

Glossary

Acacia – One of several fast-growing shade trees now being planted to shelter sun-sensitive seedlings and to prevent further hillside erosion in southern Vietnam in an effort to reforest areas that were denuded by herbicide spraying during the Vietnam War.

Agent Orange – One of a group of color-coded herbicides that U.S. forces sprayed over rural southern Vietnam from 1961-1971, during the U.S.-Vietnam war, to destroy ground cover and crops used by opposition forces. It was a 50/50 mixture of two individual herbicides, 2,4-D and 2,4,5-T. Other herbicides used included Agents White, Pink, Blue, Purple and Green.

American grass – Vietnamese nickname for any of several invasive grasses that cover soil areas otherwise barren and degraded from U.S. spraying of herbicides during the Vietnam War.

Committee 33 – The Vietnamese national government steering committee of the Ministry of Natural Resources and Development that coordinates the country's policies on Agent Orange/dioxin, including preparation of the National Action Plan of 2009.

Containment – Construction of cement caps or walls, drainage ditches, sediment tanks or other barriers to prevent the transport of Agent Orange/dioxin from the original contamination site to secondary sites.

Defoliant – A chemical substance that when applied to a plant alters its metabolism and causes its leaves to fall off. Defoliants are not necessarily fatal to the plant [cf. *herbicide*, below].

Demilitarized zone – The neutral zone established in April 1954 along the 17th parallel in Vietnam by the Geneva Conference that ended the war between France and the Viet Minh independence movement. The zone extended about a mile on either side of the Ben Hai river from the Laotian border to the sea.

Dipterocarp – A family of tall hardwood tropical trees native to southeastern Asia that have a two-winged fruit and are the source of valuable timber, aromatic oils and resins.

Dioxin – A persistent and extremely toxic organic pollutant (2,3,7,8 tetrachloro-p-dibenzo-dioxin, or TCDD). The most toxic of all dioxins and dioxin-like compounds, TCDD contaminated Agent Orange, Pink, Purple and Green when the production of one of their components (2,4,5-T) was accelerated during the Vietnam War.

Furans – A family of highly toxic substances, including dioxin and PCBs (polychlorinated biphenyls), that share a particular crystalline chemical structure and are inadvertent byproducts of industrial processes.

Green fence – A barrier of thorny honey locust trees (*Gleditschia australis*) being planted around the former A So airbase in the A Luoi valley near the Lao border. The fence is intended to prevent further human and animal exposure to dioxin in soil at the site.

Hectare – an area of land measurement, equal to 2.2 acres.

Herbicide – a chemical substance used to kill unwanted plants. In the spraying campaign, U.S. and Vietnamese forces intended to kill the targeted vegetation, not merely to remove its leaves. For that reason, we have used *herbicide* throughout these fact sheets. The term *defoliant* (see above) is often used in other discussions of the issue.

Hot spots – More than two dozen areas of high concentrations of dioxin residues remaining in southern Vietnam, associated with former U.S. military installations. They resulted from spillage of Agent Orange

and other dioxin-contaminated herbicides during storage or handling as part of the U.S. program of spraying defoliants to eliminate ground cover and food crops from 1961 to 1971.

Joint Advisory Committee – A forum made up of key government agencies from Vietnam and the United States for scientific dialogue on Agent Orange/dioxin, to provide policymakers of the two governments with sound, science-based advice. U.S. members represent the Environmental Protection Agency, Centers for Disease Control and Prevention, Agency for International Development (USAID), and the Departments of Health and Human Services, Defense and State. Vietnamese participants include the National Steering Committee 33, the Vietnam Academy for Science and Technology and the Ministries of Natural Resources and Environment, Defense, Foreign Affairs and Health.

Mangrove – A type of tree (*Rhizophora*) native to tropical saline wetlands and coastal areas, providing habitat for crabs, oysters, shrimp, barnacles, lobsters and other fish and crustaceans.

Normalization – The gradual process in which two nations return to conventional trade and diplomatic relations following a period of hostilities or suspension of such relations.

Operation Hades – The original code name for the U.S. Air Force program of spraying herbicides in Vietnam beginning in 1961.

Operation Ranch Hand – The code name U.S. forces gave to the program of spraying herbicides in Vietnam after 1962.

Pacer Ivy – The U.S. military code name for the program that gathered remaining stocks of contaminated herbicides at Da Nang, Bien Hoa and Tuy Hoa airbases beginning in 1971, re-barrelled it and shipped it to Johnston Island in the South Pacific for eventual destruction by incineration in 1977.

PPT – Parts per trillion, equivalent to picograms per gram (pg/g). One ppt is like one molecule of water in an Olympic-size swimming pool.

Remediation – Action that cleans Agent Orange/dioxin contamination from soil and pond sediments and deals with its health effects on people directly and indirectly exposed.

TEQ – Toxic equivalent: measures the toxicity of dioxins and dioxin-like compounds. TCDD, the most toxic of these substances, has a value of 1 and all other dioxins and dioxin-like compounds are given a rating that is a fraction of 1 depending on their relative toxicity. TEQ is used to measure the total toxicity of samples of soil, blood, breast milk, etc.

Tussock grass – One of several species of invasive grass and weeds now common in rural areas of southern Vietnam sprayed with Agent Orange/dioxin during the Vietnam War.

U.S.-Vietnam Dialogue Group on Agent Orange/ Dioxin -- A bi-national and nonpartisan committee of prominent U.S. and Vietnamese private citizens, scientists and policy-makers working to draw attention to the issues of Agent Orange/dioxin residues in Vietnam and to mobilize resources for remediation.