



EPA

TANAPAG, SAIPAN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION IX • OCTOBER 2000

TANAPAG VILLAGE PCBs

The purpose of this fact sheet is to update community members and other interested persons on the cleanup of PCBs in and around Tanapag Village. The U.S. Environmental Protection Agency (EPA) has produced this fact sheet so that residents know what is being done to clean up the contamination and protect public health as well as who is actually doing the cleanup. We will also describe what future activities will take place to ensure that the community is protected for the long-term.

As most people are aware, there is soil contaminated with polychlorinated biphenyls (PCBs) in Cemetery 2 and certain areas within Tanapag Village. PCBs are toxic chemicals that may be harmful to human health. The PCB fluid that has caused this problem leaked from ceramic capacitors that were discovered in 1988 by the Commonwealth of the Northern Mariana Islands Division of Environmental Quality (DEQ). Although we cannot be certain of the exact number of capacitors brought to the island, it is likely that all of them have been found and removed from the island for proper disposal. However, we will continue to investigate any reports that may lead us to discover additional capacitors.

EPA would like the community to know that all areas that might be contaminated with PCBs will be thoroughly investigated and cleaned up in a manner that protects human health and the environment. We realize residents are concerned about how the cleanup has been done over the past few years. However, we are going to make sure that Cemetery 2 is cleaned up; that levels of PCBs in the Village are reduced even further so human health is protected; and that other issues associated with the PCB contamination receive further attention, such as additional investigation of groundwater and certain foods.

What Is Being Done

The U.S. Army Corps of Engineers (Corps) is doing the cleanup; EPA is overseeing the cleanup. The highest priority is being given Cemetery 2 because of the extremely high levels of PCBs that remain there and the fact that people can easily come into contact with this contamination. All soil with PCB levels greater than 1 part per million (ppm) is being dug up and placed in lined trenches near the Cemetery until treatment or permanent disposal can take place. The cleanup goal of 1 ppm for PCBs has been established by the Corps based on recommendations from EPA toxicologists and risk assessors as a level that would be protective of human health. It is consistent with PCB cleanup levels selected for soil in residential areas at sites nationwide. This area should be cleaned up by the middle of October, weather permitting. Following cleanup of Cemetery 2, contaminated soil from specific areas within the Village will be removed so it too can be treated in a manner that will remove the PCBs from the soil. (It should be noted

that our Spring sampling of residential surface soils showed levels of PCBs below 1 ppm in a majority of the samples, including those that had not been sampled before.) It is expected that all 6 - 8,000 cubic yards of soil from both areas will be in secure trenches near Cemetery 2 by the end of November.

How the Soil Will Be Treated

The Corps has proposed a process known as "thermal desorption" as the first step in the PCB treatment. What thermal desorption does is heat the contaminated soil so that the PCB molecule separates from it. What remains is clean soil and concentrated PCBs. Before this process will be used, a "stack test" will be done to make sure the unit is heating and working properly and that emissions coming from the stack are free of dioxins. All phases of this process will be continuously monitored. Thermal desorption, a way to remove toxic chemicals from soil, has been used successfully throughout the United States for many years.

The second step in the handling of the concentrated PCBs is still being evaluated. The Corps is looking at a process called "Fenton's Reaction" as a way to completely destroy PCBs. This method uses oxidation, a process that involves the transfer of electrons in a molecule. A treatability study is currently being done by the Corps on the U.S. Mainland to evaluate the use of this process for this project. In case the Fenton's Reaction process is not successful, EPA will allow the concentrated PCBs to be imported back to the Mainland for disposal. In general, however, it is always safest to treat and dispose of contamination at the source rather than moving it great distances and risking an accident that would spread the contamination to other areas.

Should any other treatment processes be desired, they must be proposed and tested before they can be used.

Who Is Doing What

The Corps is doing the cleanup, and EPA has issued an Administrative Order (Order) so that the cleanup activities are performed under EPA standards and over-

sight. Both EPA and the Corps will be in Saipan working full-time on this project, coordinating all activities with the Commonwealth's DEQ. EPA is able to have an on-scene coordinator present at the site to provide technical assistance because of our emergency response authority under Superfund, the hazardous waste cleanup program. We are aware of the problems that have occurred in the past with the PCB contamination in Tanapag and are committed to seeing all future investigation and cleanup work done properly and thoroughly.

