



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
HEADQUARTERS, EIGHTH UNITED STATES ARMY
UNIT #15238
APO AP 96205-5236

EADCG

1 JUN 2012

MEMORANDUM FOR RECORD

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

1. **INTRODUCTION:** The purpose of this summary report is to provide an overview of the command's actions with regard to several U.S. service members allegations they buried the highly toxic defoliant, Agent Orange, on Camp Carroll in 1978. This report covers actions by Eighth Army from May 2011 through completion in December 2011, including the establishment of the Camp Carroll Task Force to address the allegations, as well as the methodology of investigating the claims. The results of the investigation findings, as well as conclusions are addressed. Detailed interviews, reports, testing results (historical and as part of the investigation), briefings, historical documents, timelines, and fact sheets that were created or reviewed as part of the investigation are in the attached annexes. The CCTF officially closed its investigation and reported its finding to the Joint Investigative Team in December 2011.

2. **SYNOPSIS (Bottom Line Up Front (BLUF)):** After a thorough, joint, and transparent investigation into the claims, the Task Force concluded the following:

a. The investigation determined there was no definitive evidence that Agent Orange was ever stored at, transported through, applied to the grounds, or buried at Camp Carroll. Mr. House's, Mr. [REDACTED] and Mr. [REDACTED] claims that Agent Orange was buried or stored on Camp Carroll were not substantiated by the investigation. (ANNEX C, D,H)

b. Hazardous Waste that was buried on Camp Carroll in 1978 was excavated in 1979-1980 and was repackaged for shipment and likely shipped to the United States for disposal. (ANNEX C)

c. Detailed Health Risk Assessment (ANNEX G) from the Army Public Health Command conducted on the alleged burial locations confirmed no currently existing health risk was found for personnel working or living on Camp Carroll due to Agent Orange from the alleged burial sites.

3. **BACKGROUND of CLAIMS:** On 13 May 2011, KPHO (a CBS affiliate in Phoenix, Ariz.) broadcasted a story about Mr. Stephen House, a former Soldier who had been assigned to Camp Carroll in Korea, who was claiming to have buried roughly 250 drums of Agent Orange in a city-block sized trench in 1978 on Camp Carroll. The report included statements of two other soldiers who had served with Mr. House who backed up his claims of burying drums of leaking chemicals in a trench (Agent Orange was only claimed by one of the

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

other Soldiers, Mr. [REDACTED]^{b6} the other, Mr. [REDACTED]^{b6} mentioned leaking barrels and the trench digging, but did not claim Agent Orange). The story was picked up by CNN, as well as the Korean media.

4. INITIAL COMMAND ACTIONS:

a. Once the issue was brought to the attention of the command, its leaders reacted swiftly to address the claims in an open, collaborative, and transparent manner. On 20 May 2011, LTG Johnson directed the establishment of an Agent Orange Task Force (later renamed the Camp Carroll Task Force or CCTF) consisting of the Eighth Army Commanding General, the Deputy Commanding General, the Installation Management Command- Korea (IMCOM-K) Commander, the Eighth Army Chief of Staff, Eighth Army Engineer, Eighth Army Public Affairs Officer, Staff Judge Advocate, Eighth Army Historian, Area IV Garrison Commander and other IMCOM-K leadership, as well as the United States Forces Korea Engineer (USFK) Environmental Director. As the investigation developed, this team was expanded to include experts from the United States Army Public Health Command (PHC), the Army Environmental Command (AEC), the U.S. Embassy, the USFK J5, and the United States Army Corps of Engineers Far East District (FED). Lastly, DOD's foremost expert consultant on Agent Orange with 30 years experience, Dr. Alvin Young (ANNEX H) was brought on board by the U.S. Army Environmental Command (AEC) for his expertise and knowledge on Agent Orange, its components, worldwide history of use, and how it had been specifically used in Korea.

