



Office of the Speaker **THERESE M. TERLAJE**

I Mina'trentai Sais na Liheslaturan Guåhan | 36th Guam Legislature
Committee on Health, Land, Justice and Culture

Notable Excerpts from the Opening Brief for United States Court of Appeals for the Federal Circuit, Case No. 20-2086:

The United States deployed roughly 20 million gallons of herbicides in the period from 1962 to 1971. Appx2576. The most notorious of these, Agent Orange, accounted for roughly 11 million gallons. Appx2580. When sprayed on enemy territory, the herbicides were used for the “defoliation of trees and plants to improve visibility for military operations” and for the “destruction of essential enemy food supplies.” Appx2576. The defoliation campaign “improved aerial observation, opened roads to free travel, and hindered enemy ambush.” Appx2576. Nearly ten percent of South Vietnam was sprayed, much of it repeatedly. Appx2591-2595.

But by the end of the 1960s, legal and ethical controversies surrounding American use of herbicides had become “a contributing element in the growing opposition to American involvement in Vietnam.” Appx2583. The government’s own studies showed that ingredients in the herbicides could harm research animals, and the American Association for the Advancement of Science concluded that they posed “a probable health threat to humans.” Appx2583. The U.S. government terminated its large-scale aerial spraying operations in Vietnam in 1971. Appx2584.

Eyewitness accounts from individual veterans confirm these uses on Guam. Veterans recall “prepar[ing], mix[ing], and spray[ing]” Agent Orange, identified by its “colored bands,” along pipelines, flightlines, building perimeters, and security fences on the island. Appx18; see also Appx17; Appx2203. The spraying took place so close to other troops that it would form a “chalky white” substance on them, Appx18, and make them nauseous, Appx14. As part of firefighting training conducted at Anderson, trainees would practice in “pit fires” concocted from leftover drums of fuel and herbicides, crawling through the resulting toxic fumes. Appx19; accord Appx531.

As a result of Congress’s “concern” that “exposures to Agent Orange may have occurred on Guam,” the U.S. Government Accountability Office (GAO) was tasked with studying the evidence of its presence there. Appx2170. Its 2018 report confirmed the use of toxic herbicides in Guam, including the TCDD contaminant found in Agent Orange. See Appx2179 & n.30. With respect to the use of Agent Orange in particular on Guam, the report’s conclusions were limited by the sparse records still available. At least one and as many as four ships transporting Agent Orange docked at Guam, but records do not show what was loaded or unloaded. Appx2165; Appx2197. Military records account for the use or disposal of most of the Agent Orange procured by DOD, but nearly 2 million gallons—one in ten barrels—are still unaccounted for as a result of shortcomings in the records. Appx2165. The GAO purported to rule out the possibility of small-scale Agent Orange spraying on Guam in light of the supposed DOD policy forbidding it, Appx2203—the same policy that was widely ignored because such uses were “so obvious and so uncontroversial at the time,” supra p. 6 (quoting Appx2586). In part for want of sufficient record-keeping, the GAO report did not address—and therefore did not rule out—the presence or use of other so-called tactical herbicides (like Agent Pink and Agent Purple) on Guam. See Appx2169 n.1; Appx2194 n.57.

Recent testing conducted for the U.S. Environmental Protection Agency (EPA) has also confirmed the use of toxic herbicides on Guam. Trace amounts of 2,4-D and 2,4,5-T, the two components of Agent Orange, were

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For Immediate Release - Speaker Terlaje Supports Change to VA Rules to Include Guam Veterans Exposed to Agent Orange detected in multiple samples taken in 2018 on Guam, including from Anderson Air Force Base. Appx2139-2140. These results “indicate the presence of ... residual chlorinated herbicides” in Guam’s soil, Appx2141, despite

significant obstacles to fair and accurate testing. First, the U.S. government has refused to test for the toxic contaminant in Agent Orange, TCDD. Appx2216. Second, 2,4-D and 2,4,5-T have half-lives of 14 and 24 days, respectively. Appx2217. As a result of environmental degradation, many sites of herbicide spraying in the 1960s and 70s are “likely” to retain low or “no detectable concentrations” today. Appx2217; see also Appx2140. Third, the government failed to follow its own testing procedures, taking too little soil for some samples, Appx2139-2140, and simply failing to report results on other samples, Appx2137. Against these odds, the Guam samples still tested positive.