Additional Sampling

EPA believes that a thorough groundwater investigation should be conducted in Tanapag Village and the Cemetery 2 area to address community concerns. The Order requires the Corps to do this, and we expect them to begin sampling early in 2001. Reportedly, groundwater from the Village is not being used for drinking water.

EPA also agrees with the community on the need for additional sampling of food sources and will make sure that this takes place. Although we are still evaluating data from our May screening survey, we have some observations from that testing. The limited preliminary data indicate that clams, yams, taro root and chicken eggs showed no levels of concern for PCBs. Some land crabs from the vicinity of Cemetery 2, however, did contain PCBs. Based upon the extremely limited crab data, and given that there is much uncertainty as to how representative that data was, it would be best if residents were cautious and avoided routinely eating land crabs collected near Cemetery 2. In conducting future food sampling, we will see to it that community concerns are addressed as much as possible. We will continue to provide consultation to DEQ and health agencies when decisions are being made on this issue.

What's Being Done to Address Health Concerns

In June 1999, the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency, was asked by EPA and the Commonwealth's Department

of Public Health (DPH) to help in addressing citizens' concerns about exposure to PCBs. ATSDR assisted DPH with medical evaluations and blood sampling for more than 1,180 villagers and provided training for local physicians on PCB exposure and health effects. The Agency is also assisting DPH with consultations with villagers about PCB exposure.

ATSDR is currently reviewing EPA's environmental sampling data; they plan to review exposure histories and PCB blood sampling data when this information is provided to them by DPH. ATSDR is preparing a "public health assessment" report for release later this year or early in 2001. This report will discuss PCB exposure in Tanapag and its significance to human health. It will attempt to address community health concerns, make recommendations on any further actions that may be needed to prevent PCB exposure and identify any needed follow-up actions. ATSDR staff is planning to visit Saipan the beginning of November to help DPH discuss the findings of the medical evaluations and PCB blood sampling with the Tanapag community. During the November visit, ATSDR staff will be available to meet with residents in Tanapag to discuss their health concerns related to the PCB contamination. These meetings will be coordinated through DPH.

If you would like to contact ATSDR, you may do so toll-free at (888) 422-8737 or visit their website at <http://www.atsdr.cdc.gov> ATSDR's Tanapag contact is Scott Sudweeks at (404) 639-604 or by e-mail at: ssudweeks@cdc.gov

Risk Assessments

There has been some question as to whether or not a risk assessment would be conducted in connection with the PCB cleanup. EPA performs risk assessments when we are looking at how to clean up a site where long-term remediation is needed. In that case, we would need to determine how people might become exposed in order to decide on the cleanup level. In the case of the PCB-contaminated soil in Tanapag, this was done through the Superfund risk assessment process which EPA used to establish the health-based

cleanup goal of 1 ppm. This risk assessment process made use of the latest scientific findings regarding the toxicity of PCBs and how Tanapag residents might be exposed. The actions being taken under the ongoing Corps cleanup will be complete and will take care of any potential risk. Therefore, a full risk assessment is not required. If the situation were to change, however, because of new information or conditions that would lead us to look at a long-term Superfund cleanup, then a risk assessment would be conducted. (See the accompanying *Superfund Today* brochure that discusses risk assessment in greater detail).

FOR MORE INFORMATION

Informal community meetings are held on Wednesday evenings in the Village. EPA, the Corps and DEQ are there to discuss any aspect of the PCB cleanup.

In addition, if you have questions or concerns regarding this issue, please do not hesitate to contact any of the people listed below:

Ignacio Cabrera
Director

Division of Environmental Quality
(670) 664-8560

Norm Lovelace
Pacific Islands Office
U.S. EPA

75 Hawthorne St. (CMD-1)
San Francisco, CA 94105
(415) 744-1599

lovelace.norm@epa.gov

Helene Takemoto
Project Manager
U.S. Army Corps of Engineers
Honolulu, HI
(808) 438-6931

Helene.Y.Takemoto@poh01.usace.army.mil



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