MICHAEL R. PETERSON, DVM, MPH, DRPH, CHIEF CONSULTANT, ENVIRONMENTAL HEALTH STRATEGIC HEALTHCARE GROUP, OFFICE OF PUBLIC HEALTH & ENVIRONMENTAL HAZARDS, VETERANS HEALTH ADMINISTRATION, DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF
MICHAEL R. PETERSON, DVM, MPH, DRPH
CHIEF CONSULTANT
ENVIRONMENTAL HEALTH STRATEGIC HEALTHCARE GROUP
OFFICE OF PUBLIC HEALTH &
ENVIRONMENTAL HAZARDS
VETERANS HEALTH ADMINISTRATION
DEPARTMENT OF VETERANS AFFAIRS
BEFORE THE
COMMITTEE ON VETERANS' AFFAIRS
UNITED STATES SENATE
OCTOBER 8, 2009

Good morning, Mr. Chairman, Ranking Member and committee members. Thank you for this opportunity to discuss the work of the Department of Veterans Affairs (VA) in responding to certain exposures that occurred during military service, including respiratory exposures from an incinerator near the Naval Air Facility Atsugi, water contamination at Camp Lejeune, sodium dichromate at the Qarmat Ali Water Treatment Plant, and exposures to burn pits during the current conflicts. I am accompanied today by Dr. Stephen Hunt, National Director, Post-Deployment Integrated Care Initiative, VA Puget Sound Health Care System, and Mr. Bradley Mayes, Director of Compensation and Pension Service, Veterans Benefits Administration.

VA recognizes that service members sometimes face exposure to toxicants or materials in the course of their military service that can have deleterious health effects. We have developed a robust program within the Office of Public Health and Environmental Hazards to address this need by identifying potential sources of exposure and at-risk Veterans, informing Veterans and health care providers, and offering treatment and care for service connected conditions. My testimony will provide background information about initiatives within VA to address these concerns, explain how VA works with the Department of Defense (DoD) to identify and respond to environmental hazards, and describe the four specific exposures cited earlier and actions taken by VA in response.

VA Programs Specifically Targeting Exposure-Related Disease
VA is very concerned about environmental health concerns of Veterans and offers a range of programs including health registries, special training for staff, and education materials including web-based information, fact sheets, and brochures. VA actively monitors and provides support to Veterans and their health care providers concerning a range of potential environmental exposures and outcomes, including Agent Orange, Gulf War Veterans' Illnesses, radiation, toxic embedded fragments including depleted uranium, thermal injuries, mustard gas, noise, vibration, and other physical exposures. More information about these programs specifically tailored to Veterans and health care providers can be found online at: http://www.publichealth.va.gov/exposures/. VA

notifies Veterans about these exposures through many different avenues. First, every VA medical center is required to have an environmental health clinician on staff. This person serves as a local resource for Veterans and clinical providers. In addition, the Transition Assistance Advisors (who work for the National Guard and receive training from VA) and Post-Deployment Integrated Care Clinics provide VA-wide expertise in a range of exposures and health outcomes commonly seen in returning Veterans. VA regularly provides letters, newsletters, brochures and other information to Veterans while maintaining registries specifically designed to track and inform Veterans with materials related to their unique health care needs.

VA trains its providers to prepare to respond to the specific health care needs of all Veterans, which in turn helps providers inform Veterans of these risks. This training includes specific Clinical Practice Guidelines on post-combat deployment health and other issues. VA operates three War Related Illness and Injury Study Centers (WRIISCs) that provide specialized health care for combat Veterans from all deployments who experience difficult-to-diagnose or undiagnosed but disabling illnesses. Starting in 2002, the WRIISCs began serving as referral centers for Veterans with undiagnosed or difficult-to-diagnose complaints. Veterans referred to the WRIISCs are provided with a complete exposure assessment, outpatient or inpatient evaluation (including advanced neurological evaluations), and a detailed treatment plan, which is provided to the Veterans' VA primary care providers. Based on lessons learned from the Gulf War, VA realizes that concerns about unexplained illnesses could also emerge after other deployments, and we are building our understanding of such illnesses. Furthermore, as we recognize that many unexplained illnesses or symptoms may be related to exposure to toxicants during deployment, the WRIISCs now provide extensive exposure assessments to patients referred to them.