As part of MVA’s advocacy on this issue, Mr. Moyer traveled to Guam in 2019 as MVA’s representative and at MVA’s expense. A2; A6. There, he provided Superfund investigators with the locations of herbicide spraying during the 1970s. A6; accord A13. These efforts by Mr. Moyer and MVA yielded test results that underscore what was already well known: TCDD was detected in 8 of the 10 soil samples, and dioxin concentrations exceeded the federal government’s own regional screening levels—one sample contained 270% the acceptable level. A14-15. The relative levels of dioxin variants in a sample can provide a chemical “fingerprint,” and by examining the soil fingerprints from Guam, the Superfund investigators concluded that the “patterns in some soil samples are consistent with residual chlorinated herbicides.” A15; see also A16 (observing that relatively high concentrations of one of the variants “could be a marker indicating that TCDD was initially higher but has degraded”). In the end, the Superfund investigators concluded:

It is probable that TCDD dioxin congener concentrations detected in soils are associated with chlorinated herbicides. Records of chlorinated herbicide use by the military on Guam and veteran affidavits documenting the use of 2,4,5-T and 2,4,5-TP along with data collected from previous soil sampling events suggest the presence and use of chlorinated herbicides was likely. Finally, the herbicides in question were known to contain TCDD.

Indeed, the Agent Orange Act’s sponsor—himself a veteran of the Vietnam War era—explained that the benefit of the doubt is at the statute’s core: “Since the beginning stages of this bill’s development in 1987, its purpose has been to afford veterans exposed to [A]gent [O]range and other herbicides in Vietnam the benefit of the doubt with respect to their service-connected disability claims.” 137 Cong. Rec. 2483 (1991) (statement of Sen. Daschle).

It is undisputed as a matter of historical fact that tactical herbicides, including Agent Orange, were sprayed at small scales around American bases—despite DOD policy forbidding it. Appx2576; Appx2581; Appx2585-2586; Appx2598. It is undisputed that the military generally kept no records of this small-scale spraying. Appx2586. An estimated 2 million gallons of herbicide were sprayed at these small scales, Appx2586, and—sure enough—roughly 2 million gallons of herbicide were unaccounted for in official records at the end of the War, Appx2165.

The same is true for the small-scale spraying of so-called tactical herbicides here. Army officials contemporaneously explained that they gave “little thought” to keeping records of such activities, because they “seemed so obvious and so uncontroversial at the time.” Appx2586. In 1990, one of VA’s own reports explained that this “non-recorded” spraying was “a significant, if not major source of exposure for ground forces” during the Vietnam War. Appx1593. And the absence of records makes sense: Corps were not required to obtain permission

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At least one and perhaps as many as four ships carrying the herbicide stopped in Guam, with no records of what was off-loaded. Appx2165; Appx2197. Testing for so-called tactical herbicides specifically is impossible, since they shared many chemical components with commercial herbicides, and these components degrade over time. See Appx2165; Appx2179; Appx2201; Appx2215-2216. In short, the GAO report concludes only that there were no official records of one specific tactical herbicide (Agent Orange). Because the report does not address all tactical herbicides, and because official records would not have been kept in any event, the report’s conclusions are not probative of the factual issue here.

In focus groups moderated by the GAO, veterans described witnessing and coming into contact with Agent Orange in Guam, including developing boils and blisters as a result. Appx2203. The GAO rejected these veteran accounts because DOD policy forbade the use of Agent Orange for spraying on bases and because the official records show only commercial herbicides on Guam. Appx2203. That conclusion is nonsensical for the reasons just discussed: Agent Orange was sprayed at small scales around bases despite the contrary policy, and records of that spraying were not typically kept.

Veterans offered sworn accounts of herbicide spraying, including “tactical” Agents Orange and Blue specifically, as identified by the colored bands on their drums. Appx17-18. They described spraying these herbicides in the areas where other servicemembers were working, as well as the resulting defoliation. Appx15-16; Appx18-19. Mr. Foster recalled doing so specifically in the vicinity of Mr. Stanton, Appx18, who in turn recalls the nausea he would develop every time Mr. Foster came by spraying, Appx14. Mr. Fink was in the line of Mr. Foster’s spraying, too. Appx19. VA has no response to this evidence on its merits—only its nonresponsive contentions about the lack of official records and the opportunity for individual compensation.

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