b. LTG Johnson immediately directed a senior member of the IMCOM-K staff to travel to the United States and interview Mr. House in-person on his claims. This initial interview was conducted on May 23, 2011, with COL Degidio representing Eighth Army, along with the assistance of the Army's Environmental Command (AEC). Mr. House pointed out on a map of Camp Carroll the location where he claimed to have buried the barrels, which was near the helipad. (ANNEX C)

c. From the beginning, LTG Johnson was adamant that the investigation be transparent, joint and health and safety focused. Transparency included both internal (U.S. Forces, Korean National Workers, family members) as well as external (local populace) audiences. Joint meant establishing a Joint Investigation Team (JIT) with the Republic of Korea (ROK) counterparts in the Ministry of Environment (MOE), run through the Status of Forces Agreement (SOFA) Environmental Subcommittee. The JIT also included North Gyeongsang Province and Chilgok County (where Camp Carroll is located in Korea) council members providing for local populace representation. Using the SOFA Environmental Subcommittee (ANNEX E) allowed the Task Force to use previously outlined procedures and rules for exchanging information, handling disputes, and arranging joint action with regard to the claims. The health and safety of U.S. and ROK citizens was the top concern of the command, with that concern driving later decisions to conduct soil and water sampling.

d. LTG Johnson directed the Task Force to answer two questions: "Was Agent Orange buried on Camp Carroll?" And "Is there an existing health risk to the Soldiers, government employees (both Korean and U.S.), and civilians (both Korean and U.S.) who lived and worked

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

on or around Camp Carroll from Agent Orange?" Later, after the investigation indicated that non-Agent Orange hazardous waste had been buried and dug up on Camp Carroll, LTG Johnson added a third question- "What happened to the waste and soil that was excavated?"

e. To conduct the investigation and answer the Commander's questions, the CCTF was directed to establish four distinct Focus Areas: Investigative Focus Area, led by COL Gavle the Area IV Garrison Commander; Test and Evaluation Focus Area, led by COL Degidio, the USACE Far East District (FED) Commander; the Legal And Policy Focus Area, led by COL Birchmeier, the USFK Engineer; and the Public Affairs Focus Area, led by COL Mutter, the Eighth Army PAO.

f. The Investigative Focus Area oversaw the conduct of 172 interviews of past and present Soldiers, civilians and current/former employees of Camp Carroll. It reviewed and analyzed hundreds of documents and reports. It worked with 32 agencies to locate reports and records including ROK national and local government officials, DOD agencies, U.S. Air Force (USAF), U.S. Coast Guard (USCG), CONUS and OCONUS commands and Area IV units. The results of these investigations were shared with the JIT through the environmental subcommittee and outlined in public press releases, town hall meetings and press conferences. Results of the Investigative Focus Area are found in ANNEX C.

g. The Test and Evaluation Focus Area conducted geophysical surveys throughout the areas of interest (including ground penetrating radar, magnetometer, and electrical resistivity), conducted joint water sampling from six groundwater supply wells and 21 monitoring wells, and conducted joint soil sampling from 86 boreholes. The methodology in the purpose and conduct of these tests is covered in paragraph 6 as well as in ANNEX D. These tests were conducted jointly with the ROK MOE. The results of both ROK/U.S. samples were shared with the JIT through the environmental subcommittee and outlined in numerous public press releases, town hall meetings and press conferences. Detailed testing results of the Test and Evaluation Focus Area, including previously conducted testing at Camp Carroll is found in ANNEX D.

h. The Legal and Policy Focus Area coordinated actions with the SOFA Environmental Subcommittee. They served as the Command lead representative on the Joint Investigative Team (JIT). They reviewed reports from all Focus Areas and were the conduit for sharing the information found with the Koreans through the subcommittee. The legal staff provided advice and counsel, especially in regards to U.S. overseas environmental law and restrictions that guided the Command. See ANNEX E.

i. The Public Affairs Focus Area was the lead in ensuring the public was informed of the Camp Carroll Task Force's commitment to transparency and the health and safety of U.S. and ROK citizens. They developed a comprehensive communication plan and prepared press releases, coordinated key leader engagements, conducted press conferences and set up town hall meetings with Chilgok County Officials and residents. A command information program was developed for internal audiences as well. Many of their stories were republished in external media, including the investigation wrap up story that was republished almost verbatim by the United Press International. They oversaw the public release of requested historical documents

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

and conducted daily media assessments, in order to gauge external response to the events and investigation and helped ensure that the command could respond rapidly to inaccurate reports. They created a bilingual Camp Carroll Task Force Web page that served as the primary source of information for Korean and international media on the progress of the investigation. See ANNEX F.

