

Notes on the discovery and investigations into contaminated barrels on Okinawa City's soccer field

Citizens' Network for Biodiversity in Okinawa

Citizens' Network for Biodiversity in Okinawa (Okinawa BD), an Okinawan environmental NGO, has been addressing the issues of contamination - including Agent Orange allegations - on Okinawa. Working together with US veterans, scientists and experts, we are engaged in raising public awareness and seeking environmental justice regarding contamination issues. The following is Okinawa BD's summary of the discovery and investigations into contaminated barrels at a soccer field in Okinawa City.

Discovery of barrels and first investigations

- On June 13, 2013, 26 barrels - some marked *Dow Chemical* - were found at a soccer field adjacent to the Okinawa Expressway in Okinawa City. 22 of the barrels were unearthed for investigation while the remaining four were left where they were originally found. Following the discovery, three governmental organizations, the Okinawa Defense Bureau, Okinawa City and Okinawa Prefecture conducted their investigations.

- The Bureau and Okinawa City investigated residues in the barrels as well as soil and ground water around the barrels.

- Okinawa City's investigation report shows:

- the residues in the barrels include dioxin compounds, 2,4,5-T, PCB, and oil.
- the soil around the barrels contains dioxin compounds, fluorine, and arsenic in small quantity.
- the ground water around the barrels contains dioxin compounds and 2,4,5-T.

- Okinawa City's report also points out that contamination is likely to be spread in the soil below the barrels and recommends that further investigations be conducted to determine the range/area, depth and degree of contamination.

- Okinawa Prefecture investigated ground water in areas surrounding the soccer field. Okinawa Prefecture's investigations show no contamination in the ground water sampled in areas surrounding the soccer field.

Experts' comments and concerns on the first investigations and their results

Independent experts made comments and expressed concerns regarding the first investigations and their results.

- Dr. Wayne Dwernychuk, an expert on Agent Orange and herbicides who headed investigations into dioxin "hot-spots" in Vietnam, wrote in an email (Nov. 8, 2013) to Okinawa BD about the relationship between soil and barrel contents as follows.

"The screen shot of the Okinawa drum contents shows that there is a range of TCDD concentration with a maximum figure of 4400 pg/g. Concentration was found in the drums, per se, however it is logical to assume that with leakage directly from the drums, soil TCDD levels in close proximity to these drums would ostensibly be very similar. In FIGURE 3.4 of the Da Nang report you quote in your email you see levels at the northern sector of the base, where Ranch Hand was situated, there are levels of TCDD not unlike those determined in the drums. Certainly there may be dispersion of drum contaminants into the soil subsequent to leakage, and probably some reduction of TCDD levels in a given area near the drums. However, *it is clear to me that in many cases the scenario in Da Nang, although with much higher levels in some cases, could be likened to the Okinawa situation.*" [italics added]

- Ms. IKEDA Komichi, a Japanese expert on dioxin contamination, points out in a report dated Aug. 30, 2013 that Okinawa Prefecture's sample size (1~2) is too small to make any accurate assessment of the ground water contamination. She also emphasizes that the depth of contamination should be taken into consideration.

- Professor HONDA Katsuhisa, a Japanese expert on dioxin contamination, argues that this case needs to be considered as an issue of "multiple contamination" involving 2,4,5-T, dioxin, and other "herbicides."

Ongoing "Full Investigations"

- Concern was expressed by the public over the first investigations and their results. Due to this, the Okinawa Defense Bureau, in consultation with Okinawa City and Okinawa Prefecture, began its "full investigations" on the soccer field in October 2013. Their investigations are currently ongoing.

- Information on the process of investigations including their plans, methods and data has not yet been made public, however. Okinawa City explained that results would be announced after the investigations are completed. To date, we have had to gather the following information through a National Diet member and Okinawa City Assembly members.

- In a December 2013 session of Okinawa City Assembly, Okinawa City reported that the investigation of surface soil was completed and that the investigations revealed the presence of arsenic in amounts which slightly exceeded environmental standards.

- The Bureau's report (Dec. 2013) revealed that an additional seven barrels were found on December 5, 2013 in the process of its "full investigations." The Bureau subsequently announced that it would unearth these seven barrels and the four barrels (mentioned above) in work scheduled to start on January 28.

- According to the documents of the consulting company (IDEA) regarding investigation design, surveys of the soil under these barrels will be carried out.

- Okinawa Prefecture has not yet made public their investigations on ground water.

Conclusion and Recommendations

- Considering the experts' comments and concerns mentioned above and considering that the Okinawa Defense Bureau's "full investigations" are still underway, we must conclude that it is impossible for anyone to issue any declaration of safety at this point. We should wait for the present investigations to be completed.

- Meanwhile, we make the following recommendations: 1) the Okinawa Defense Bureau, Okinawa City and Okinawa Prefecture make public their investigations and keep the public updated; 2) the US Military share the information regarding their own investigations on Kadena Air Base with service members, their families and local (Okinawan) people; 3) Independent third parties evaluate the investigations in order to ensure transparency and accountability.

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