

Linda Douglass
Fort Wainwright Public Affairs Office

Cleanup of a contaminated Fort Wainwright housing area is nearly complete, officials said in a meeting last week.

The 110 houses of the Taku Gardens housing area have never been occupied because early in the construction process, in 2005, workers on the site discovered the presence of polychlorinated biphenyl oil in the ground.

As a result of this discovery, officials halted work on the project and initiated an investigation, which ultimately led to an investigation and concurrent cleanup of the area beginning in 2007.



Courtesy photo

Sarah Belway of Jacobs Engineering stands in front of a pile of metal debris the company dug from the ground at Taku Gardens during the investigation. Officials say the cleanup of the contaminated site is nearly complete.

The PCBs have been cleaned up and the investigation and cleanup of the remainder of the housing project site are nearly complete, said Joe Malen, Remediation Program Manager at Fort Wainwright's Environmental Office.

The PCB contamination was discovered in what is approximately one-quarter of an acre on the 54-acre site, Malen said. To date, all the PCB contamination has been removed and transported to permitted disposal facilities.

Malen said officials believe the site – known as the Former Communications Site to the environmental community – was many things during first Ladd Field's and then Fort Wainwright's history: temporary barracks for Army and Air Force units waiting for new facilities to be completed; motor pools, mess halls, administrative areas, a potential communication site; a staging area for railroad construction; and a metal disposal and salvage area in the 1940s and 1950s.

From the 1960s through the 1990s, the southwest corner of the site was used for vegetable garden plots for Soldiers and their families. When the garden plots were established, the facility engineers hauled in topsoil and mulch from off-site, installed water pipes and marked off plots for personnel to use.

Excavation has shown both the Army and the Air Force discarded and buried unusable military equipment and

hardware there.

Additionally, there may have been a communications site and motor pools located where the housing units now sit.

Large quantities of metal debris were discovered in the northeast section of the property, Malen said.

"Working closely with the Environmental Protection Agency and the Alaska Department of Environmental Conservation, we began to investigate the soil, groundwater and debris to determine if there were any potential hazards to our residents," Malen said of the investigation and cleanup. "As we investigated, we also removed the debris and any contamination found and transported it to a proper disposal site."

He said investigators used electromagnetic sensing devices called EM-61s to determine where metal was located. The agencies also mapped out areas for contractors to sample and analyze soil and groundwater to check for contaminants of concern.



Courtesy photo

The 110 houses in the Taku Gardens housing area have never been occupied due to site contamination.

"We stockpiled it and recycled it. During preliminary investigations, lab results indicated additional areas of concern in the soil including some pesticides, battery parts and drums of waste in the soil, packaged it and shipped it to a toxic substance disposal facility outside of Alaska.

"We opened all the intact drums to ensure they were empty, and if not, sampled the contents and shipped them to a disposal facility away from here," Malen said. "The explosive ordnance detachments at Fort Richardson or Eielson Air Force Base were called every time suspected discarded military munitions were found on the site.

"Most of the items found did not have any markings, or paint on the outside so standard Army procedures require that all such devices must be treated as live munitions until proven otherwise because there might be a chance that they may have explosive material inside" he explained.

"By the end of 2008, all areas where we had known contamination that might pose a risk to the health of our families was removed and disposed of offsite at approved facilities," he said. "All known PCBs are gone."

Malen said the investigations continue. A detailed review of reports last winter revealed three minor areas of metal anomalies. Crews will check those this summer, he said.

If something was found, it was mapped and the Army, EPA and ADEC consulted with experts to design a plan for additional investigation and cleanup.

Once the main areas of concern were laid out, contractor crews dug in those areas to remove the debris or contaminants of concern.

As an example of the kinds of metal underground at the site, crews conducting the excavation and cleanup found a locomotive engine, a forklift, boilers, inert munitions debris, training devices, aircraft aluminum, steel cables and strapping and metal drums. Malen said the crews excavated more than 300,000 square feet of soil between five to 18 feet deep.

"We removed 267 tons of metal between 2007 and 2008," Malen said.

He added that what are being found now are small items like nails, bolts and other types of metal junk and debris from the construction activities that were halted in 2005.

"Work this summer includes excavation backfill operations, completing test pits to accommodate street-light installation and housekeeping duties (dust control and drainage)," he said. "We will continue groundwater evaluation with another series of sampling and analysis."

He said there is no indication that the PCBs or the petroleum products and pesticides found in the soil had migrated beyond the confines of the site.

"The investigative fieldwork is complete," Malen said. "The DRAFT Remedial Investigation/Human Health Risk Assessment report is written and almost ready to submit to agency project managers for review."

In addition to the work that has already been accomplished, the Army has established a list of institutional controls that will remain in place until all agencies agree they are no longer needed.

The controls restrict how construction or earthmoving will be handled in the future; restrict the use of groundwater in such a way that it cannot be used for drinking water or fire suppression wells; require the Army to periodically sample and analyze the soil gas under each house to ensure there is no chance of chemical vapors getting into the houses; and ensure every potential family is made aware of all that has happened at this site.

Pursuant to an Action Memorandum Agreement between the Army, EPA and ADEC, Soldiers will not be permitted to occupy houses at Taku Gardens until all three agencies concur that it is safe to do so.

Nevertheless, Malen said Soldiers and families will not be required to accept housing in Taku Gardens, but can request another area if the history of the site concerns them.

Although the fieldwork is complete, Malen said there are still things to be done before the site is deemed ready to move people into the homes.

"The Army, EPA and ADEC will develop a list of remedial actions to address any remaining risks and potential safety hazards identified in the risk assessment," he said.

A proposed plan to identify future actions will be written and presented for public comment. At the end of the comment period, the Army will issue a Record of Decision that documents past actions; identifies safety and health risks; and explains remedial actions and institutional controls at the site.

All of these documents must be approved by all three agencies, and will be reviewed by third-parties as well.

"Our primary concern is for the safety and health of our Soldiers and their families," said Col. Timothy Jones, Fort Wainwright garrison commander. "In conjunction with our partners in EPA and ADEC, we will ensure the Taku Gardens housing area is safe before we move any Soldiers or their families into these homes."