Following the Gulf War, VA developed the Veterans Health Initiative (VHI) Independent Study Guides (ISG) for health care providers as one of many options to provide tailored care and support of Veterans. These study guides were principally designed for the clinical care of Veterans of the Gulf War era, but have proven highly relevant for treating Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) Veterans, since many of the hazardous deployment-related exposures are likely to be the same. VA developed ISGs for health care providers to deliver appropriate care to Veterans returning from Iraq and Afghanistan that cover topics such as gender and health care, infectious diseases of Southwest Asia, military sexual trauma, and health effects from chemical, biological and radiological weapons. Study Guides on post-traumatic stress disorder (PTSD) and Traumatic Brain Injury (TBI) were also developed and made available for primary care physicians to increase understanding and awareness of these conditions. VHI ISGs are currently undergoing a comprehensive update to make them more relevant to busy providers and to modularize the content so that it is more accessible. The Office of Public Health and Environmental Hazards and the Employee Education System are working together on this project. VA recently brought on board an American Association for the Advancement of Science fellow with advanced degrees in post-secondary education and computer technology to spearhead this effort.

VA has also initiated a large, long-term study to look carefully at a broad array of health issues that may affect OEF/OIF Veterans and their counterparts who served during the same time period. VA's "National Health Study for a New Generation of U.S. Veterans" will begin with

30,000 Veterans deployed to OEF/OIF and 30,000 comparison Veterans who were not deployed.

The study includes Veterans who served in each branch of service, representing active duty, Reserve, and National Guard members. Women are being over-sampled to make sure they are represented and comprise 20 percent of the study, or 12,000 women. A combination of mail surveys, online surveys, telephone interviews, and in- person physical evaluations are used to collect data from Veterans.

The study compares the deployed and non-deployed Veterans in terms of chronic medical conditions, traumatic brain injury (TBI), post traumatic stress disorder (PTSD) and other psychological conditions, general health perceptions, reproductive health, pregnancy outcomes, functional status, use of health care, behavioral risk factors and VA disability compensation. VA has contracted with an independent Veteran-owned research firm to collect the data.

Interaction and Information Exchange with DoD

One of the many lessons that VA has learned from experiences with Agent Orange and Gulf War Veterans' Illnesses is that information regarding possible exposures to environmental agents and other toxicants, both within the combat theater and other areas in which our troops operate, must be received and acted upon by VA as early as possible. Up-to-date information on these situations is invaluable to VA's ability to identify Veterans who may have been affected by an exposure, evaluate their individual risk of exposure and for sequelae, provide appropriate medical surveillance, and mitigate untoward health effects that are known to be caused by these toxicants. In addition, where the possible health outcomes are not known, it is important to perform prospective epidemiological studies on exposed troops. This will provide better information than performing retrospective studies once it is determined that adverse health outcomes are being ascribed to a potential exposure.

To this end, the Joint DoD-VA Deployment Health Working Group (DHWG) was established. This working group reports to the Joint Executive Council through the Health Executive Council (HEC). The objective of this group is to identify and fosteropportunities for sharing information and resources between VA and DoD in the areas of deployment health surveillance, assessment, follow-up care, health risk communication, and research and development. Each year this working group discusses deployment-related concerns and develops strategies by which to address them. The DHWG meets monthly to discuss a wide-ranging array of exposure issues, including those dating to the World War II era. The DHWG also actively seeks to discuss and recommend coordinated action to identify involved service members, establish a determination of risk for this population, and develop methods of outreach, risk communication and, where necessary, medical surveillance and appropriate health care for Veterans with any condition that may have resulted from these exposures.

Now I will discuss in greater detail the four exposures about which the committee asked for specific information.

