J. H. BAXTER EPA SUPERFUND SITE

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • March 1999

EPA Announces Construction Activity for Groundwater and Soils Remedy

Introduction

The U.S. Environmental Protection Agency (EPA) has begun construction of the selected remedy for groundwater contamination and soils contamination at the J.H. Baxter Superfund site in Weed, California. This fact sheet will provide you with an update of current and expected activities associated with this construction activity at the site.

Remedies [See Figure 2]

These are the activities EPA has undertaken to implement the selected remedy:

- restoration of contaminated groundwater outside the *DNAPL* zone by pumping and treatment;
- installation of a *slurry wall* to contain an area of contaminated groundwater, which cannot be cleaned up (the DNAPL zone);
- excavation, treatment and onsite disposal of contaminated surface soils both inside and outside the DNAPL zone as well as subsurface soils (deeper than two feet) outside the DNAPL zone. (These treatment methods include *biotreatment of organic contaminants; stabilization of inorganic contaminants;* and disposal in a landfill called a "RCRA equivalent disposal cell");

(Words in italics can be found in the glossary.)

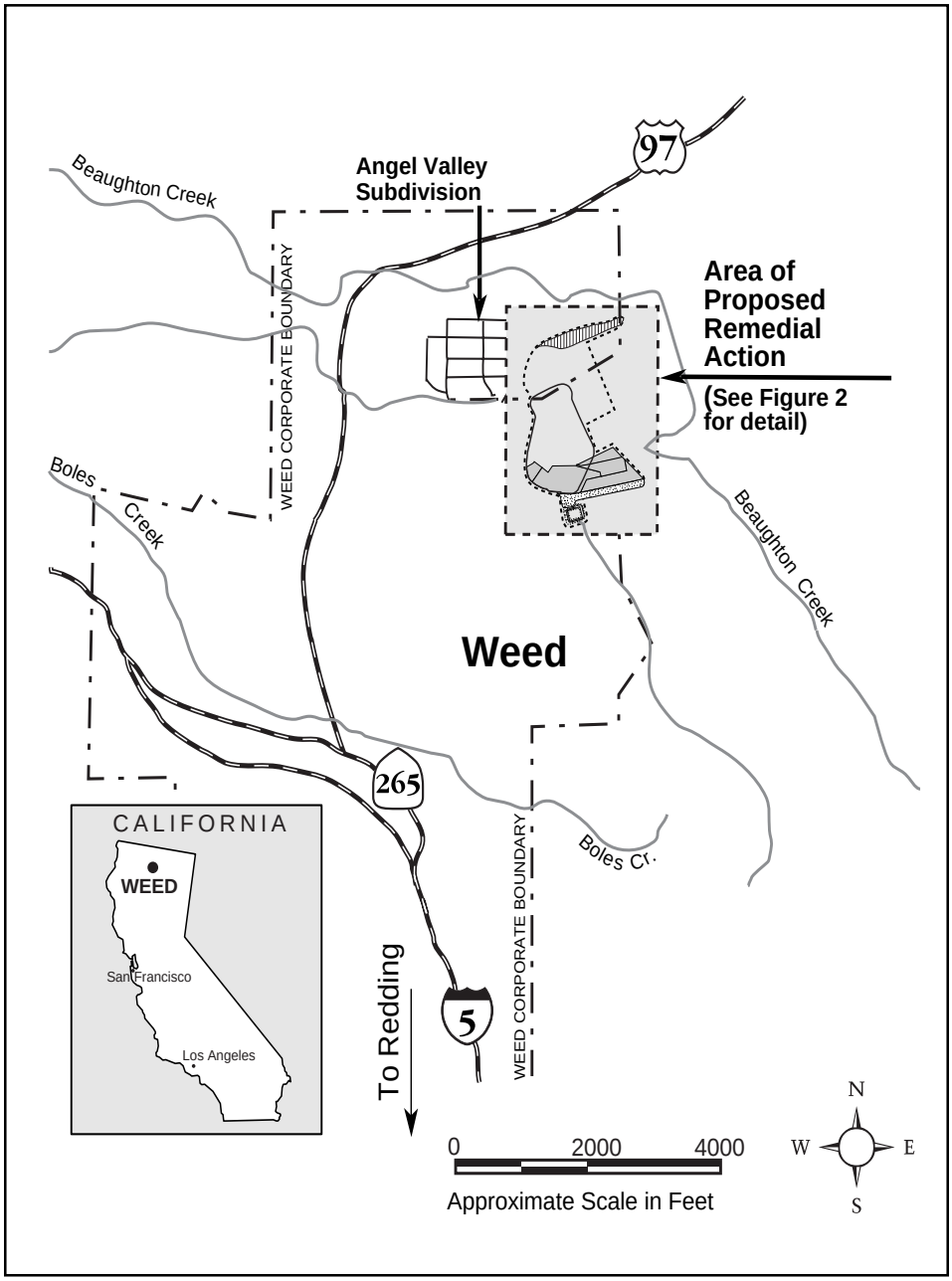

Figure 1: Site Location

Remedies *(Continued from cover)*

• regrading of the existing excavation on property owned by Roseburg Forest Products and installation of an asphalt surface on the J.H. Baxter Property to cap areas where excavation of contaminated soils has occurred;

