U.S. ENVIRONMENTAL PROTECTION AGENCY • REGION 9
SAN FRANCISCO, CALIFORNIA • AUGUST 2000

REPORT ON PUNA EMERGENCY RESPONSE PLANS FINALIZED

The U.S. Environmental Protection Agency (EPA) has finalized its report on emergency response capabilities for Hawai'i County and Puna Geothermal Venture (PGV) after reviewing the public comments received on the draft report. The Puna Emergency Response Plans Review Report is the result of an independent review of response plans, as well as site visits and interviews which took place in August 1996. The long-term objective for this project is to prevent chemical accidents and improve emergency response capabilities. Besides EPA's findings and recommendations, this Final Report includes public comments received during the public comment period, which ran from February through May 1999.

HISTORY OF EMERGENCY RESPONSE PLANS REVIEW

As a follow-up to EPA's 1995 compliance inspection of the PGV facility and in response to a request from community members, EPA formed a Review Team comprised of technical experts from outside EPA but with assistance from EPA staff experienced in emergency preparedness programs and safety audits. From August 5-9, 1996, the review team conducted site visits in Hawai'i and gathered information from state and local agencies, PGV and local residents. EPA held public meetings at the Pahoa Community Center and the University of Hawai'i, Hilo Campus Center, to discuss the review. The review team concluded their work with specific findings and recommendations for improving emergency response capabilities and safety management systems. These recommendations address Hawai'i County and PGV emergency response plans and procedures.

FINDINGS OF THE REVIEW TEAM

The Review Team reviewed in detail the Hawai'i County Emergency Operations Plan—specifically the Oil and Hazardous Substances Response Plan—and found it in urgent need of an update to meet requirements of Emergency Planning and Community-Right-to-Know laws.The current plan does not address threats to the public and environment from a serious spill or release of hazardous substances from an operating facility such as PGV. To support this planning effort, EPA has provided $25,000 to Hawai'i County for the updating and upgrading of the hazardous substances portion of its Emergency Operations Plan by September 30, 2001.

In particular, the Review Team was concerned about the capability of local responders to respond quickly to an emergency at the PGV facility. Hawai'i County responders need to evaluate their capacity for emergency response and their ability to participate in an Incident Command System (ICS). ICS is an organizational structure set up to efficiently handle all the elements of a response. In addition, the Hawai'i County Fire Department, Pahoa Substation, needs to work with PGV to gauge the potential severity of an incident.

The Review Team found that many who attended the public meetings expressed concerns about their health and safety being jeopardized by the PGV facility, with a major release of hydrogen sulfide as the principal hazard. In addition, the public was concerned about the need for public alert and notification systems and plans for shelter-in-place and evacuation. Other meeting attendees expressed confidence in the capabilities of PGV management to operate the facility safely and efficiently.

After visiting the PGV site, the Review Team believed that the facility would be able to respond to most incidents except fire. However, at the time of the review the PGV Emergency Response Plan did not fully address coordination issues between the facility and local response agencies. The Review Team has concerns over public alert and notification procedures and the ability of the facility and the County to carry out a coordinated, timely response.

HIGHLIGHTS OF RECOMMENDATIONS

The Review Team recommends some changes in the hydrogen sulfide monitoring capabilities around PGV's perimeter. Since the primary purpose of the monitoring is to protect the health of the community, the sites operated by the Hawaii Department of Health (HDOH) should sample air at the breathing height of approximately six feet. The monitoring network, operated by both PGV and HDOH, should also continuously measure concentrations greater than 500 parts per billion (ppb), since it is possible that more than that amount could be released. Monitors with a wider range (from five to 1,000 ppb), are now available, and monitoring equipment is fundable under EPA's Clean Air Act Section 105 grant to HDOH. In addition, PGV should share its real-time air monitoring data with the Pahoa Substation so the local responders know what is occurring at PGV during an emergency.

The Review Team recommends that the County form a technical work group to evaluate evacuation needs, procedures and

resources. Based on comments EPA received on the draft report, EPA suggests that at least one member of the technical workgroup represent the community-at-large. This technical work group should include representatives from the County Civil Defense Agency and the Fire Department, Hawai'i Department of Health, the University of Hawai'i and EPA. Work group members should confer with PGV technical staff on the details of facility operations.

Both PGV and the County need to coordinate their planning activities and conduct joint training exercises before they can understand the capabilities of local fire, police and medical units. These joint exercises, held at least annually, would identify how to update and improve the emergency response plans and would serve as quick refresher training for PGV personnel and local hazardous materials responders. In addition, PGV and the County need to designate community and facility emergency coordinators, as required by the Emergency Planning and Community-Right-to-Know Act. These emergency coordinators should take the lead on planning and carrying out the exercises.

THE BIG PICTURE

The Review Team emphasizes that an emergency response plan is only a detailed blueprint for protection; it alone does not directly protect the public and the environment. Emergency response programs are the comprehensive approach to protection of communities. In addition to complete, updated and coordinated emergency response plans, jurisdictions and industries must have the required resources, equipment and trained personnel to be fully prepared to implement the plans and respond to accidents and disasters, both man-made and natural. The authorities responsible for the emergency response programs must be assured at all times that the programs are workable.

PUBLIC COMMENTS ON THE DRAFT REPORT

Comment letters and EPA's responses to those comments are included as appendices to the Final Report. Some letters were referred to state or local agencies if the comments were most appropriately addressed by those other entities. EPA's referral letters to those agencies are also included in the appendices.

FOR MORE INFORMATION

If you have questions or would like additional information on EPA's review of the Puna Emergency Response Plans, contact either of the two EPA staff members listed below:

VICKI ROSEN
COMMUNITY INVOLVEMENT COORDINATOR (SFD-3)
(415) 744-2187

MIKE ARDITO
PROJECT MANAGER (SFD-1-2)
(415) 744-2328

U.S. EPA • 75 HAWTHORNE ST. SAN FRANCISCO, CA 94105

You may also call TOLL-FREE: (800) 231-3075. Please leave a message for either Mike or Vicki, and they will return your call as soon as possible.

INFORMATION REPOSITORIES

Copies of the Puna Emergency Response Plans Final Review Report may be found in the following repositories:

EPA PACIFIC ISLAND CONTACT OFFICE
FEDERAL BUILDING
300 ALA MOANA BLVD., ROOM 5-152
HONOLULU, HI 96850
(808) 541-2710

PAHOA PUBLIC LIBRARY
15-3070 PAHOA KALAPANA ROAD
PAHOA, HI 96778
(808) 965-8574

KAILUA-KONA PUBLIC LIBRARY
75-138 HAULALAI ROAD
KAILUA-KONA, HI 96740
(808) 327-4327

UNIVERSITY OF HAWAI'I LIBRARY
200 WEST KAWILI STREET
HILO, HI 96720
(808) 974-7346

KEAAU PUBLIC LIBRARY
16-571 KEAAU PAHOA ROAD
KEAAU, HI 96749
(808) 966-8181

HILO PUBLIC LIBRARY
300 WAIANUENUE AVENUE
HILO, HI 96720
(808) 933-8888

In addition, the Final Review Report without the appendices can be found on the following EPA website:
http://www.epa.gov/region09/waste/puna