Incinerator at Naval Air Facility Atsugi

Naval Air Facility Atsugi, Japan is located about 25 miles from Tokyo at the site of a Japanese Air Force base which the U.S. took control of in 1945. In 1985, a private waste incinerator, Shinkampo Incinerator Complex (SIC), began operations immediately southeast of the

community areas of the base. The incinerator burned a variety of liquid and solid industrial waste, municipal solid waste, and construction debris. The incinerator released a plume of smoke, ash, particulate material, and fumes at ground level over the community area of the base. Complaints by residents regarding air quality led to multiple health risk assessments between 1988 and 1999. These assessments demonstrated health risks related to the incinerator plume which resulted in efforts by representatives of the United States Government to close the incinerator. This was accomplished in 2001. It is estimated that over the 15 years of operation, 18,000 adults and 8,000 children could have been exposed, with a typical exposure duration of 3 years.

The non-cancer health effects of primary concern are impairment of respiratory function from exposure to inhaled respiratory toxicants particularly among the resident children at the base. Permanent reduction in respiratory function can occur after several years of exposure to respiratory toxicants especially if exposure occurred before age 16. The final health risk assessment completed in 2002 by DoD noted an increased risk of cancer, above the U.S. background rate, among residents of Naval Air Facility Atsugi during incinerator operations.

In 2007, Batelle Corporation was asked by the Department of the Navy to conduct a review of the various health risk assessments and recommend what, if any, population- based medical surveillance of residents of Naval Air Facility Atsugi might be warranted, as well as the parameters and expected outcomes from such screenings. Battelle published its report in June 2008. The only recommendation from that report was that a health registry be established for residents of Naval Air Facility Atsugi. All medical surveillance recommendations were limited to the juvenile population at the base.

Because all of the recommendations in this detailed report address medical surveillance of a population not within VA's statutory authority, VA has not requested information regarding this cohort. Any Veteran who served at the Naval Air Facility Atsugi who may develop either a respiratory condition or cancer that competent medical authority ascribes to exposure at Naval Air Facility Atsugi would be eligible to submit a claim for direct service connection for the condition, provided they meet other eligibility criteria for benefits. VA will inform regional offices of the Naval Air Facility Atsugi situation and alert them to the possibility of disability claims from Veterans who were stationed there. All such claims will be evaluated on a case-by-case basis with evidentiary weight given to medical examinations and opinions from both private and VA physicians. In all cases, the benefit of doubt will be provided to the Veteran. VA's assessment of issues related to Naval Air Facility Atsugi continues to be coordinated through HEC and the Office of Public Health and Environmental Hazards and we continue to monitor study outcomes that could inform future policy decisions.

Water Contamination at Camp Lejeune

From the 1950s through the mid-1980s, some persons residing or working at the U.S. Marine Corps Base Camp Lejeune were exposed to drinking water contaminated with volatile organic compounds. Two of the eight water treatment facilities supplying water to the base were contaminated with either tricholoroethylene (TCE) or tetrachloroethylene (perchloroethylene, or PCE). The Department of Health and Human Services' Agency for Toxic Substances and Disease Registry (ASTDR) estimated that PCE drinking water levels exceeded current standards from

1957 to 1987 and represented a potential public health hazard. The heavily contaminated wells were shut down in February 1985, but it is estimated that more than one million individuals may have been exposed.

An ATSDR study begun in 2005 is evaluating whether children of mothers who were exposed while pregnant to contaminated drinking water at Camp Lejeune are at an increased risk of spina bifida, anecephaly, cleft lip or cleft palate, and childhood leukemia or non-Hodgkin's lymphoma. The results of this report have not yet been released. In the same year, a panel of independent scientists convened by ATSDR recommended the agency identify cohorts of individuals with potential exposure, including adults who lived or worked on the base and children who lived on the base (including those that may have been exposed while in utero), and conduct a feasibility assessment to address the issues involved in planning future studies at the base.

