



Changes Proposed in the Burbank Groundwater Cleanup Plan

United States Environmental Protection Agency, Region IX, San Francisco

Fact Sheet Number 6

July 1990

INTRODUCTION

On June 30, 1989, the U.S. Environmental Protection Agency (EPA) signed a Record of Decision (ROD) that outlined EPA's plan for an interim cleanup of contaminated groundwater in the Burbank area. The cleanup plan consisted of pumping and treating contaminated groundwater to meet drinking water standards and using the treated water in the City of Burbank's water supply. Due to technical data received after the ROD was signed, EPA is now issuing an Explanation of Significant Differences (ESD) to describe changes to the proposed cleanup plan. This fact sheet summarizes the original plan for the Burbank area and outlines the significant changes being proposed.

BACKGROUND

In June 1986, EPA placed four areas within the San Fernando Valley Groundwater Basin on the National Priorities List (NPL) of hazardous substances sites, making them eligible for federal cleanup funds. Certain industrial chemicals, called volatile organic compounds (VOCs), were detected in groundwater in these areas. EPA, the Los Angeles Department of Water and Power (DWP), and the California Department of Health Services (DHS), signed cooperative agreements in 1987 to initiate groundwater investigation and cleanup activities for the San Fernando Superfund sites. The four sites are referred to as North Hollywood (Area 1), Crystal Springs (Area 2), Verdugo (Area 3) and Pollock (Area 4).

THE BURBANK CLEANUP PLAN

The interim Burbank cleanup plan, as outlined in the ROD, involves the extraction of contaminated groundwater and treatment by air or steam stripping. The stripping process uses air or steam to remove VOCs from the water by increasing contact between the water and air or steam in the treatment towers. The VOCs transferred to the air are then removed with a filter before the air is released to the atmosphere. Monitoring wells will be placed within the area of contaminated groundwater to monitor the effectiveness of the extraction system. The groundwater will be treated and transferred to Burbank's water distribution system. The groundwater used for public drinking supply will be treated to meet state and federal drinking water quality standards.

EXPLANATION OF SIGNIFICANT DIFFERENCE

The ESD describes five changes in, or clarifications to, the cleanup plan outlined in the Record of Decision. The changes are based on recently acquired data and are proposed to ensure that the interim remedy is protective of public health, meets all requirements not waived, and is cost effective. The proposed cleanup plan, as changed by the ESD, involves extraction of groundwater from the most contaminated zone, VOC treatment by air or steam stripping, nitrate reduction by blending, and distribution of the treated water to the City of Burbank for use as a water supply. Surplus water would be put back in the groundwater basin (reinjecting). The five significant changes or clarifications are as follows:

- 1** The Record of Decision (ROD) for the Burbank treatment plant provided that treated water to be served as drinking water must meet all drinking water standards, and that nitrate treatment might be necessary. Based on new information regarding nitrate levels in the groundwater and after considering several alternatives, EPA proposes to require nitrate reduction by blending the VOC treated groundwater with another water supply that is lower in nitrates so that drinking water standards will be met before the water is served to the public.
- 2** The ROD stated that all treated water was to be delivered to the City of Burbank's distribution system for use as drinking water. The ESD proposes that, if the City of Burbank does not accept all of the treated water, the remaining portion shall be returned to the groundwater basin using injection wells. Because blending will produce more water for distribution than was previously estimated, EPA needs more flexibility in determining how the water will be used. Also, new data have better defined the extent of contamination. EPA believes it is possible to locate re-injection wells to enhance cleanup of the VOCs in the groundwater and not exacerbate the contamination problem.
- 3** EPA proposes to allow for implementation of the remedial work in three phases. The total water supply to be extracted and treated from the groundwater remains the same as in the Record of Decision. Each phase would gradually increase the amount of groundwater extracted and treated. Monitoring and technical evaluations would occur after each phase and interim assessments of the effectiveness of the cleanup plan would be made. This phasing would provide for more effective and efficient performance of the cleanup.
- 4** The ROD estimated that extraction and treatment of 12,000 gallons per minute of groundwater for 20 years would collect and treat groundwater containing VOCs at concentrations of 100 parts per billion (ppb) or greater. EPA has determined that the 12,000 gallons per minute extraction rate for 20 years would not completely clean up the contamination to the levels previously stated in the ROD. Since this is an interim remedy, EPA will not require this treatment to meet specified levels in the groundwater. The proposed interim remedy will initiate cleanup action and control some of the contamination through extraction of 12,000 gallons per minute (gpm) of groundwater, treatment by steam or air stripping, and use or reinjection of the treated water. EPA is considering additional cleanup actions as part of the ongoing basinwide investigations.

