

ACTION PLAN

REMOVAL OF CONTAMINATED SOIL
FROM AN AREA ADJACENT TO THE
EAST SECURITY FENCE, ROCKY FLATS PLANT

C. J. Barker
Environmental Analysis

May 12, 1983

APPROVED:



D. D. Hornbacher, Manager
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Soil Removal Start Date: June 10, 1983 (Dependent upon available Solid Waste Operations personnel.)

Estimated Completion Date: October 15, 1983

Estimated Number of Boxes: 75-100

Responsible Environmental Analysis Personnel:

C. J. Barker - Action Plan, Environmental Surveillance

B. A. Abu-Tawileh - Backup Environmental Surveillance

C. T. Illsley - Special Soil Sampling

Responsible HSE Applications Technology Personnel:

C. R. Hodgkin - Project Consultant

Background Information

A research study entitled "Berm Culpability Study" has been performed and reported by C. R. Hodgkin, Applications Technology. The study was conducted on soil which has accumulated adjacent to the East Security Fence from Central Avenue to approximately 50 meters south of Rocky Flats ambient air sampler S-9.

The soil removal area is the shaded portion shown in Figure 1. Figure 2 shows soil contamination levels within the soil removal area. These levels were measured using a Harshaw Model 301 Gamma Counter, set at the 60 KeV range.

This soil will be removed during the summer of 1983 for the following reasons:

1. Ongoing general plant cleanup to meet ALARA criteria.
2. The research study, and pursuant statistical analysis, indicates the probability of reducing plutonium in ambient air concentrations at onsite ambient air samplers S-7, S-8 and S-9.

Preoperational Plan

The following items must be completed prior to startup of soil removal.

1. RF/OSA-1, "Contaminated Soil Removal," approved 4/21/78, will be updated by Waste Operations.
2. Six soil samples (three from the west side of the East Security Fence and three from the east side) will be collected by C. T. Illsley, and submitted for plutonium and americium analyses.
3. Announcement of the soil cleanup operation will be made to the Colorado Department of Health at a public Monthly Information Exchange Meeting.

Soil Removal Operation

1. This operation will be conducted in accordance with RF/OSA-1, "Contaminated Soil Removal."
2. Soil removal and packaging is the responsibility of Solid Waste Operations.
3. Environmental surveillance, control, and recommendations regarding adverse environmental impact are the responsibility of Environmental Analysis.
4. Radiation control and radiometric measurements are the responsibility of Radiation Monitoring. The instrument to be used is a Harshaw Model 301 Gamma Counter, which will be set at the 60 KeV range, and will be provided by G. Langer, HSE Applications Technology.

Postoperational Plan

The following items will be accomplished after completion of the soil removal operation:

1. Six soil samples (three from the west side of the East Security Fence and three from the east side) will be collected by C. T. Illsley and submitted for plutonium and americium analyses.
2. The soil removal area will be evaluated by Environmental Analysis personnel. Restoration will be performed as deemed appropriate.
3. Soil sample data will be evaluated and compared.
4. Ambient air data from samplers S-7, S-8 and S-9 for a period of at least six months prior to, and six months after, the soil removal operation will be evaluated and compared.
5. A final report will be issued.

