### Section I. Developing Claims for Service Connection (SC) Based on Other Exposure Types

#### Overview

|  |  |
| --- | --- |
| **In This Section** | This section contains the following topics: |

|  |  |
| --- | --- |
| **Topic** | **Topic Name** |
| 1 | Developing Claims for SC for Positive Tuberculin Reactions |
| 2 | Developing Claims for SC for Chronic or Tropical Diseases |
| 3 | Developing Claims for SC for Asbestos-Related Diseases |
| 4 | Developing Claims for SC for Acquired Immune Deficiency Syndrome (AIDS) |
| 5 | Developing Claims Based on Participation in Special Operations Incidents |
| 6 | Developing Claims Based on Exposure to Environmental Hazards |
| 7 | Developing Claims Based on Participation in the Shipboard Hazard and Defense (SHAD) Project |
| 8 | Developing Claims Based on Chemical Biological Radiological Nuclear and Explosives (CBRNE) Testing |
| 9 | Exhibit 1: FACT SHEET Burn Pits in Iraq, Afghanistan, and the Horn of Africa |
| 10 | Exhibit 2: FACT SHEET Particulate Matter Throughout Iraq, Afghanistan, and Djibouti |
| 11 | Exhibit 3: FACT SHEET Sulfur Fire at the Mishraq State Sulfur Mine Near Mosul, Iraq |
| 12 | Exhibit 4: FACT SHEET Qarmat Ali Water Treatment Plant in Basrah, Iraq |
| 13 | Exhibit 5: FACT SHEET Naval Air Facility, Atsugi, Japan |
| 14 | Exhibit 6: Internet Websites Related to the Issue of Contaminated Water at Camp Lejeune |
| 15 | Exhibit 7: Diseases Potentially Associated With Exposure to Contaminants Present in the Camp Lejeune Water Supply Between 1953 and 1987 |
| 16 | Exhibit 8: Internet Websites Describing Potential Health Effects of Exposure to Chemical Contaminants Present in the Water Supply of Camp Lejeune Between 1953 and 1987 |
| 17 | Exhibit 9: Notice to Examiners Evaluating Claims Based on Service at Camp Lejeune |

#### 1. Developing Claims for SC for Positive Tuberculin Reactions

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims for SC for positive tuberculin reactions, including the   * action to take when a positive tuberculin reaction only is claimed * action to take when a positive tuberculin reaction and other disabilities are claimed, and * reporting responsibilities of the Department of Veterans Affairs (VA) outpatient clinics and VA medical centers (VAMCs). |

|  |  |
| --- | --- |
| Change Date | October 23, 2015 |

|  |  |
| --- | --- |
| a. Action to Take When a Positive Tuberculin Reaction Only Is Claimed | If a claim is submitted for *only* a positive tuberculin reaction, refer the claim to the rating activity for a determination as to whether or not a disability is present.  ***Reference***: For more information on medical treatment for a positive tuberculin reaction, see M21-1, Part III, Subpart v, 7.A.10. |

|  |  |
| --- | --- |
| b. Action to Take When a Positive Tuberculin Reaction and Other Disabilities Are Claimed | If a positive tuberculin reaction is claimed together with other disabilities   * complete any appropriate development required for the other disabilities, and * refer the claims folder to the rating activity for rating of all the claimed disabilities. |

|  |  |
| --- | --- |
| c. Reporting Responsibilities of VA Outpatient Clinics and VAMCs | As provided in M21-1, Part III, Subpart v, 7.A.10.c, a Department of Veterans Affairs (VA) outpatient clinic or VA medical center (VAMC) will furnish a report of the follow-up examination made at the expiration of the 12-month period of chemotherapy for discharged personnel who have had a tuberculin test conversion from negative to positive during service.  If a VA outpatient clinic or VAMC report or any other evidence indicates the presence of tuberculous disease, solicit a claim for service connection (SC).  ***Reference***: For more information on soliciting claims for chronic, unclaimed disabilities, see M21-1, Part IV, Subpart ii, 2.A.1.f. |

#### 2. Developing Claims for SC for Chronic or Tropical Diseases

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims for SC for chronic or tropical diseases, including   * definition of a chronic disease * establishing whether a disease is chronic * considering * SC for a chronic or tropical disease, and * presumptive SC * locations of lists of chronic and tropical diseases, and * action to take if a chronic or tropical disease was * treated in service, or * not treated in service. |

|  |  |
| --- | --- |
| Change Date | October 23, 2015 |

|  |  |
| --- | --- |
| a. Definition: Chronic Disease | A ***chronic*** ***disease*** is a disease   * of prolonged duration, producing incapacitating symptoms of varying degree * that may undergo remission, and * that is seldom entirely cured with all residuals of damage being completely eradicated. |

|  |  |
| --- | --- |
| b. Establishing Whether a Disease Is Chronic | If a diagnosis is prefaced with the word “chronic,” that does *not* necessarily establish the disease as chronic.  ***Important***: Whether a disease is chronic is a matter for a factual determination dependent on the nature of the disease and its manifestations. Some diseases are inherently chronic, such as multiple sclerosis, while others, such as bronchitis, may be either acute or chronic. |

|  |  |
| --- | --- |
| c. Considering SC for a Chronic or Tropical Disease | When deciding any claim for SC for a chronic or tropical disease, it is also necessary to consider   * SC based on manifestation of the claimed disease during service, and * SC based on a presumption that the disease, which was first manifested following discharge from service, is nevertheless related to service. |

|  |  |
| --- | --- |
| d. Considering Presumptive SC | Once a substantially complete claim is ofrecord, the following conditions apply   * the possibility of entitlement to presumptive SC exists when the Veteran alleges inception within the limiting periods contained in * [38 U.S.C. 1112](http://www.law.cornell.edu/uscode/text/38/1112), or * [38 U.S.C. 1133](https://www.law.cornell.edu/uscode/text/38/1133), when appropriate * the Veteran does not need to establish that the disease in question was definitely diagnosed within the presumptive period, and * the evidence should show that manifestations of the condition, disabling to the degree of at least 10 percent, became apparent prior to the expiration of the presumptive period shown in [38 CFR 3.307](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1307&rgn=div8). |