5. INVESTIGATION OVERVIEW

a. The Investigative Focus Area was initially a dual tracked approach. The initial priority comprised of conducting interviews, not only of Mr. House and the two other Soldiers mentioned in the original news report, but also of any other identified key leaders from that period, such as unit and installation commanders, civilian employees, and other soldiers. As more interviews were conducted, more potential sources of information were uncovered until ultimately 172 interviews were conducted in all. One key highlight from the interviews was that Mr. House was the only one of the original three to claim the burial happened at the Helipad. The other two indicated that the trench had been dug in the vicinity of the Land Farm (Area D). Only one other individual of the original three also claimed the buried material was Agent Orange (Mr. [REDACTED] ANNEX C). A second key interview was the discovery of Mr. [REDACTED] who was the Office in Charge (OIC) directing the subsequent excavation of the material buried in Area D in 1979-1980. Mr. [REDACTED] specifically stated that the barrels/drums excavated did not include Agent Orange markings or identification. Mr. [REDACTED] account was substantially supported with documentation located later (see below) that also placed the trench in Area D.

b. The second line of effort was a thorough review of records regarding any connection of Agent Orange with Camp Carroll as well as past environmental testing/issues. Numerous documents were discovered, most relating to previous testing on Camp Carroll. Some documents, especially the 1982 *Review of the Camp Carroll Chemical Disposal Problem* Memorandum (ANNEX C) which clearly spelled out that hazardous waste had been inappropriately buried on Camp Carroll in the late 1970's, dug up in 1979-1980 and was being prepared for subsequent repackaging and shipment. No documentation uncovered linked Agent Orange to Camp Carroll. Dr. [REDACTED] historical expertise and reports (ANNEX H) outlined how Agent Orange had been used in a single instance in Korea at the Demilitarized Zone (DMZ) in 1968 and that its application had not included U.S. Soldiers nor involved Camp Carroll in any manner (ANNEX D, H). According to the facts found in the historical records and military directives, there was no supporting evidence that any Agent Orange was sent to, stored at, applied to, or buried at Camp Carroll, or sprayed elsewhere in South Korea except at the DMZ in 1968 (ANNEX H)

c. While nearly all of the previous Camp Carroll environmental testing reports indicated soil and groundwater contamination of various sorts (see ANNEX D, specifically the 1992 and 2004 reports, ANNEX G for Health Risk Impacts) none of these reports alleged or indicated Agent Orange or its by-products. (For detailed information on Agent Orange and its components, see ANNEX H, and ANNEX F, Encl 17)

d. Between the interviews and the documents recovered, it was clear that chemicals and other hazardous waste had been inappropriately buried in Area D in 1978 (ANNEX C). They

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

further indicated that the burial had been identified as a mistake and subsequently excavated. Again, there was no indication that Agent Orange was amongst the substances buried or dug up.

e. The efforts of the Investigative Focus Area expanded to determining what happened to the drums and soil that was excavated from Area D. Those results are addressed in Section 7, Hazardous Waste Disposal Overview.

6. TESTING DETAILS

a. FED (in cooperation with the ROK MOE) performed the field investigations in two phases. The first phase consisted of non-intrusive investigations, specifically geophysical surveys to determine the presence of possible drums within the alleged burial area, and sampling and chemical testing of water recovered from existing monitoring wells and production wells within and adjacent to the investigation area. The second phase consisted of intrusive investigations, specifically the drilling of borings within the alleged burial area and the recovery of soil samples for chemical testing. Boring locations were selected based on results from the non-intrusive investigations, personnel interviews, and requirements for subsequent human health risk assessments. Both phases of the field investigative plan were agreed to by the JIT. Additional testing locations came from Mr House's visit to Camp Carroll in July 2011. Testing locations are outlined and defined in ANNEX B and D. Field work, laboratory soil and water testing, and interim report submittals were performed from 2 June to 28 September 2011. Additional soil sampling was conducted in Area 41 in December 2011 (three additional borings and ten soil samples). Field activities were jointly conducted with staff from FED and the National Institute of Environmental Research of Korea under the Ministry of Environment (MOE). Even though interviews and documentation pinpointed the location of the trench to Area D (ANNEX C), the Helipad and areas between the two, in addition to the slope near the Helipads were included in the search area to ensure the health and safety of the U.S. and ROK personnel were fully investigated and addressed.

