



Metlakatla, Alaska

Metlakatla is a small town located in the Annette Islands Reserve in Southeast Alaska. Annette Island was the site of several military facilities during and following World War II. The Metlakatla Indian Community is concerned that former military buildings, fuel storage tanks, and landfills are now leaking, contaminating beaches and local seafood. The Community is particularly concerned about the safety of locally collected seafood because these shellfish, fish, and seaweed are a significant source of food for many people in the community.



Brownfields Issues in Metlakatla

In 2000, Metlakatla was designated to be a Brownfields Showcase Community by the Brownfields National Partnership. The Metlakatla Indian Community has identified many potential contamination sources on Annette Island, including past military operations, a recently closed sawmill, sewer outfalls and other industrial activities. The Community has been working with the Federal Aviation Administration (FAA), the U.S. Department of Defense, the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the Bureau of Indian Affairs to survey and cleanup over 90 distinct abandoned facilities or sites. There has been extensive sampling in upland soils, groundwater, and surface

water, but relatively little sampling offshore. In 2000, the FAA collected more than 5,000 sediment samples in the area offshore of the old military hospital. The samples were analyzed for various



contaminants, and most of the concentrations were non-detect or below levels of concern. However, these data did not allow for a direct assessment of potential risks from eating seafood, because the tissues of shellfish, fish and other food items were not sampled.

To address this data gap, the National Oceanic and Atmospheric Administration (NOAA) partnered with Metlakatla Indian Community in 2002 / 2003 to investigate whether the fish and shellfish are contaminated. NOAA developed the study plan and led the effort to collect samples under the federal Brownfields program. The Metlakatla Indian Community assisted with study design, and local residents helped collect, label, and package the samples for shipping. The Department of Defense contributed money towards the sample collection and laboratory analysis.

Various edible tissues from butter clams, cockles, chitons, Dungeness crab, octopus (devilfish), seaweed, halibut, and Chinook salmon were collected from locations where Community members practice subsistence and commercial fishing, and also from a reference location along the east coast of Annette Island. Samples were analyzed for four major groups of contaminants: polycyclic aromatic hydrocarbons (PAHs), organochlorine pesticides, polychlorinated biphenyls (PCBs), and metals.

Data indicate:

- PCBs were detected, but only in the fatty tissues of crab hepatopancreas (crab butter) and halibut heads.
- Low concentrations of various PAHs, metals, and pesticides were detected in most samples, and varied from location to location and species to species.
- The levels of the various chemicals observed in the samples were similar to those found in other seafood studies in the Pacific Northwest and Alaska.
- No trend was observed in the distribution of chemicals by location, including the reference location. This suggests that the chemicals detected do not come from Annette Island, but instead represent regional "ambient" levels.
- As part of a preliminary risk evaluation, the concentrations of chemicals measured in seafood were compared to U.S. EPA risk levels. All estimated risks appear to fall within the "safe range."

The Agency for Toxic Substances and Disease Registry (ATSDR) is using the data generated by this study in an environmental public health evaluation for the Metlakatla Indian Community.

Accomplishments through Partnerships

The partnership between NOAA and the Community to assess potential seafood contamination is just one example of how the Federal Brownfields program is helping the Community clean up and put into productive use properties that may have been contaminated. Metlakatla's Brownfields activities have generated numerous partnerships and positive working relationships between the Tribal Council, federal Brownfields Partner agencies, and local residents. Other partnerships and examples include:

Bureau of Indian Affairs and the U.S. Army Corps of Engineers signed a memorandum of understanding with the Community in 1998 for investigation and cleanup of contaminated sites in the community. The Corps of Engineers has removed a number of underground storage tanks, drums, and debris.

The Federal Aviation Administration has removed 500,000 pounds of PCB-contaminated soil, 8,000 pounds of PCB-contaminated oils, 200 transformers, 10,000 gallons of contaminated fuel, and 5,000 pounds of asbestos, lead-based paints, and oil wastes

The Department of Defense Native American Lands Environmental Mitigation Program helped fund the seafood study described in this fact sheet, and has also provided funding for asbestos abatement at seven sites on the island.

The U.S. EPA, has provided \$100,000 to the Metlakatla Indian Community to clean up three underground storage tanks and associated properties.

For additional information about Brownfields:
NOAA's Brownfields Web page
<http://brownfields.noaa.gov/welcome.html>

U.S.EPA's Brownfields's Web page:
<http://www.epa.gov/swerosps/bf/index.html>

For additional information:
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NOAA's Office of Response & Restoration—Protecting our Coastal Environment

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