In October 2008, the Department of the Navy issued a letter to Veterans who were stationed at Camp Lejeune while in military service between 1957 and 1987. This letter informed Veterans that the Navy had established a health registry and encouraged them to participate. Veterans who received the letter from the Navy may visit the following Web sites for the most current updates about Department of Navy actions: http://www.atsdr.cdc.gov/sites/lejeune/index.html or www.marines.mil/clsurvey/index.html. Veterans may also call the Department of Navy toll-free at (877) 261-9782.

VA is providing Veterans with information about this issue and offering contact information and referrals to the Navy registry. In December 2008, VA issued a VA Health Care Fact Sheet on the contamination of the ground water at Camp Lejeune. On June 13, 2009, the National Research Council of the National Academies' Committee on Contaminated Drinking Water at Camp Lejeune released a report that indicated further research will unlikely provide definitive information on whether exposure resulted in adverse health effects. However, the report did find 14 conditions with limited or suggestive evidence of an association with exposure to PCE, TCE, or solvent mixtures. VA is convening a work group to evaluate the National Research Council's report and any other relevant scientific studies. This will contribute significantly to further policy decisions.

VA does not operate a registry for this population and does not have special authority to enroll Veterans or their family members based upon this exposure. Veterans who are a part of this cohort may apply for enrollment if they are otherwise eligible, and are encouraged to discuss any specific concerns they have about this issue with their health care provider. Veterans are also encouraged to file a claim for VA disability compensation for any injury or illness they believe is related to their military service. VA environmental health clinicians can provide these Veterans with information regarding the potential health effects of exposure to volatile organic compounds and VA's WRIISCs are also available as a resource to providers.

VA takes the Camp Lejeune matter very seriously and has informed all regional offices of the situation. Disability claims based on contaminated drinking water exposure at Camp Lejeune will be evaluated on a case-by-case basis with evidentiary weight given to medical examinations and opinions from both private and VA physicians. In all cases, the benefit of doubt will be provided to the Veteran.

Sodium Dichromate at Qarmat Ali Water Treatment Plant
VA has been extremely proactive in its response to this exposure event. As you are aware, there are approximately 600 National Guard troops, primarily from four states

(Oregon, South Carolina, West Virginia and Indiana), who may have been exposed to sodium dichromate (a source of hexavalent chromium) while serving at Qarmat Ali outside Basrah, Iraq.

VA is obtaining the names and contact information of National Guard troops present at Qarmat Ali. We are also verifying the numbers of these Veterans who have either enrolled in care or received a Gulf War registry exam. We have already augmented the Gulf War Registry (GWR) to reflect service at Qarmat Ali. The involved Guard Members who have had an initial exam will be recalled to have a complete exposure assessment as well as a more targeted physical exam and ancillary testing to detect indications of health outcomes that may be related to hexavalent chromium. Those who have yet to enroll in the GWR will receive this targeted examination initially. They will also receive a chest radiograph and pulmonary function testing. This evaluation will be repeated periodically (every year for an exam and every 5 years for a chest radiograph). All of this testing can be done within the GWR's existing authority.

Once we have made all the these modifications to the GWR, and have established the appropriate process for the involved VA medical centers, VA will send letters to each service member explaining the new process and details regarding how to receive an examination. Because this group of Veterans is relatively small and already identified, and because the health risks of exposure to hexavalent chromium are well established, VA believes this is the best cohort to develop its new program of targeted medical surveillance. VA hopes that experience with this program can be a model for other medical surveillance programs for returning Veterans who may have been exposed to environmental toxicants.

VA has begun analyzing the available list of identifiable service members to determine who has filed claims for disability benefits for any condition potentially related to toxin exposure. It is important to note that this analysis is still ongoing and is primarily focused on, but not limited to, diseases of the skin and respiratory system. On preliminary review, it appears that approximately 25 percent of potentially exposed

members have filed claims for such conditions. This assessment takes into consideration all identifiable members of the Guard who have previously filed disability claims for such conditions and who have claims currently pending for such conditions. It also assumes that such claims were filed after exposure and related to exposure. This analysis has the potential to identify Veterans whose claims are based on disabilities resulting from exposure at Qarmat Ali and to provide regional office personnel with relevant historical information to assist with evaluating these claims.

