

# United States Senate

WASHINGTON, DC 20510

August 11, 2009

**Via Facsimile: (703) 604-8310**

Hon. Gordon S. Heddell  
Office of the Inspector General  
U.S. Department of Defense  
400 Army Navy Drive  
Arlington, VA 22202-4704

Dear Inspector General Heddell:

We are writing to request that you perform a formal investigation into the exposure of U.S. soldiers to sodium dichromate, a potentially deadly carcinogen, at the Qarmat Ali water injection facility in Iraq in 2003.

As you know, the Senate Democratic Policy Committee has conducted two hearings on this exposure: 1) on June 20, 2008, the Committee examined the performance of contractor KBR, which was retained by the Army under Restore Iraq Oil (RIO I) Task Order 3 to conduct an assessment of environmental conditions and operational functionality of the facility, and to make recommendations for its repair and resumption of operations; and 2) on August 3, 2009, the Committee examined the response of the Department of Defense to the exposure, including oversight conducted by the U.S. Army Corps of Engineers (USACE), testing and monitoring performed by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), and a subsequent review done by the Defense Health Board (DHB).


Based on these hearings, and the investigation conducted by the Committee, we believe that the conduct and/or inaction of KBR and the Army may have caused hundreds of U.S. troops to be exposed to dangerous levels of sodium dichromate, which may have caused many of these soldiers to develop serious medical conditions related to their exposure at Qarmat Ali. We also believe that the testing, monitoring and review conducted by USACHPPM and the DHB may have been deeply flawed. During the course of your investigation, please assess the following:

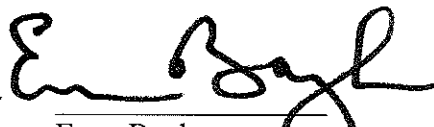
- 1) Did the Army include provisions in Task Order 3 to specify the nature and extent of the Army's and KBR's duties to identify, prevent, report and/or remediate nuclear, biological, chemical and industrial hazards and to ensure the safety of U.S. soldiers at RIO I sites?
- 2) Task Order 3 states, "...it is not the intent of this contract to remediate pre-hostilities environmental contamination unless such remediation is necessary to protect the health and safety of contractor and Government personnel during ongoing restoration actions." Based on this language, should the Army have directed, and KBR performed, a timely remediation of the Qarmat Ali facility beginning in March 2003 to "protect the health and safety of contractor and Government personnel"?


- 3) Task Order 3 required the Army to inform KBR that an Iraqi oil infrastructure facility was “benign” and had been cleared of all environmental hazards (including nuclear, biological, chemical and industrial hazards) before allowing KBR to enter a facility. Did the Army fail to clear sodium dichromate from the Qarmat Ali water injection facility before authorizing KBR to enter the site?
- 4) U.S. soldiers reported that a distinctive orange powder covered the Qarmat Ali facility and was swept into the air and onto their clothes, faces and exposed skin during frequent, intense windstorms. Many of these soldiers began experiencing symptoms consistent with exposure to sodium dichromate, including nasal perforations, “chrome holes” or ulcers on the skin, and severe nosebleeds, within days or weeks of arriving at the facility in April 2003. Given these conditions and symptoms, did the Army and KBR fail to implement timely health and safety protocols to detect industrial hazards; restrict access to the plant; and provide military-issued protective gear or Personal Protective equipment (PPE), which could have eliminated or significantly reduced the risk to U.S. military personnel?
- 5) USACHPPM did not begin testing soldiers at the facility until October 1, 2003, which was more than five months after the exposures began. Should USACHPPM have started testing soldiers at the site within days of when the conditions and symptoms started to be reported?
- 6) USACHPPM concluded that “there was not a significant inhalation exposure from Chromium VI” and “there does not appear to be any specific follow-up indicated, since there does not appear to be evidence of acute exposures.” However, Herman Gibb, Ph.D, one of the country’s leading experts on the health effects of sodium dichromate exposure, testified at the August 3 hearing that “the air concentration to which the Qarmat Ali soldiers were exposed could be estimated to be approximately 80 to 200 times the current OSHA limit” and “the symptoms reported by some of the soldiers who served at Qarmat Ali are consistent with significant exposure to sodium dichromate.” Did USACHPPM improperly conclude that “there does not appear to be any specific follow-up indicated, since there does not appear to be evidence of acute exposures”? If so, should USACHPPM revise and re-issue its risk communications and health guidance to the soldiers who were exposed?
- 7) In its December 2008 report on USACHPPM’s occupational and environmental health assessment at Qarmat Ali, the Defense Health Board (DHB) concluded, “Soldiers who were similarly exposed but were not studied *should be reassured that these results apply to them as well* (emphasis added)...the essentially negative results from the Indiana National Guard led to a pragmatic and reasonable decision not to extend testing and medical examination to the other Guard contingents...” Because soldiers who served during earlier periods (April to July 2003) may have been exposed to a greater risk of chromium inhalation than the soldiers tested by USACHPPM weeks after remediation, was it scientifically sound for USACHPPM to extrapolate (and for DHB to endorse the extrapolation of) test results from one group of soldiers to another group?


Thank you for your continued service and prompt attention to this matter. We look forward to receiving the results of your investigation.


Sincerely,

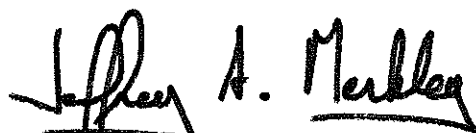
  
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United States Senator

  
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United States Senator

cc: Secretary Robert M. Gates  
Secretary of Defense

Secretary William J. Lynn  
Deputy Secretary of Defense

Secretary Pete Geren  
Secretary of the Army

Under Secretary Ashton B. Carter  
Under Secretary of Defense of  
Acquisition, Technology & Logistics