• implementation of *institutional controls* to prevent future exposure to any contamination left on the site, and to prohibit any activity that might interfere with the integrity of the remedy.

Beaughton Creek is being continuously monitored. Sampling will be done before construction, and after any rainfall event that could generate runoff to ensure that contaminants are not reaching the Creek.

The remedy being implemented at the site follows provisions of the 1990 Record of Decision (ROD) and modifications made in the 1997 Proposed Plan, following a community meeting and 30-day public comment period. These provisions are following the ROD Amendment signed on March 27, 1998.

Background

The J.H. Baxter site is located at the northeastern border of the city of Weed in Siskiyou County, California. The site includes property owned by J.H. Baxter & Company and Roseburg Forest Products. J.H. Baxter operates a wood treatment plant. Roseburg operates a lumber mill and veneer plant. Wood treatment is intended to protect wood from deterioration from insects and fungi and has historically used a variety of chemical compounds including creosote, arsenic, chromium, copper, zinc, and pentachlorophenol.

Wood treatment operations and related chemical handling and disposal practices over the past 60 years have resulted in contamination of soil, surface water, sediment, and groundwater.

The Potentially Responsible Parties (PRPs), as identified by EPA, include J.H. Baxter, International Paper, Beazer East, and Roseburg Forest Products. This group of PRPs have formed the Weed Remediation Group (WRG) in response to EPA's initiative to clean up the site. The State of California first identified the J.H. Baxter site as an environmental problem in the early 1980s. EPA placed the site on the National Priorities List (NPL) in 1989. EPA began a Remedial water and surface water contamination at the site in 1986 and issued a report in 1988.

Activity At The Site

Current (March 1999 - October 1999) ~ soil excavation ~ slurry wall construction ~ installation of extraction/monitoring wells

Prior to March 1999 ~ asphalt cap test pad ~ biotreatment using landfarming ~ bioventing ~ construction of stormwater pond ~ containment and treatment of stormwater runoff ~ extraction and treatment of groundwater ~ monitoring of surface and groundwater quality ~ soil excavation ~ water treatment plant upgrades

Planned (March 2000 - October 2000) ~ construction of RCRA cell ~ excavation of soils ~ installation of asphalt cap.

Things To Look For During Construction

Most of the operations will NOT be visible from any of the residential areas, except along the southern portion of the Baxter property. EPA has made every effort to assure that this process is safe; causes a minimum of inconvenience; is effective and efficient. Here are some of the things you may see as the construction work continues:

Air monitoring = during construction, air quality will be monitored using stationary and mobile monitoring equipment. The air monitoring will be performed to assure that the construction activities are conducted in a manner that does not cause unacceptable air quality impacts or nuisances in the nearby neighborhoods.

Equipment & gear = there will be a fair amount of heavy equipment operating within the Baxter and Roseburg properties to construct the groundwater containment system (slurry wall) and the accompanying gravel- drainage trench. This includes some large track-mounted excavators, track-mounted bulldozers, rubber-tired loaders, backhoes and forklifts, dump trucks, pickup trucks, drilling rigs, water storage tanks (for mixing the slurry) and office trailers.

Hours of construction activity = a single shift will work 10-hour days, six days a week, initially from 7:00 a.m. to 5:30 p.m. When the days get lighter, the shift will work from 6:00 a.m. to 4:30 p.m.

Odor control = in the past when the landfarming cell had been uncovered (this is where the biotreatment of soil contaminated with organics is taking place), a strong napthalene smell was detected by the neighbors on the southern side of the Baxter property. Although the napthalene was not a health hazard, it was a nuisance. All attempts are being

made to ensure that the remediation of these soils is carried out without causing any more nuisances to neighbors.

Safety = signs will be posted warning of the chemical hazards on the site; and a 24-hour security guard will be at the slurry wall trench during excavation.