b. A total of 83 soil borings were performed by direct push technology within the following areas: the helipad area, Area D, the Slope Area (the area identified by Mr. House during a visit to Camp Carroll in July 2011), and the Recycling Yard. A total of 272 soil samples were collected at various depths (down to twelve meters or hitting bedrock) within the borings for analysis of Agent Orange components (see ANNEX D, ANNEX F Encl 17). An additional 3 boreholes and 10 soil samples were collected in December from Area 41.

c. Groundwater samples were collected for analysis from 21 existing monitoring wells within the area of investigation (helipad area, Area D, Area 41), and 6 existing production wells west of the helipad area (see Annex D).

d. The detailed results of this testing is found in ANNEX D; in summary, the non-intrusive and intrusive investigations conducted by FED and MOE within the evaluation areas found no evidence of the presence of Agent Orange. Subsurface anomalies detected by the geophysical surveys are attributable to soil and bedrock conditions (e.g. high bedrock and variations in soil moisture) as verified by subsequent borings and not to the presence of buried steel drums. Chemical test results for subsurface soil and groundwater samples do not indicate that Agent

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

Orange is present in soil or groundwater at the site. Very low levels of some constituents that are found in Agent Orange but that also come from many sources were detected in a few of the samples. There was no corresponding confirmed detection in any individual soil or groundwater sample of constituents found only in Agent Orange (with one clearly anomalous exception that was not found in either FED or MOE re-sampling). Furthermore, the chlorinated phenol breakdown products of the two principal components of Agent Orange, which would be expected to persist far longer in the environment than the basic components themselves, were not found in either soil or groundwater. Likewise, the spatial distribution of dioxins and furans in the soil across the tested areas was randomly scattered and relatively sparse, both in area and in detected depths, clearly indicative of a natural background deposition, rather than a definitive point or limited area release source. This evidence leads to the conclusion that Agent Orange was not buried at these locations. (ANNEX D)

e. A comprehensive Health Risk Assessment for Camp Carroll was conducted by the Army Public Health Command for the areas identified in the Agent Orange burial allegations. The details are attached in ANNEX G; in summary, no currently existing health risk was found for personnel working or living on Camp Carroll due to Agent Orange from the alleged burial sites.

7. **HAZARDOUS WASTE DISPOSAL OVERVIEW:** The Investigation of documents and interviews, especially the 1982 *Review of the Camp Carroll Chemical Disposal Problem* Memorandum (ANNEX C), as well as the interviews of Mr. [REDACTED] Mr. [REDACTED] and Mr. [REDACTED] (ANNEX C) indicated that pesticides, herbicides, solvents, and assorted other chemicals - but NOT Agent Orange, were buried in Area D and subsequently excavated in 1979-1980 along with a large quantity of contaminated soil. (Though Mr. [REDACTED] did allege that Agent Orange was present on Camp Carroll - ANNEX C). The Investigation Focus Area worked to determine the disposition of the excavated drums and soil. From the interviews, record searches, and located documents they concluded that Hazardous Waste that was buried on Camp Carroll in 1978 was excavated in 1979-1980 and was likely shipped to the United States for disposal.

a. Documents exist discussing the excavation and ordering of proper Department of Transportation (DOT) packaging for transport. (ANNEX C)

b. Mr. [REDACTED] (interview, ANNEX C) ordered 800 DOT barrels, enough for 250 barrels of waste and the contaminated soil.

c. Mr. [REDACTED] also remembered the shipment of hazardous waste from Korea to CONUS was the subject of a case study at a 1983 Transportation Conference. (ANNEX C)

d. Mr. [REDACTED] (Korean Employee retired from the Shipping and Transportation Department, interview, ANNEX C) saw the repackaged waste loaded on MILVANS and transported off Camp Carroll by the 69th Transportation Battalion.

e. Interviews indicate that the final destination of the excavated material was Utah. (ANNEX C)

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

8. **CCTF CONCLUSIONS:** After a thorough, joint and transparent investigation into the allegations, the overwhelming results of the CCTF investigation and efforts point to the following conclusions:

a. There was no definitive evidence that Agent Orange was ever stored at, transported through, or buried at Camp Carroll.