|  |  |
| --- | --- |
| e. Locations of Lists of Chronic and Tropical Diseases | The conditions listed in   * [38 U.S.C. 1101(3)](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001101----000-.html) and [38 CFR 3.309(a)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1309&rgn=div8) are chronic diseases, and * [38 U.S.C. 1101(4)](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001101----000-.html) and [38 CFR 3.309(b)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1309&rgn=div8) are tropical diseases. |

|  |  |
| --- | --- |
| f. Action to Take if a Chronic or Tropical Disease Was Treated in Service | Follow the instructions in the table below when service records show the Veteran was treated for a chronic or tropical disease. |

|  |  |
| --- | --- |
| **If the Veteran ...** | **Then ...** |
| files a substantially complete claim for the condition | refer the case to the rating activity. |
| did not file a claim for the condition | solicit a claim. |

|  |
| --- |
| ***Reference***: For more information on   * what constitutes a substantially complete claim, see * M21-1, Part I, 1.B.1.b, and * [38 CFR 3.159(a)(3)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1159&rgn=div8), and * soliciting claims for chronic, unclaimed disabilities, see M21-1, Part IV, Subpart ii, 2.A.1.f. |

|  |  |
| --- | --- |
| g. Action to Take if a Chronic or Tropical Disease Was Not Treated in Service | Even though certain chronic and tropical diseases were not treated during service, SC may still be established on a presumptive basis under the provisions of   * [38 U.S.C. 1112](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001112----000-.html) * [38 U.S.C. 1133](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001133----000-.html), or * [38 U.S.C. 1137](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001137----000-.html).   ***Reference***: For more information on the diseases for which SC may be established on a presumptive basis and the service requirements that must be met, see [38 CFR 3.307](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1307&rgn=div8). |

**3. Developing Claims for SC for Asbestos-Related Diseases**

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims for SC for asbestos-related diseases, including   * entitlement to SC for conditions based on exposure to asbestos * development action to take when no disability related to asbestos exposure is claimed * use of Military Occupational Specialty (MOS) to determine probability of in-service asbestos exposure * developing for evidence of in-service asbestos exposure in substantially complete claims * consideration of all evidence in the claims folder in determining in-service asbestos exposure, and * requesting an examination and opinion for claims based on asbestos exposure. |

|  |  |
| --- | --- |
| Change Date | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Entitlement to SC for Conditions Based on Exposure to Asbestos** | Veterans who were exposed to asbestos while in service and developed a disease related to that asbestos exposure may receive compensation benefits.  Claims based on exposure to asbestos require   * a military occupational skill with exposure to asbestos or other exposure event associated with service sufficient to request an examination with medical opinion as described in M21-1, Part IV, Subpart ii, 1.I.3.f, and * a diagnosed disability that has been associated with in-service asbestos exposure.   ***Note***: Occupational exposure is the most common cause of asbestosis, but the condition also can have other causes.  ***Reference***: For more information on asbestos exposure to include rating guidance, see M21-1, Part IV, Subpart ii, 2.C.2. |

|  |  |
| --- | --- |
| b. Development Action to Take When No Disability Related to Asbestos Exposure Is Claimed | A claim is not substantially complete if a Veteran alleges exposure to asbestos during service, but does not claim SC for a specific disability. In such cases, send a letter to the Veteran to   * inform the Veteran that exposure, in and of itself, is not a disability, and * ask the Veteran to identify the disability(ies) that resulted from exposure to asbestos during service.   Use the Veterans Benefits Management System (VBMS) or Modern Awards Processing - Development (MAP-D) to generate the applicable paragraphs to send in the development letter to the Veteran by selecting the entry ASB – TELL US SPECIFIC DISABILITY FM ASBESTOS EXPOSURE.  ***Important***:   * Do not * process the claim as a denial, or * establish end product (EP) control for the incomplete claim. * Whenever possible, telephone the Veteran to obtain the information needed to substantiate the claim.   ***Reference***: For more information on what constitutes a substantially complete application, see   * [38 CFR 3.159(a)(3)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1159&rgn=div8), and * M21-1, Part I, 1.B.1.b. |

|  |  |
| --- | --- |
| **c. Use of MOS to Determine Probability of In-Service Asbestos Exposure** | The table below describes probability of asbestos exposure by military occupational specialty (MOS). |