Traffic = we expect that as many as 12 vehicles will be coming to the site daily during the most active construction periods this year. Additionally, construction of the slurry wall and gravel trench will require the temporary rerouting of log trucks that usually pass through the Roseburg Property. Between April 15 until about June 1, it is possible that some timber trucks will be passing along Lincoln Street from Highway 97 to deliver the logs to the lumber mill.

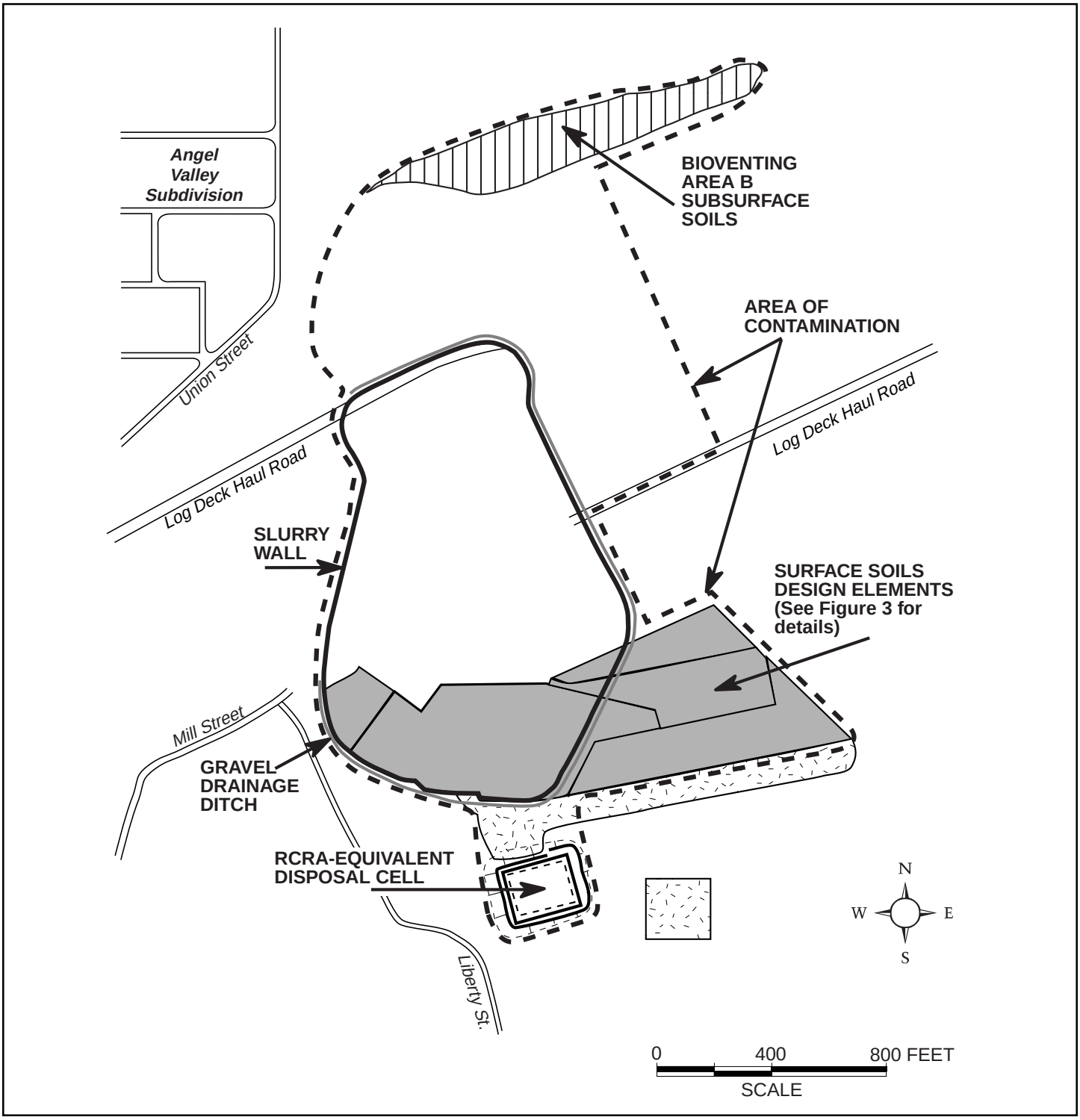

Figure 2: Area of Remedial Activities

Specifics About The Construction

Bioventing (Refer to Figures 2 and 3) The bioventing system will be installed in an area where soils were previously located at the bottom of the Roseburg log pond. This material was placed in it's current location between 1983 and 1985. The soil is contaminated with potentially carcinogenic PAHs as well as non-carcinogenic PAHs.

