



ENVIRONMENTAL ASSESSMENT OF DIOXIN CONTAMINATION AT BIEN HOA AIRBASE

OCTOBER 2013 – JUNE 2016 | IMPLEMENTER: CDM SMITH, INC | PLANNED BUDGET \$3,700,000

Working in partnership with the Government of Vietnam, USAID conducted an environmental assessment (EA) of dioxin contamination at the Bien Hoa Airbase, where Agent Orange was stored and handled during the U.S.-Vietnam War. The assessment determined the nature and extent of dioxin contamination and developed and evaluated potential remediation alternatives, including both containment and treatment options, to reduce the risk of dioxin exposure on and around the Airbase. The U.S. Government worked in close collaboration with the Vietnam Ministry of National Defense (MND) to implement the assessment.

ENVIRONMENTAL ASSESSMENT PROCESS

The environmental assessment included developing a database of historical environmental investigations conducted on and around the Airbase; sample collection and analysis; development and screening of potential technologies and remediation alternatives; and final documentation of the study.

COMPLETED ACTIVITIES

Field sampling began in November 2014, following sampling plan approval by MND and the Dong Nai Department of Natural Resources and Environment and was completed in April 2015. Over 1,400 environmental samples were collected for potential dioxin analysis. The sampling team included USAID contractors, the Academy of Military Science and Technology (AMST), the Vietnam Russia Tropical Center, and the Union of Science on Geology, Foundation, Engineering & Building Materials. USAID developed conceptual designs and evaluated remediation alternatives in close collaboration with AMST and other technical agencies within MND, as well as Office 33. The results of this evaluation were shared with stakeholders and the final document is online at: <https://www.usaid.gov/vietnam/environmental-assessment>.

Throughout the assessment process, USAID conducted a four-part training series to increase the knowledge base and remediation skill set of approximately 30 of Vietnam's next generation of dioxin experts using Bien Hoa as a case study.

In the photo: American and Vietnamese scientists process soil samples at Bien Hoa; CDM Smith