Asbestos MOS Handout

|  |  |  |
| --- | --- | --- |
| MOS Code | Job Title | Probability of Exposure |
| AA | Airman Apprentice | Minimal |
| ABE | Aviation Boatswain’s Mate (Launch & Rec Equip) | Probable |
| ABF | Aviation Boatswain’s Mate | Probable |
| ABH | Aviation Boatswain’s Mate (Aircraft Handler | Probable |
| AC | Air Traffic Controller | Minimal |
| ACM | Aviation Chief Metalsmith | Probable |
| ADJ | Aviation Machinist’s Mate (Jet Engine Mechanic) | Probable |
| ADR | Aviation Machinist’s Mate | Probable |
| AE | Aviation Electrician’s Mate | Probable |
| AFCM | Aircraft Maintenanceman (Master Chief) | Minimal |
| AG | Aerographer’s Mate | Minimal |
| AK | Aviation Storekeeper | Minimal |
| AM | Aviation Structural Mechanic | Probable |
| AME | Aviation Structural Mechanic (Safety Equipment) | Probable |
| AMH | Aviation Structural Mechanic (Hydraulics) | Probable |
| AMS | Aviation Structural Mechanic (Structural) | Probable |
| AN | Airman | Minimal |
| AO | Aviation Ordnanceman | Minimal |
| AQ | Aviation Fire Control Technician | Highly Probable |
| AR | Airman Recruit | Minimal |
| ARM | Aviation Radioman | Probable |
| AS | Aviation Support Equipment Technician | Probable |
| AT | Aviation Electronic Technician | Probable |
| AW | Aviation Antisubmarine Warfare Operator | Probable |
| AX | Aviation Antisub Warfare Technician | Probable |
| AZ | Aviation Maintenance Administrationman | Minimal |
| B | Boilermaker (WWII) | Highly Probable |
| BU | Builder | Probable |
| BM | Boatswain’s Mate | Minimal |
| BR | Boilermaker | Highly Probable |
| BT | Boiler Technician | Highly Probable |
| CD | Construction Driver | Probable |
| CE | Construction Electrician | Probable |
| CM | Construction Mechanic | Minimal |
| CN | Constructionman | Probable |
| Cox | Coxswain | Minimal |
| CS | Commissaryman | Minimal |
| CT | Communication Technician | Minimal |
| CTR | Cryptologic Technician (Collections) | Minimal |
| DC | Damage Controlman | Minimal |
| DK | Disbursing Clerk | Minimal |
| DP | Data Processing Technician | Minimal |
| DS | Data System Technician | Minimal |
| DT | Dental Technician | Minimal |
| EM | Electrician’s Mate | Probable |
| EN | Engineman | Probable |
| EO | Equipment Operator | Minimal |
| ET | Electronics Technician | Probable |
| FC | Fire Controlman | Highly Probable |
| FN | Fireman | Highly Probable |
| FP | Pipefitter | Highly Probable |
| FT | Fire Control Technician | Highly Probable |
| FTG | Fire Control Technician (Guns) | Highly Probable |
| GM | Gunner’s Mate | Minimal |
| GSM | Gas Turbine System Technician (Mechanical) | Probable |
| HC | Hospital Corpsman | Minimal |
| HN | Hospitalman | Minimal |
| HT | Hull Maintenance Technician | Highly Probable |
| IC | Interior Communication Technician | Probable |
| IM | Instrumentman | Highly Probable |
| LI | Lithographer | Minimal |
| M(ME) | Metalsmith | Minimal |
| MA | Master-At-Arms | Minimal |
| MLC | Molder | Probable |
| MM | Machinist Mate | Probable |
| MN | Mineman | Minimal |
| MOMM | Motor Machinist Mate | Probable |
| MR | Machinery Repairman | Minimal |
| MS | Mess Management Specialist | Minimal |
| MT | Missile Technician | Probable |
| MU | Musician | Minimal |
| NC | Navy Counselor | Minimal |
| OM | Opticalman | Minimal |
| OSPC | Operations Specialist | Minimal |
| PC | Postal Clerk | Minimal |
| PH | Photographer’s Mate | Minimal |
| PHM | Pharmacist | Minimal |
| PN | Personnelman | Minimal |
| Prtr | Printer | Minimal |
| PT | Photographic Intelligenceman | Minimal |
| PTR | Painter | Probable |
| QM | Quartermaster | Minimal |
| RD | Radarman | Minimal |
| RM | Radioman | Minimal |
| RN | Radarman | Minimal |
| SA | Seaman Apprentice | Minimal |
| SC | Ship’s Cook | Minimal |
| SD | Stewart | Minimal |
| SF | Shipfitter | Minimal |
| SFM | Shipfitter (Metal Smith) | Minimal |
| SFP | Shipfitter (Pipefitter) | Minimal |
| SH | Ship’s Serviceman | Minimal |
| SK | Storekeeper | Minimal |
| SM | Signalman | Minimal |
| SN | Seaman | Minimal |
| SO | Sonarman | Highly Probable |
| SoM | Soundman | Highly Probable |
| ST | Sonar Technician | Highly Probable |
| STG/SOG | Sonar Technician (Surface) | Highly Probable |
| STS | Sonar Technician (Submarine) | Highly Probable |
| StM | Steward’s Mate | Minimal |
| SW | Steelworker | Probable |
| TA | Stewart Apprentice | Minimal |
| TD | Trademan | Minimal |
| TE | Teletype | Minimal |
| TM | Torpedoman’s Mate | Probable |
| TN | Stewardsman | Minimal |
| UT | Utilitiesman | Highly Probable |
| WT | Water Tender | Highly Probable |
| Y | Yeoman | Minimal |

|  |
| --- |
| ***Note***: This list is not exclusive and exposure may be otherwise demonstrated on review of the claims folder. Each claim based on asbestos exposure must be adjudicated on its own merit with MOS being one consideration in determining whether there was an exposure event. |

|  |  |
| --- | --- |
| **d. Developing for Evidence of In-Service Asbestos Exposure in Substantially Complete Claims** | Complete a Personnel Information Exchange System (PIES) request for military personnel records using   * code O16 for paper claims, or * code O50 for claims processed in VBMS.   This is necessary in order to determine all MOSs the Veteran performed while in service.  At the same time, send a development letter to the Veteran requesting additional exposure information if not already of record, or if exposure has not been conceded. Use VBMS or MAP-D to generate the applicable paragraphs for placement in the letter by selecting the following entries:   * ASB – TELL US WHERE, WHEN, HOW EXPOSED, and * ASB – MEDICAL EVID OF DISEASE (BIOPSY) NEEDED.   ***Important***: The determination as to whether to concede exposure to asbestos is based on a complete review of the claims folder. Therefore, continue to develop for asbestos exposure via PIES even if no response from the Veteran to the development letter has been received. If exposure is confirmed by records to include military personnel records, follow the guidance contained at M21-1, Part IV, Subpart ii, 1.I.3.e.  ***Notes***:   * Upon selection, a *VA Form 21-4142, Authorization to Disclose Information to the Department of Veterans Affairs*, is generated and is to be included in the letter for the Veteran to complete if the Veteran wishes for the VA to attempt to obtain any doctor, hospital, or medical reports on his/her behalf. * Obtaining the military personnel records before scheduling an examination for an MOS listed as having minimal exposure probability ensures that examiners know about any other MOS that the Veteran may have served under that may have resulted in asbestos exposure. |