The goal of the bioventing system is to treat identified constituents in the soil so they reach concentrations below the standards set forth in the ROD Amendment.

The principle of bioventing is to enhance the activity of aerobic microbes in areas of the soil where hydrocarbons are present. The microbes will degrade the hydrocarbons. This process is enhanced by increasing the oxygen concentration of the soil by ventilating the soil with air.

The system will include the installation of 41 horizontally-placed wells with continuous perforations along their length. Two blowers will deliver air through the wells into the soil. The system will be under low pressure in order to minimize emissions of hydrocarbons through the ground surface. An access road will be constructed to this area. The success of this technique will be gauged over a three to five year test period.

Extraction/monitoring Wells Groundwater extraction wells will be placed inside the perimeter of the slurry wall to enhance hydraulic containment. Extraction wells will also be placed outside the perimeter of the slurry wall to extract contaminated water, which will be treated in the water treatment plant.

Landfarmed Soils This refers to the area where soils contaminated with organics undergo biotreatment. When these soils have been uncovered, the smell of naphthalene has been a nuisance to neighbors, although the substance is at safe levels. The landfarm will remain covered and we believe that the required standards can be met.

Slurry Wall The purpose of the slurry wall is to isolate DNAPLs. The wall will be 30-50 feet deep and over four thousand feet long. Construction will be underway from about March 26 through August 14,1999. Also, a gravel drainage trench will be located on the southern, eastern and northern sides of the slurry wall. This will assist in avoiding the pooling of groundwater behind the slurry wall that flows in a northeasterly direction.