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In the ESD, EPA identifies what the applicable or relevant and appropriate requirements (ARARs) are for the reinjection portion of the remedy. EPA also clarifies what ARARs must be met in order for the extracted water to be served as drinking water. Water served to City of Burbank customers will meet all drinking water standards.

PUBLIC COMMENT PERIOD

EPA encourages the public to review the Explanation of Significant Differences and comment on the draft plan. All comments received and any responses to them will be included in the administrative record. These additional provisions for public comment are not required for an ESD but EPA is providing this opportunity in order to encourage maximum public input into the ESD process for this site. The draft ESD and Administrative Record will be available for public review at the following information repositories during the public comment period:

**City of Burbank
Public Library**
110 North Glenoaks Blvd.
Burbank, CA 91502
Contact: Helen Wang
(818) 953-9741

**City of Glendale
Public Library**
222 East Harvard St.
Glendale, CA 91205
Contact: Lois Brown
(818) 956-2027

Interested parties are encouraged to submit written comments on the proposed changes during the public comment period: July 24th to August 23rd, 1990. Written comments must be postmarked by August 23rd and should be sent to:

Alisa Greene
Remedial Project Manager, U.S. EPA
1235 Mission St. (H-6-4)
San Francisco, CA 94103

For further information, contact:

Fraser Felter
EPA Community Relations Coordinator
1235 Mission St. (H-1-1)
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(800) 231-3075

GLOSSARY

AIR/STEAM STRIPPING: A process to remove VOCs from contaminated water by forcing air or steam through the water. The VOCs are transferred to the air or steam and then removed through a filtering process.

ARARs (Applicable or Relevant and Appropriate Requirements): Remedial actions must comply with relevant and appropriate or applicable federal and state laws at Superfund sites.

MCL (Maximum Contaminant Levels): Enforceable standards that apply to public drinking water supplies.

MONITORING WELL: Wells drilled at specific locations for the purpose of determining direction of groundwater flow, types and concentrations of contaminants present, or vertical or horizontal extent of contamination.

NITRATES: Nitrates are inorganic chemicals that can originate from industrial and municipal wastewater, septic tanks, chemical storage tanks, and fertilized agricultural land.

NPL (National Priorities List): A list of the top-priority hazardous substance sites in the country that are eligible for investigation and cleanup under the federal Superfund program.

PPB (parts per billion): Units commonly used to express low concentrations of contaminants. For example, 1 ounce of trichloroethylene (TCE) in 1 billion ounces of water is 1 ppb.

REINJECTION: After contaminated groundwater has been extracted and treated, injection wells are sometimes used to put the water back into the ground.

ROD (Record of Decision): A public document that explains what cleanup alternative will be used at a specific NPL site. The ROD is based on information and technical analysis generated during the remedial investigation/feasibility study and consideration of public comments and community concerns.

SUPERFUND: The common term used for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA). This authorizes EPA to respond to releases or threatened releases of hazardous substances that may endanger public health and the environment.

VOC (Volatile Organic Compound): An organic (carbon containing) compound that evaporates readily at room temperature. VOCs are commonly used in dry cleaning, metal plating and machinery degreasing.



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Agency - Region IX

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