|  |  |
| --- | --- |
| **e. Consideration of All Evidence in the Claims Folder in Determining In-Service Asbestos Exposure** | If an MOS is listed as minimal, probable, or highly probable in the table above, concede asbestos exposure for purposes of scheduling an examination.  As discussed at M21-1, Part IV, Subpart ii, 1.I.3.c, asbestos exposure may be demonstrated upon review of the claims folder on a basis other than MOS. Any evidence that is probative of (serves to establish) asbestos exposure may be used to support a determination that asbestos exposure occurred. Determining whether evidence proves a Veteran was exposed to asbestos requires an evaluation of all of the evidence in the case, including   * an assessment of the credibility of the evidence, and * whether the evidence establishes that the exposure occurred.   In determining whether asbestos exposure has been demonstrated by the evidence of record, consider   * exposure information that the Veteran provides in response to the asbestos development letter to include lay testimony * service personnel records * service treatment records * buddy statements, and * all other evidence located in the claims folder or identified by the Veteran relevant to the determination of asbestos exposure.   ***Note***: The term ***credibility*** refers to believable evidence that tends to support the Veteran’s assertion based on consideration of plausibility, consistency with other evidence in the case, and source. Once asbestos exposure has been demonstrated by the evidence of record and the evidence contains competent lay or medical evidence of a current diagnosed disability or persistent or recurrent symptoms of disability, accept the Veteran’s lay testimony as sufficient evidence of current symptoms or disease that could potentially be related to asbestos exposure for purposes of requesting an examination and medical opinion. |

|  |  |
| --- | --- |
| **f. Requesting an Examination and Opinion for Claims Based on Asbestos Exposure** | Use the table below in determining the actions to take, to include when to request an examination and medical opinion, following review of the evidence in the claims folder. |

|  |  |
| --- | --- |
| **If the Veteran’s claims folder contains evidence of a current disability and…** | **Then ...** |
| demonstrates asbestos exposure | * do not continue to develop for additional records to verify asbestos exposure * request an examination with medical opinion using the Examination Request Builder (ERB), and * refer the claim to the rating activity for a decision upon receipt of the requested examination.   ***Notes***:   * When selecting a respiratory examination in ERB, a system prompt will be generated as to whether examination is being scheduled based on a Navy Veteran and asbestos exposure. If asbestos exposure is conceded based on MOS, select yes and pick the Veteran’s MOS, which will then generate the exposure probability. * Additional evidence should be tabbed to identify all records the examiner should review in making a medical opinion. * While the ERB indicates exposure based on a Navy Veteran, the asbestos guidance contained in this topic applies to all branches of service. * Ensure that the examination request states all applicable information as to asbestos exposure to include the Veteran’s MOS(s) and probability of asbestos exposure. |
| does not demonstrate asbestos exposure | * ensure that the development procedures detailed at M21-1, Part IV, Subpart ii, 1.I.3.d have been completed * review any evidence received as a result of the development for any evidence of asbestos exposure to include personnel records and information on the MOS(s) the Veteran performed in service, and * if exposure is shown as demonstrated by an MOS with a MINIMAL or higher indicator of probability of asbestos exposure or based on other evidence of exposure, request an examination with medical opinion and send to the rating activity following receipt of the requested examination, or * if exposure is not shown as indicated by lack of evidence demonstrating at least a MINIMAL indicator of probability of asbestos exposure based on MOS and other evidence does not establish asbestos exposure, refer the claims folder to the rating activity for a decision without requesting an examination. |

#### 4. Developing Claims for SC for AIDS

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims for SC for AIDS, including   * definition of AIDS * causative agent of AIDS * tests available to verify AIDS * obtaining medical records showing treatment of AIDS, and * when to send the claim to the rating activity. |

|  |  |
| --- | --- |
| Change Date | August 7, 2015 |

|  |  |
| --- | --- |
| a. Definition: AIDS | ***Acquired immune deficiency syndrome (AIDS)*** is defined by the Centers for Disease Control (CDC) as “a disease at least moderately predictive of a defect in cell-mediated immunity occurring in a person with no known cause for diminished resistance to that disease.” |

|  |  |
| --- | --- |
| b. Causative Agent of AIDS | AIDS is caused by the human immunodeficiency virus (HIV). |

|  |  |
| --- | --- |
| c. Tests Available to Verify AIDS | The most commonly used lab test for AIDS is the HIV antibody test.  The following two HIV antibody tests are available   * the screening enzyme-linked immunosorbent assay (ELISA) test, and * the confirmatory Western Blot test. |

|  |  |
| --- | --- |
| d. Obtaining Medical Records Showing Treatment of AIDS | Request   * service treatment records (STRs) if they are not in the claims folder, and * records of treatment from a VAMC or VA outpatient clinic, if the Veteran indicates that he/she received treatment at one of these facilities.   Send the Veteran *VA Form 21-4142* if he/she   * reports treatment by a private hospital or physician, but * does not furnish the treatment records. |

|  |  |
| --- | --- |
| e. When to Send the Claim to the Rating Activity | If a substantially complete claim exists, send the claim to the rating activity.  ***Reference***: For more information on what constitutes a substantially complete claim, see   * M21-1, Part I, 1.B.1.b, and * [38 CFR 3.159(a)(3)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1159&rgn=div8). |