Many of these claims may have been adjudicated prior to VA's learning of potential toxin exposure at Qarmat Ali. Therefore, we are currently working on the best possible methods to educate our field-station employees of the circumstances surrounding this incident, ensure those stations have easy access to all identifiable data on the potential exposure of National Guard

members, and determine whether VA must readjudicate any claims that were previously adjudicated without such information.

Burn Pits and Other Environmental Exposures

During a May 14, 2009 Deployment Health Work Group meeting, VA was apprised of 24 potential exposure incidents in OEF/OIF. This included various open burn pits for waste disposal, sulfur fires, non-potable water contamination, exposure to industrial waste, and others. DoD and VA have made significant progress in sharing information and assessing health risks. VA works diligently to obtain and interpret data from DoD and formulate appropriate responses to better serve combat Veterans.

Exposure to open burn pits for solid waste disposal has created significant concern among Veterans and their families. The most widely publicized of these was the burn pit at Balad Air Base in Iraq. According to a May 2008 report from the U.S. Army Center for Health Promotion and Preventive Medicine (USA CHPPM), the amount of solid waste being burned was estimated at about 2 tons of material per day in the early stages of troop deployment and currently may be as much as several hundred tons per day. This 2008 risk assessment concluded that the overall risk estimate for 12 month exposure was low. It states that the risk for both cancer and non-cancer outcomes did not exceed Environmental Protection Agency guidelines for acceptable risk. Affected troops did report upper respiratory irritation due to burn pits. This outcome was expected. Because of uncertainty related to specific exposures, as well as questions about methodology and estimates, VA officials must rely on objective facts developed on a case-by-case basis. VA understands DoD tested air samples at Balad in 2005, 2006, and 2007. USA CHPPM's May 2008 risk assessment was based on the air samples performed in 2007.

VA anticipates that concerns about potential long-term health effects from exposure to pollutants generated from open pit waste burning used throughout the Iraq and Afghanistan theaters will be an ongoing issue for affected Veterans. VA has learned many lessons from previous conflicts wherein service members were exposed to various toxins on the battlefield. In many of those situations, too much time lapsed between Veterans' exposure to such toxins and an easy path to the many VA benefits they had earned. After VA learned of potential exposure for service members to burn pits, and to help address health concerns of Veterans and their families, VA began initiating a contract with the Institute of Medicine to provide a review of potential long-term health effects from exposure to burn pit pollutants.

In addition to these efforts, VA has started presenting one-day seminars to VA and non- VA providers on many of these exposures. These seminars give information regarding the nature of the exposures, their possible health outcomes, how to perform an exposure assessment for Veterans, appropriate medical surveillance, treatment options, and risk communication.

VA is analyzing data on the number of Veterans from the first Gulf War, the Gulf War Era, and OEF/OIF, who have filed service connection claims for a variety of conditions, including respiratory and skin disabilities. This information will hopefully serve as a valuable tool to help VA observe any early, discernable trends such as increased disability claims for diseases potentially related to toxins. VA is currently exploring the best information to include in communication and how best to deliver such information to field employees responsible for

adjudicating disability claims, specifically those related to toxins. This analysis is not yet complete.

Conclusion

Mr. Chairman VA understands these issues are very important to you, all the members of this committee, and to Veterans and their families. I can assure you VA is equally concerned and committed to working with DoD and other agencies to identify potential hazards, inform Veterans of any risks to their health, develop appropriate responses, and deliver needed care and benefits to Veterans and their families. Only through such cooperation will VA be prepared to deliver the proper health care and disability compensation benefits to those entitled. Sharing this information is important because many factors may contribute to adverse, long-term health effects for service members and Veterans.

Thank you again for the opportunity to testify. My colleagues and I are prepared to address any questions you or the other committee members might have.