Figure 1. Soil Removal Area
CENTRAL AVE

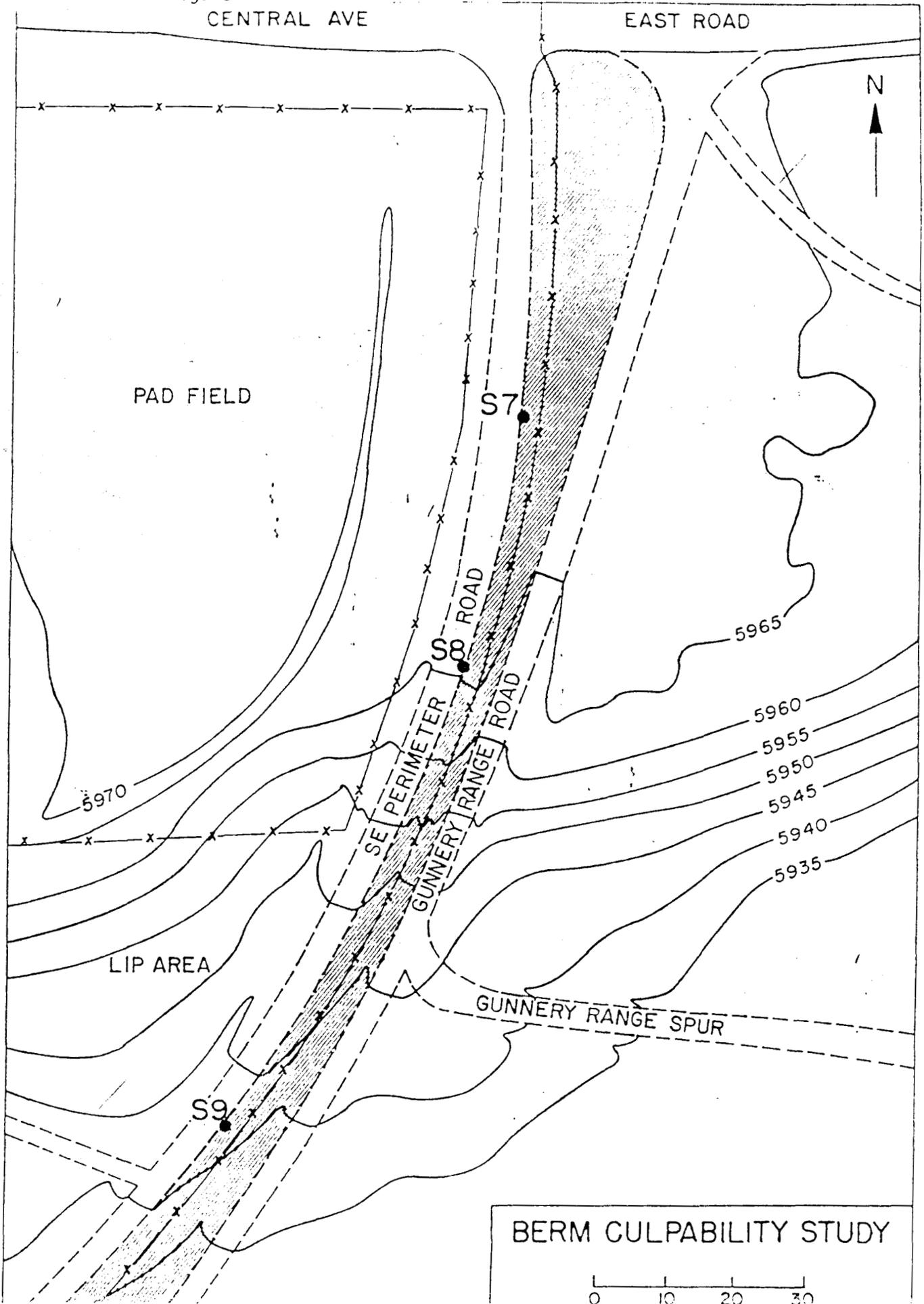
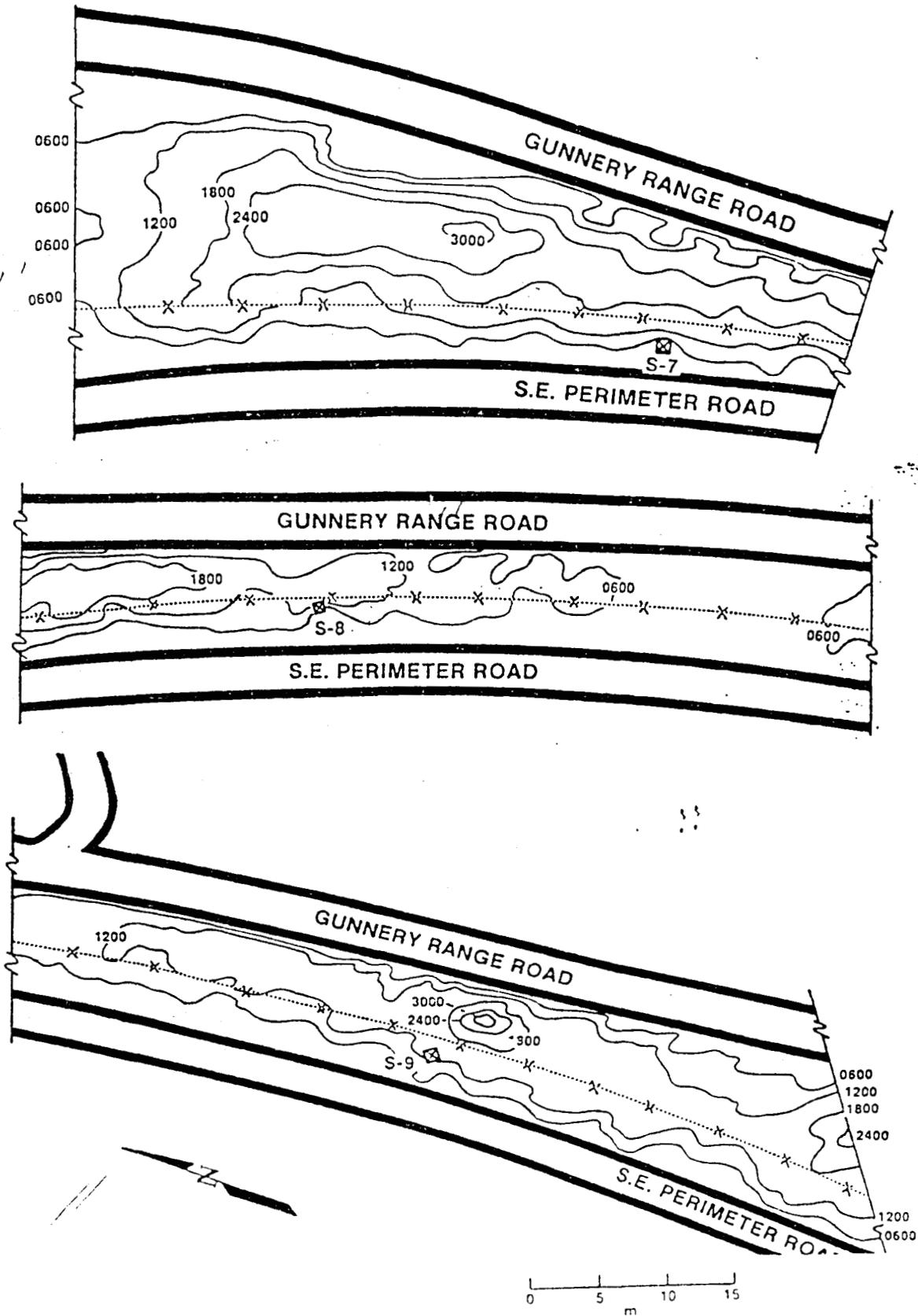


Figure 2. Contamination Levels-Soil Removal Area



BERM SOIL SURVEY
(CTS/MIN)