#### 5. Developing Claims Based on Participation in Special Operations Incidents

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims based on participation in Special Operations incidents, including   * definition of Special Operations * developing claims related to Special Operations incidents * example of a “Special Operations Forces Incident” document * responses from the U.S. Special Operations Command (USSOCOM), and * classified service records received from USSOCOM. |

|  |  |
| --- | --- |
| Change Date | October 23, 2015 |

|  |  |
| --- | --- |
| a. Definition: Special Operations | ***Special Operations*** are small-scale covert or overt military operations of an unorthodox and frequently high-risk nature, undertaken to achieve significant political or military objectives in support of foreign policy.  Special Operations units are   * typically composed of relatively small groups of highly-trained, armed personnel, and * often transported by helicopter, small boats, or submarines, or parachute from aircraft for stealthy infiltration by land.   ***Examples***:   * U.S. Army’s Special Forces, commonly called the “Green Berets.” * U.S. Navy sea, air, and land teams (SEALs).   ***Note***: Some Special Operations, such as counter-terrorism actions, may be carried out domestically under certain circumstances. |

|  |  |
| --- | --- |
| b. Developing Claims Related to Special Operations Incidents | Follow the steps in the table below to determine the development action to take when a Veteran claims that an injury or disability occurred during a Special Operations assignment. |

|  |  |
| --- | --- |
| Step | Action |
| 1 | Generate and send a section 5103 notice to the Veteran by selecting the SPECIAL OPERATIONS UNIT development action.    ***Note***: This notice is required unless the evidence of record provides the information requested in the letter. |
| 2 | After waiting 30 days, did VA receive the Veteran’s response?   * If *yes*, go to Step 3. * If *no*, process the claim in accordance with standard procedures. |
| 3 | Did the Veteran provide *at least* the   * location (city/province and country) where the incident took place, and * the approximate date (within a 60-day range) of the incident? * If *yes*, route the claims folder to the Military Records Specialist (MRS) to * complete the “Special Operations Forces Incident” document shown in M21-1, Part IV, Subpart ii, 1.I.5.c, and * send it via encrypted e-mail to VAVBASPT/RO/SOCOM. * If *no*, go to Step 4. |
| 4 | Send a 10-day follow-up letter explaining what information is missing and why the information is needed.  If the Veteran fails to respond to the follow-up letter or does not provide the information listed in Step 3   * continue to process the claim and promulgate a rating decision with the evidence in the claims folder, and * in the decision notice * advise the Veteran that VA was unable to verify an incident in service related to the claimed disability, and * identify the information that is still needed to verify the incident. |

|  |  |
| --- | --- |
| c. Example: Special Operations Forces Incident Document | An example of a Special Operations Forces Incident document is shown below.  ***Note***: The regional office (RO) MRS will complete as much information as possible and submit this request via encrypted e-mail to VAVBASPT/RO/SOCOM. Allow 60 days for a response before sending a follow-up request. |

|  |
| --- |
| **Special Operations Forces Incident**  **Name of Veteran: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **C#: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Social Security Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **MOS/Specialty: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Branch of Service and component: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Rank/Grade: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Special Operations tour of duty dates: From: \_\_\_\_\_\_\_\_ To: \_\_\_\_\_\_\_\_\_**  **If not assigned, Veteran was attached to which Special Ops Unit/Service: \_\_\_\_\_\_\_\_\_**  **From: \_\_\_\_\_\_\_\_\_\_\_ To: \_\_\_\_\_\_\_\_\_\_**  **Was the operation classified: Yes \_\_\_ No \_\_\_**  **List a brief description of the incidents reported by the Veteran:**  **Incident(s): Were the incidents classified: Yes \_\_\_\_\_\_ No \_\_\_\_\_**  Date of incident #1 (60-day range): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Location of incident: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Specific information regarding incident: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date of incident #2 (60-day range): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Location of incident: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Specific information regarding incident: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Submitted by (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **VARO: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Telephone number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

|  |  |
| --- | --- |
| d. Responses From USSOCOM | Upon receipt of a request from VA, U.S. Special Operations Command (USSOCOM) will research each claimed incident and provide   * a “sanitized” summary of its research, or * a negative reply, if it finds no information.   ***Notes***:   * The response will *not* include copies of documentation related to claimed incidents. * For certain incidents, USSOCOM may report that it cannot release any information. |

|  |  |
| --- | --- |
| e. Classified Service Records Received From USSOCOM | Classified service records received from USSOCOM   * will often be from a casualty report * may be limited to * the date of the injury * the location where the injury occurred, and/or * a brief description of the injury or illness, or * may only confirm that the Veteran participated in Special Operations, because the operation is still considered classified.   ***Note***: Because Special Operations have the characteristics of combat, [38 CFR 3.304(d)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1304&rgn=div8) will apply in all cases where a Veteran’s participation in Special Operations is confirmed. |

#### 6. Developing Claims Based on Exposure to Environmental Hazards

|  |  |
| --- | --- |
| Introduction | This topic contains information on developing claims based on exposure to environmental hazards, including   * locations of specific environmental hazards identified by Department of Defense (DoD) * environmental hazard EP control and tracking * guidelines for developing environmental hazard claims * using DoD records to establish exposure to environmental hazards * using alternate evidence to establish exposure to environmental hazards * what to include in VA examination and/or medical opinion requests in environmental hazard claims * centralized processing of Camp Lejeune claims and appeals to Louisville RO * actions taken by the office of original jurisdiction (OOJ) upon receipt of a Camp Lejeune claim or appeal * actions taken by the Louisville RO upon receipt of a Camp Lejeune claim or appeal, and * verification of Camp Lejeune service. |

|  |  |
| --- | --- |
| Change Date | February 8, 2016 |

|  |  |
| --- | --- |
| **a. Locations of Specific Environmental Hazards Identified by DoD** | The Department of Defense (DoD) has identified a number of environmental hazards at military installations in Iraq, Afghanistan, and elsewhere that could present health risks.  ***Reference***: For more information on specific environmental hazards and affected military installations identified by DOD, see M21-1, Part IV, Subpart ii, 2.C.5. |

