

## **Senate Democratic Policy Committee Hearing**

### **“The Exposure at Qarmat Ali: Contractor Misconduct and the Safety of U.S. Troops in Iraq”**

**Edward Blacke**  
Former KBR Employee

My name is Ed Blacke. My home is in Bella Vista, Arkansas. I hold a University degree, am a member of the American Society of Safety Engineers, hold Fire Service certifications as a Fire Officer, Fire Investigator, Fire Instructor, Fire Inspector and Airport FireFighter. In addition, I am certified as an Instructor in Construction Safety by the U. S. Department of Labor. I am also an Emergency Medical Technician and have had additional training in hazardous material identification and spill mitigation. In the fifty-three years of my working career, I have served as a U. S. Navy Petty Officer, a Corporate Safety Manager, a Construction Safety Manager, an Adjunct Instructor at the National Fire Academy, an instructor for the Louisiana State Fireman training program, and a Fire Chief commanding both domestic and international fire departments. In the past several years, I have served as a Safety Manager, for American firms, on oilfield development projects in Russia, Saudi Arabia, Syria, and the Republic of Chad. On completion of my contract with KBR in the Republique of Chad, I was recruited for the position of Health, Safety and Environmental (HSE) Coordinator in Iraq, supporting KBR’s Restore Iraq Oil (RIO) project. I was required to report to Houston for Iraq pre-deployment indoctrination that included a physical examination, administrative briefing, and completion of KBR personnel file forms. On completion of the indoctrination, I was deployed to Iraq on July 10, 2003.

After completion of an in-country briefing, I was assigned, as HSE Coordinator, to the Qarmat Ali water treatment plant near Basra, Iraq. On my arrival at the plant, I made a risk

assessment of the facility and surroundings. During the course of my assessment, I noted a reddish-orangish material spread on the ground and spilling from damaged bags in the injection building. I requested information on this material from the HSE Manager and was advised it was a non-issue. I pressed in-country management for identification of the material. In response, I was briefly sent to two other jobs before being returned to the Qarmat Ali water treatment plant. Within a week of my return, I began to experience medical problems that included sinus, throat, and respiratory irritation. My co-workers at Qarmat Ali water treatment plant were experiencing similar symptoms. As an EMT concerned that there was a health problem, I began to query all English-speaking personnel working at the facility, which included KBR, Halliburton, Iraqi Oil Company, U. S. Army National Guard, and British soldiers, and all were suffering identical symptoms. The symptoms for all at the facility developed into continuous bloody noses, spitting up of blood, coughing, irritation of the nose, eyes, throat and lungs, and shortness of breath. In order to determine what might be the cause of these medical problems, I undertook a more in depth assessment of the facility with my Iraqi interpreter taking down the chemical names on the burst bags I initially noted, as well as from the tanks in the Injection building. The chemical was Sodium Dichromate, which contains Hexavalent Chromium. I asked my Iraqi interpreter if he was aware of what the material in the bags was used for and was advised that it was injected into the water supply system for the oil fields as an anti-corrosive. He was reluctant to say more and when pressed he said he knew it was poisonous and that he was aware of many workers from the plant who were made ill by it. He said that it being a poisonous chemical was probably the reason members of the Baath Party had opened the storage bags and spread their contents all over the plant as part of their sabotage efforts in the facility. That evening, on my return to my quarters, I researched Sodium Dichromate on the Internet, finding and downloading a Material

Safety Data Sheet (MSDS) for the chemical (attached). The MSDS states that Sodium Dichromate is a hazardous material and a carcinogen, exposure to which is to be avoided. At this time, a colleague I knew from Chad provided me with an internal memo written by a KBR Industrial Hygienist that substantiated my personal findings. I was totally taken aback to find that KBR knew as early as May 2003, from a UN report, and from their own Industrial Hygienist, that they were putting not only KBR workers, but our security details from the U. S. and British military in harms way, without the required training or personal protective equipment.

I reported my findings about the imminent danger Sodium Dichromate was posing to the workers at Qarmat Ali to the HSE and Project Manager in Kuwait and insisted that they take immediate action. A few days later, two representatives of the health, safety and environmental section of KBR came to Qarmat Ali to assess the situation and talk to the workers. Those individuals were Safety Manager Tommy Mornay and Medical Supervisor Ray Garcia. They held a meeting with the workers during which they told the workers that the Sodium Dichromate was a mild irritant at worst, that the plant had been thoroughly checked out, and was safe, and that they were to get back to work. I was at the meeting and was shocked that fellow safety and medical professionals were telling such outrageous and blatant lies to the workers. I pointed out in the meeting that the NIOSH/CDC documents that I had on Hexavalent Chromium contained in the Sodium Dichromate to which we were exposed directly contradicted their statements to the workers. At this point, Mr. Garcia, who was one of my superiors, directed me to be quiet and to leave. He then escorted me out of the meeting. Outside of the meeting, he advised me that I was being insubordinate, disruptive, and that my input was not appreciated.

It was after this meeting that KBR had its HSE people take soil and air samples at the plant. The soil samples showed extremely high levels of Hexavalent Chromium in the soil. The air samples showed very low levels of chromium. The air samples were misleading because they were taken in no wind conditions, which were not typical at the plant. The KBR management jumped on the air samples to attempt to justify the continued operations at the plant without personal protective equipment and without the contamination being cleaned up. I told my supervisors, Chuck Adams and Ray Garcia, that it was wrong to rely on the air samples. I was determined to pursue the complaint with higher-ups in KBR's HSE department in Kuwait, and upon attempting to do so, it was made clear to me that my presence in Iraq and Kuwait was no longer appreciated and that I would be better off going home. As a response to my complaints, the Medical Supervisor, Ray Garcia, under direction of the KBR Project Manager, directed me to accompany him to a clinic for blood workup. I was taken to a substandard medical clinic where I refused to submit to the tests due to the unsanitary conditions and unprofessional nature of the staff.

On my return home, KBR offered medical monitoring, including blood tests, through its medical contractor. I am skeptical about the objectivity of KBR's lab and any results from them because the screening that they conducted was not appropriate to the type of exposure encountered in Iraq, nor was the screening done on a timely basis. Although my acute symptoms slowly abated, a pulmonary function test taken shortly after I arrived home showed a marked deficiency of pulmonary function compared to the test KBR administered prior to my Iraqi assignment. At this time, I am beginning to show signs of entering the chronic phase of Sodium Dichromate poisoning, particularly in that I have apparent damage to my endocrine system, which includes failure of my thyroid function. In my last medical exam, my lab tests did

indicate hematuria. Due to this, my physician has ordered tests on my kidneys as this could be an early sign of cancer in these organs.

In my mind, it was criminally negligent of the KBR HSE and Project management to make a decision to continue to expose personnel to Sodium Dichromate poisoning at the Qarmat Ali water treatment plant when they knew of the exposure and knew of the absence of any personal protective gear whatsoever. I understand that KBR and Halliburton take the position that the air was tested at the plant and showed low levels of chromium, however, those tests were apparently done when the air was still, not during one of the frequent dust storms in which all of the materials on the ground became airborne. Furthermore, the levels of chromium from the ground samples show that the plant was a highly dangerous and unsafe and contaminated facility, and these facts were objective facts known by KBR management, in the face of which they made the conscious decision to continue to expose the American workers, the Iraqi workers, the American military personnel, and the British military personnel at the plant to these horrifically unsafe conditions. It is outrageous that American tax dollars are the source of the funding of the Iraqi operation of Halliburton and KBR when those companies have demonstrated such total and complete disregard for the health and safety of the workers for whom they are responsible.