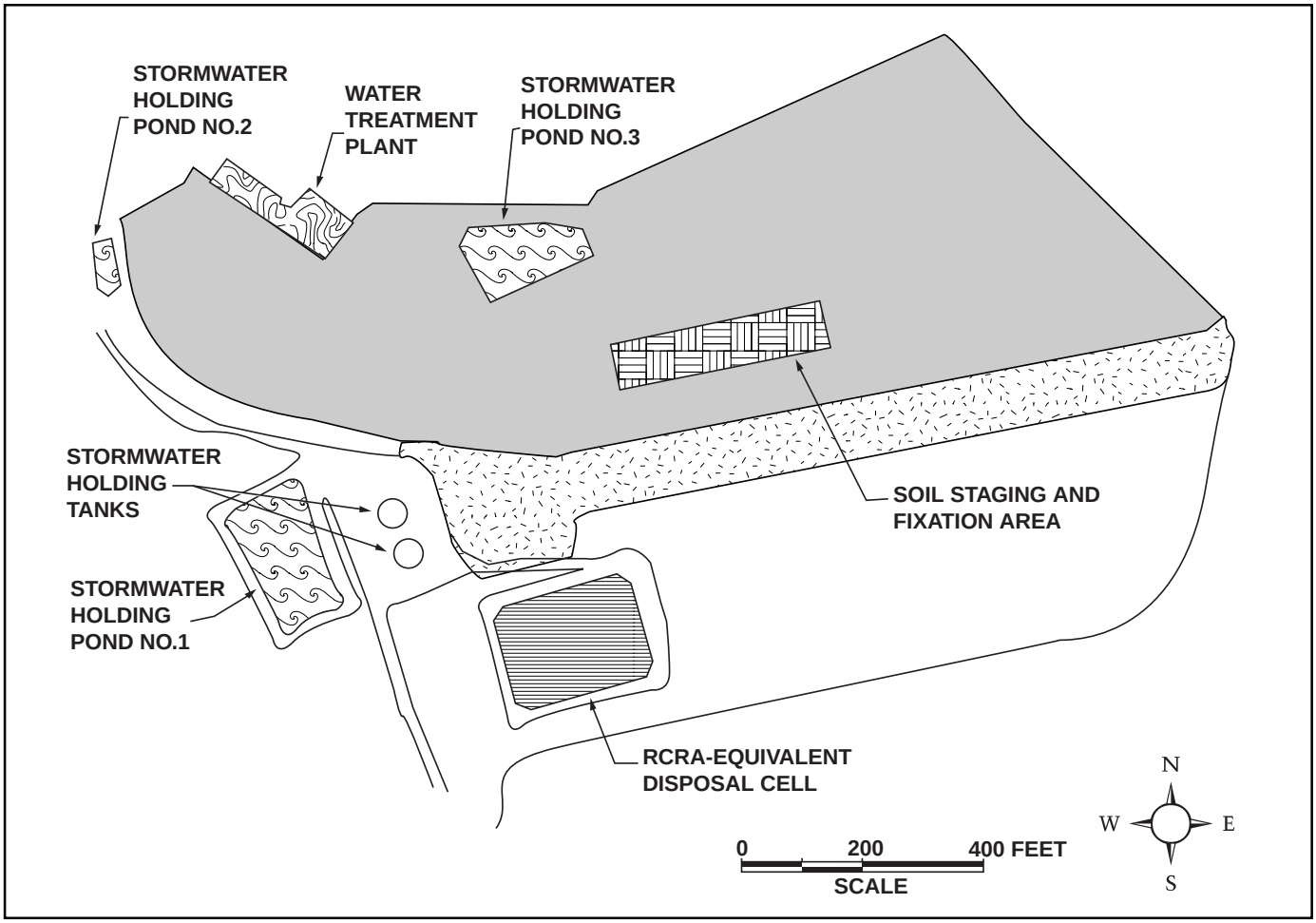

Figure 3: Surface Soil Design Elements

Storm Water Pond The purpose of the pond is to store stormwater so no uncontrolled discharges of surface water occur. The pond consists of a liner with a drainage layer for leak detection, a spillway and sides, all of which will be maintained to prevent erosion. It is surrounded by a fence to prevent accidental access. The capacity of the pond is 1,750,000 gallons. Construction of the pond has been completed.

Surface Soil Excavation The purpose of excavating surface soils is to remove the contaminated surface soil from the path of the slurry wall. The removed soil will be stockpiled in a staging and fixation area before treatment and placement in the RCRA equivalent cell (basically, a mini-landfill). This work will be done next year.

Water Treatment Plant Modifications are being made to the existing water treatment plant in 1999, which includes a building extension and new equipment. The modifications will allow for an increase in the plant's capacity, from 40 gallons per minute being treated, to 130 gallons per minute. This increase will prevent any uncontrolled discharges of surface water runoff , which may occur during the rainy season. Modifications should be completed by May 1, 1999.

Glossary

Biotreatment = The use of microorganisms (such as bacteria) to transform harmful substances into nontoxic compounds.

Bioventing = An "in situ" (in place) process in which air or oxygen is supplied to the soil to stimulate biotreatment.

Creosote = A petroleum-based product used as a wood preservative. It contains many compounds (PAHs) , some of which are considered to be carcinogenic (cancer-causing)

DNAPL = A dense non-aqueous phase liquid is an oily (or other non-water soluble) form of a substance such as creosote, which is difficult to remove from soils or groundwater. DNAPLs are denser than water and can therefore be pulled down through the subsurface by gravity.

Inorganic contaminants = At the J.H. BAXTER site, inorganic contaminants include the following metals which have been used as wood preservatives: arsenic, chromium, copper and zinc.

In Situ = A Latin term meaning "in place;" in situ treatment of soil is performed without the need for excavation.

Institutional Controls = Measures to reduce or eliminate potential exposure to contamination. These may include land use restrictions, notice requirements, and prohibitions on activities that would disturb the integrity of the remedy.

Organic contaminants = PAH contaminants containing carbon. At the J.H. BAXTER site, these include; creosote, PCP, dioxin and furans. Polycyclic hydrocarbons are the class of compounds constituting creosote.

Slurry wall = A physical barrier constructed below ground surface to prevent the lateral movement of contaminated groundwater. Typically, a trench is excavated, the excavated soils are mixed with bentonite, and the resulting slurry mixture is placed back into the trench. The slurry mixture hardens to form an impenetrable barrier to water and contaminants.

Stabilization = The use of an additive to immobilize contaminants.

EPA MAILING LIST FOR THE H. J.H. BAXTER SUPERFUND SITE

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We need your help to update our mailing list for the J.H. Baxter Superfund Site. Please mark the box and complete the coupon below and return to: Vicky M. Semones
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Contacts For The Community

You may call the USEPA TOLL FREE

Call Vicky Semones,
Community Involvement Specialist at,
1-800 -231-3075 with any questions
about this fact sheet or for information
about site activity.
[semones.vicky@epamail.epa.gov.]

(Si necesita esta informacion en espanol
por favor llame al 1-800-231-3075.)

You may also contact US EPA specialists DIRECT

Until March 11 and after October 1, 1999, contact
Beatriz Bofill,
Remedial Project Manager,
415-744-2235,
bofill.beatriz@epamail.epa.gov,

Between March 12 until October 1, 1999, contact
Travis Cain,
Remedial Project Manager,
415-744- 2341
cain.travis@epamail.epa.gov,

At the J.H. Baxter Site

You may also contact
Gale E. Jensen, 530-938-3671 with any concerns
and questions about site remediation efforts

Written information about the site is available at:

College of the Siskiyous Library
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