|  |  |
| --- | --- |
| b. Environmental Hazard EP Control and Tracking | Upon receipt of a substantially complete claim for SC based on exposure to one or more of the environmental hazards listed in M21-1, Part IV, Subpart ii, 2.C.5   * establish a standard EP, such as EP 110, 010, or 020, and * if the claim is based on service in Southwest Asia, enter the *Environmental Hazard in Gulf War* special issue indicator for the related contention(s).     ***Note***: Do *not* use the *Environmental Hazard in Gulf War* identifier for claims based on Atsugi or Camp Lejeune service.  ***Reference***: For specific instructions on processing Camp Lejeune claims, see M21-1, Part IV, Subpart ii, 1.I.6.g. |

|  |  |
| --- | --- |
| c. Guidelines for Developing Environmental Hazard Claims | Use the guidelines below when developing claims for SC based on exposure to environmental hazards.   * If the claimed exposure is not established by the evidence of record, send the Veteran a standard section 5103 notice. * If the Veteran claims exposure to environmental hazards during service, but does not claim SC for a specific disability, the claim is not substantially complete. Inform the Veteran that he/she must at least identify a symptom or cluster of symptoms, because exposure, in and of itself, is not a disability. * Ask the claimant to provide at least some general information about the exposure event. ***Note***: Send a follow-up letter or telephone the Veteran if he/she fails to provide sufficient information regarding exposure and/or disability claimed because of such exposure. * Develop for STRs and any VA and/or private medical records that are noted by the claimant. * Verify dates of military service and obtain military personnel records as per normal procedures.   ***Note***: Do *not* establish a pending EP until the Veteran has identified a  disability that has resulted from exposure to the environmental hazard.  ***References***: For more information on   * obtaining service information for claims involving exposure to contaminated water at Camp Lejeune, see M21-1, Part III, Subpart iii, 2.E.7 * standard section 5103 notices, see M21-1, Part I, 1.B * requesting evidence from * the claimant, see M21-1, Part III, Subpart iii, 1.B, and * other sources, see M21-1, Part III, Subpart iii, 1.C * developing for STRs and other service records, see M21-1, Part III, Subpart iii, 2.A, and * verifying military service, see M21-1, Part III, Subpart ii, 6.5. |

|  |  |
| --- | --- |
| d. Using DoD Records to Establish Exposure to Environmental Hazards | DoD has provided VA with a list of those who served at the Qarmat Ali Water Treatment Plant in Basrah, Iraq. If the Veteran is claiming exposure to an environmental hazard at this location, send an e-mail request for verification of service to the following Compensation Service mailbox: VAVBAWAS/CO/211/ENVIRO.  If exposure cannot be verified through an official list provided by DoD, review STRs, military personnel records, and all other available documents for evidence that corroborates the Veteran’s statement of exposure.  ***Important***: Carefully review the *Post-Deployment Health Assessment (PDHA)* and *Discharge Examination,* generally located in the STRs, for exposure information. The *PDHA* includes specific questions relating to exposure incidents.  ***Reference***: For more information on using alternate evidence to establish exposure, see M21-1, Part IV, Subpart ii, 1.I.6.e. |

|  |  |
| --- | --- |
| e. Using Alternate Evidence to Establish Exposure to Environmental Hazards | Because military service records will not verify all incidents of exposure, it is important to consider alternate evidence in establishing whether the Veteran participated in or was affected by an in-service environmental hazard exposure incident.  ***References***: For more information on   * considering evidence in claims for disability compensation, see * [38 U.S.C. 1154(a)](http://www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001154----000-.html), and * [38 CFR 3.303(a)](http://www.ecfr.gov/cgi-bin/text-idx?SID=eeb25614ff133ec52c6f89f62aa156dc&mc=true&node=se38.1.3_1303&rgn=div8), and * a list of what alternate evidence includes, see M21-1, Part IV, Subpart ii, 2.C.5.k. |

|  |  |
| --- | --- |
| **f. What to Include in VA Examination and/or Medical Opinion Requests in Environmental Hazard Claims** | When requesting a medical examination and/or medical opinion for a claim based on exposure to an environmental hazard listed in M21-1, Part IV, Subpart ii, 2.C.5.a follow the guidance below.   * Advise the examiner of the nature of the claimed environmental hazard and the location and timeframe of exposure. * Remember that more than one environmental hazard may apply when Veterans are alleging exposure to a specific event. Therefore, each *Fact Sheet* related to service in Iraq as provided in Exhibits 1 through 4 (M21-1, Part IV, Subpart ii, 1.I.9, 10, 11, and 12) should be provided to the VA examiner. This is necessary for Iraq Veterans since the Veteran served in Iraq and could have been exposed to burn pit emissions and the same high levels of particulate matter (PM) as others in the Southwest Asia theater of operations. * For claims based on exposure to contaminated drinking water at Camp Lejeune, attach the appendices shown in M21-1, Part IV, Subpart ii, 1.I.14, 15, 16, and 17. * Forward the claims folder to the examiner and ask him/her to * review the medical and other evidence in the claims folder, including the *Fact Sheets* or other documents for Camp Lejeune or other exposure claims, and * provide an opinion, and rationale for the opinion, as to the likelihood that the Veteran’s claimed disability is related to the hazardous environmental exposure.   In some cases, an opinion based on a records review only may suffice, but other cases may require a current examination. When initially requesting an opinion only, ask the examiner to schedule an examination if he/she believes it is needed to render the requested medical opinion.  ***Note***: Do *not* request an examination or medical opinion until exposure has been established.    ***Reference***: For more information on establishing exposure to a claimed environmental hazard, see M21-1, Part IV, Subpart ii, 2.C.5.k and l. |

