The Fernald committee decided it would be a waste of money to do another study. What they decided made the most sense to them based on what information they were given.

Rosters of public groups are available. Ask people what they thought.

**Public:** Regarding getting permission for former employees to speak: Los Alamos is a company town, New Mexico a company state. People have economic ties to LANL. Can the team get broad permissions so that individuals don't have to stand up and seek permission?

**Team Response:** If this is an issue, we need to work together to find a resolution. During our last visit here, this was discussed as an issue. We will investigate.

**Public:** Is there a precedent set from other sites for such permissions?

**Team Response:** No. Individuals had agreed not to release information. At an annual banquet they were given permission to cooperate during the banquet. At another retiree event, clearance was given for that day to speak to us. For more detailed information, we needed to get individual permission.

**Public:** Interviews are a valuable historical source. Will they be available?

**Team Response:** Information from interviews will be part of database.

**Public:** Interviews flush out information.

**Team Response:** We agree 100%. At the same time, individual rights will be protected.

**Public:** Have you considered that conflicting interests will pick a portion of your reports to cause public dissention? Have you thought of anything to change that?

**Team Response:** We welcome all input on avoiding this sort of problem. We want to get the community to become involved. We want liaisons with various committees. We want everyone to know what everyone is doing. We want to know what their needs and goals are. If the community decides it needs a committee, we hope it can build a diverse committee.

**Public:** Dose reconstruction: Example tritium: how general do you get or how detailed?

**Team Response:** First we look at the total picture, considering amounts released, handling of problem. Then, based on results, may try to compartmentalize and analyze in more detail. If a high potential of risk is involved, a release is studied in the most detail possible. Will identify missing components too, that may keep us from evaluating some releases in more detail.

**Public:** Know one family that has suffered health consequences thought to be associated with father's work. He probably won't talk to you. However, if blanket permissions are received and there is an appeal to the community to help identify problems, you may get more response.

**Public:** How far will you go--100-mile radius or specific street in identifying risks?

**Team Response:** We will go as far as the data will allow. For example, in Washington, Idaho, and Oregon residents who lived in the domain during a time period can contact the Washington State Department of Health, who will estimate risk encountered on an individual basis. I don't know of any other site doing that. At Fernald, did more of a population-based risk analysis. Depends on the data and the community.

---

Page last reviewed: November 06, 2018

Page last updated: November 06, 2018

Content source: Centers for Disease Control and Prevention

(<https://web.archive.org/web/20230207111457/https://www.cdc.gov/>)