(1) While the Task Force has verified that hazardous materials were inappropriately buried in 1978, interviews and documentation indicate that Agent Orange was not part of the buried chemicals. (ANNEX C)

(2) There is no evidence that Agent Orange was ever stored at, transported through, or buried at Camp Carroll. (ANNEX H)

(3) Water sampling from six groundwater supply and 21 monitoring wells and soil samples from 86 boreholes (282 samples) do not support Agent Orange burial. Analysis of 135 soil samples and five river sediment samples collected from outside Camp Carroll also do not indicate the presence of Agent Orange or its byproducts. These samples failed to confirm the presence of Agent Orange's two major components, nor the chlorinated phenol breakdown products of the two principal components of Agent Orange, which would be expected to persist far longer in the environment than the basic components themselves (other than one anomalous sample not detected in either MOE or FED re-sampling). Also, any dioxins present are representative of normal background deposition and not spot release from the Agent Orange Dioxin contaminant 2,4,5-T (ANNEX D)

(4) Agent Orange was not available through normal supply channels and could not have been procured by the Units assigned to Camp Carroll. (ANNEX H)

(5) Evidence shows that the Agent Orange used in Korea arrived at Port of Incheon and was then transported to DMZ; all was expended by the ROK Army inside the Korean Demilitarized Zone (Dr. [REDACTED] *Historical Review of the 1968 Project to Spray Tactical Herbicides on the Korean DMZ*, 30 November 2011 ANNEX H)

(6) No Korean National current or previous employee at Camp Carroll interviewed as part of the Investigative Focus Area ever reported seeing Agent Orange anywhere on Camp Carroll. (ANNEX C)

b. Hazardous Waste that was buried on Camp Carroll in 1978 was excavated in 1979-1980 and was likely shipped to the United States for disposal.

(1) Documents exist discussing the excavation and ordering of proper DOT packaging for transport. (1982 *Review of the Camp Carroll Chemical Disposal Problem* Memorandum ANNEX C)

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

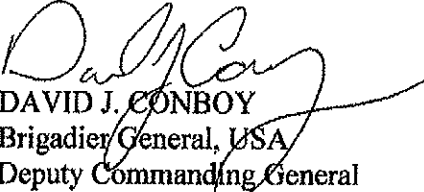
- (2) Mr. [REDACTED]^{b6} (interview, ANNEX C) ordered 800 DOT barrels, enough for 250 barrels of waste and the contaminated soil.
- (3) Mr. [REDACTED]^{b6} also remembered the shipment of hazardous waste from Korea to CONUS was the subject of a case study at a 1983 Transportation Conference (ANNEX C).
- (4) Mr. [REDACTED]^{b6} a Korean employee working in the Shipping and Transportation Division on Camp Carroll (interview, ANNEX C) saw the repackaged waste loaded on MILVANS and transported off Camp Carroll by the 69th Transportation Battalion.
- (5) Interviews indicate that the final destination of the excavated material was Utah. (ANNEX C)

c. There is no currently unmitigated health risk to Soldiers, civilians, Korean employees or family members living or working on Camp Carroll. The health risk assessment conducted on the alleged burial sites concluded that there is no identified health risk from Agent Orange.

(1) Water sampling from six groundwater supply and 21 monitoring wells and soil samples from 86 boreholes do not support Agent Orange burial allegations (ANNEX D).

(2) Detailed Health Risk Assessment (ANNEX G) from the Army Public Health Command conducted on the alleged burial locations confirmed no currently existing health risk was found for personnel working or living on Camp Carroll due to Agent Orange from the alleged burial sites.

9. The CCTF Summary report has been reviewed and concurred with by all members of the Task Force. The POC for this summary report is the Eighth Army Engineer Environmental Office. Copies of this report will go to 8A EN, 8A Historian, Area IV CDR, FKEN, PHC, AEC, IMCOM-P ENV. Files of the report will be stored on the Eighth Army AKO Organizational Sharepoint at in the EUSA, HQ Engineer, Environmental, Camp Carroll Task Force Folders.


DAVID J. CONBOY
Brigadier General, USA
Deputy Commanding General

8 Encls

ANNEX A- Investigation Timeline

ANNEX B- CCTF Overview Briefing

ANNEX C- Investigative Focus Area Summary Report

ANNEX D- Test and Evaluation Focus Area Reports

8

EADCG

SUBJECT: Camp Carroll Task Force (CCTF) Summary Report

ANNEX E- Legal and Policy Focus Area Summary Report

ANNEX F- Public Affairs Focus Area Summary Report

ANNEX G- PHC Health Risk Assessment

ANNEX H- Agent Orange Facts and History