|  |  |
| --- | --- |
| g. Centralized Processing of Camp Lejeune Claims and Appeals to Louisville RO | The Louisville RO processes all disability claims and appeals that are based on exposure to contaminated drinking water at Camp Lejeune, including claims containing both Camp Lejeune and non-Camp Lejeune issues.  The Louisville RO will retain jurisdiction of the Camp Lejeune claims until   * all Camp Lejeune issues are decided, and * no appeal has been received within the one-year appeal period.   ***Note***: The Louisville RO has jurisdiction for any appeals received on Camp Lejeune claims and all other non-Camp Lejeune claims and/or appeals received during the one-year appeal period. |

|  |  |
| --- | --- |
| h. Actions Taken by the OOJ Upon Receipt of a Camp Lejeune Claim or Appeal | Upon receipt of a substantially complete claim or appeal containing at least one Camp Lejeune issue, the office of original jurisdiction (OOJ)   * notifies the claimant by letter, using the *Camp Lejeune Contaminated Water Letter* in Letter Creator, that his/her claims folder has been transferred to the Louisville RO * establishes the appropriate EP to control the Camp Lejeune issue, as well as other claimed issues, but does *not* initiate development on the claim * ensures the claim and the Veteran’s claims folder is scanned and uploaded into VBMS, and * inputs claim attributes to facilitate reassignment to the Louisville RO.   ***Reference***: For more information about the Letter Creator tool, see the [*Rating Job Aids*](http://vbaw.vba.va.gov/bl/21/rating/rat00.htm) webpage. |

|  |  |
| --- | --- |
| i. Actions Taken by the Louisville RO Upon Receipt of a Camp Lejeune Claim or Appeal | Upon receipt of a claims folder containing a Camp Lejeune claim or appeal, the Louisville RO   * if necessary, sends a section 5103 notice that includes a request for * the month and year of arrival and departure for Camp Lejeune service, and * where the Veteran lived (on-base or off-base) and worked on base * enters the *Environmental Hazard – Camp Lejeune* special issue indicator to the relevant contention(s) * places a corporate Camp Lejeune Flash on every Veteran’s record with verified service during any period between 1953 and 1987, and * for appeals, establishes EP 685 in addition to the standard EP. |

|  |  |
| --- | --- |
| j. Verification of Camp Lejeune Service | If the Veteran is claiming Camp Lejeune service between 1953 and 1987, but military personnel and/or medical records or information obtained from the Veteran does not show it, request records as provided in M21-1, Part III, Subpart iii, 2.E.7.c. These records may verify Camp Lejeune service through temporary duty (TDY) orders or performance evaluations.  ***Note***: It is important to verify that the Veteran’s service at Camp Lejeune occurred during the period of water contamination, 1953 to 1987. |

**7. Developing Claims Based on Participation in the SHAD Project**

|  |  |
| --- | --- |
| **Introduction** | This topic contains information on developing claims based on participation in the SHAD project, including   * background on the SHAD Project * identifying a SHAD Claim * EP control of SHAD claims * requesting access to the U.S. DoD and VA Chemical Biological Warfare Exposure System (Chem-Bio) Database * verification of participation and SHAD Manager notification * action to take upon receipt of final negative response from DOD regarding SHAD participation, and * procedure when receiving confirmation of SHAD participation. |

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Background on the SHAD Project** | From 1962 to 1974, the DoD conducted the Shipboard Hazards and Defense (SHAD) Project to identify the vulnerabilities of U.S. warships to chemical and biological warfare agents.  Project SHAD encompassed tests designed to identify U.S. warships’ vulnerabilities to attacks with chemical or biological warfare agents and to develop procedures to respond to such attacks while maintaining a war-fighting capability.  ***Reference***: For more information on Project SHAD, see the [Project 112/SHAD Fact Sheets](http://www.health.mil/Military-Health-Topics/Health-Readiness/Environmental-Exposures/Project-112-SHAD/Fact-Sheets). |

|  |  |
| --- | --- |
| **b. Identifying a SHAD Claim** | Consider a claim to be a SHAD claim if the Veteran claims disease or injury as a result of participation in the SHAD Project. SHAD involved service members from the Navy and Marine Corps as well as a small number of personnel from the Army and Air Force.  ***Notes***:   * The SHAD Project was part of a larger effort called Project 112, with tests being both ship and land-based. For VA purposes, all claims resulting from participation in ship-based or land-based chemical or biological testing under these projects are considered SHAD claims. * A claim in which the Veteran clearly served outside of the dates SHAD was conducted would not be considered a SHAD claim but could be considered a Chemical-Biological (Chem-Bio) exposure claim and should be clarified with the claimant. |

|  |  |
| --- | --- |
| **c. EP Control of SHAD Claims** | In addition to the traditional rating EPs (for example, 010, 110, 020), establish an EP 683 to control SHAD claims for tracking purposes.  ***Reference***: For more information on EP control, see M21-4, Appendix B, Section II. |

|  |  |
| --- | --- |
| **d. Requesting Access to the U.S. DoD and VA Chem-Bio Database** | The U.S. DoD and VA Chemical Biological Warfare Exposure System (Chem-Bio) is a consolidated database for mustard gas, Shipboard Hazard and Defense (SHAD), and Chem-Bio participants.  All ROs must maintain primary and alternate points of contact who are authorized access to DoD’s database. These POCs are responsible for conducting preliminary research regarding claimed in-service chemical and biological agent testing-related exposures. Access should be requested in advance of receipt of a claim based on exposure in order to ensure that claims processing is not unnecessarily delayed.  ***Important***: To request access to the Chem-Bio Database, send a completed *DD Form 2875, System Authorization Access Request (SAAR)*, to the SHAD Mailbox at VAVBAWAS/CO/SHAD. |

|  |  |
| --- | --- |
| **e. Verification of Participation and SHAD Manager Notification** | Follow the steps in the table below to verify the Veteran’s participation in Project SHAD at the RO-level based on review of the exposure database for the Veteran’s name. |

|  |  |
| --- | --- |
| **If …** | **Then** **...** |
| the Veteran’s name appears in the Chem-Bio Database | determine whether an examination and/or medical opinion is/are required to decide the claim. |
| the Veteran’s name does *not* appear in the Chem-Bio Database | it will be necessary to request a thorough search by DoD. To do so, a memorandum must be prepared with the following information   * the name of the individual requesting verification * the Veteran’s full name, claims folder number, Social Security number (SSN), and service number, and * the nature of the disabilities being claimed.   If available, also provide the   * name of the test * name of the ship(s) * location, and * dates of exposure.   ***Important***: Ensure that copies of personnel records accompany the request.  The records and memo should be **mailed** to  Department of Veterans Affairs  Compensation Service  ATTN: SHAD Manager  810 Vermont Ave, NW  Washington, DC  20420 |
| DoD response confirms exposure | determine whether an examination and/or medical opinion is/are required to decide the claim. No further action necessary. |
| DoD response does not confirm exposure | proceed with denial of disabilities claimed as resulting from SHAD exposure. |

|  |
| --- |
| ***Reference***: For more information on Project 112/Project SHAD, see   * [Project 112/Project SHAD: Resources and Materials](http://vaww.publichealth.va.gov/exposures/shad/resources.asp) * [Project 122/SHAD Reports – Shipboard Hazard Defense](http://www.health.mil/Reference-Center/Congressional-Testimonies/2002/10/10/Winkenwerder-SHAD), and * [VHA Directive 2009-047](http://vaww.va.gov/vhapublications/ViewPublication.asp?pub_ID=3092). |

|  |  |
| --- | --- |
| **f. Action to Take Upon Receipt of Final Negative Response From DoD Regarding SHAD Participation** | Follow the steps in the table below to determine what action to take when a final negative response is received from DoD regarding the claimant’s participation in Project SHAD. |

|  |  |
| --- | --- |
| **Step** | **Action** |
| 1 | Upload a copy of the negative response received from the SHAD Manager to the claimant’s electronic claims folder (eFolder). |
| 2 | Cancel the EP 683 |
| 3 | Deny the claim in accordance with M21-1, Part IV, Subpart ii, 1.I.7.e if exposure is not otherwise demonstrated. |

|  |  |
| --- | --- |
| **g. Procedure When Receiving Confirmation of SHAD Participation** | If a claimant is found to have been a Project SHAD participant, schedule all appropriate examinations. Examinations should include the following using *Fact Sheets* from the [Project 112/SHAD Fact Sheets](http://www.health.mil/Military-Health-Topics/Health-Readiness/Environmental-Exposures/Project-112-SHAD/Fact-Sheets) site   * a request for a medical opinion regarding any relationship between the claimant’s current disability and exposure to agents, simulants, tracers, and decontaminants used in the test(s) the claimant was involved in, and * a copy of all applicable DoD *Fact Sheets* for the test(s) the claimant participated in.   ***Notes***:   * If the name of the test(s) is/are known, in the comment section of the examination request include a list of the agents, simulants, tracers, and decontaminants listed in the DoD *Fact Sheet*. * Many claimants were involved in multiple tests. Medical examiners need information about all tests for which the claimant was involved. * Additionally, SC should be considered on direct and presumptive bases, where applicable. |

**8. Developing Claims Based on CBRNE Testing**

|  |  |
| --- | --- |
| **Introduction** | This topic contains information on developing claims based on CBRNE testing, including   * definition of CBRNE claims * action to take when the Veteran claims exposure to CBRNE testing but does not claim a disability * EP control procedures for claims based on CBRNE testing * sending notification of entitlement to medical treatment at a VAMC for individuals claiming exposure as a test participant * use of the Chem-Bio Database * procedure to follow after attempting to verify participation in CBRNE testing * completing the request to Compensation Service to verify participation in CBRNE testing * where to schedule an examination for claims based on CBRNE testing * information to include in examination or medical opinion requests for claims based on CBRNE testing, and * actions to take on EP when a response from DoD is received. |

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Definition: CBRNE Claims** | ***Chemical Biological Radiological Nuclear and Explosives (CBRNE)*** claims are claims in which a Veteran claims that a disease or injury resulted from participation in any test, chemical or biological, regardless of location, other than those tests discussed at M21-1, Part IV, Subpart ii, 1.I.7 and tests involving mustard gas.  ***Examples***: Exposures during tests conducted at Edgewood Arsenal, Fort (Ft.) Detrick, and Dugway Proving Ground.  ***Important***: While the examples listed above are known test locations, other areas of exposure likely exist. |

|  |  |
| --- | --- |
| **b. Action to Take When the Veteran Claims Exposure to CBRNE Testing but Does Not Claim a Disability** | Claims that allege exposure to a chemical or biological agent, but do not attribute the exposure to the development of a specific disability or disease, are not substantially complete and should not be under EP control. |

|  |  |
| --- | --- |
| **c. EP Control Procedures for Claims Based on CBRNE Testing** | Upon receipt of a substantially complete CBRNE claim, establish an EP 683 for control purposes in addition to the standard EP (for example, 010, 110, 020).  ***Important***:   * EP 683 is solely reserved to control for CBRNE or SHAD claims as discussed at M21-1, Part IV, Subpart ii, 1.I.7.c. * Claims related to Agent Orange or other herbicide exposure, battery acid spills, jet fuel exposure, or other exposures do ***not*** qualify for this EP unless the claim involves ***test participation***. |

|  |  |
| --- | --- |
| **d. Sending Notification of Entitlement to Medical Treatment at a VAMC for Individuals Claiming Exposure as a Test Participant** | An individual claiming exposure as a test participant is entitled to receive medical treatment at a VAMC. Include the following statement in initial correspondence following receipt of a claim based on CBRNE testing.  *Although there is no specific medical test or evaluation for the types of exposures you might have experienced more than 30 years ago, VA is offering a clinical examination to Veterans who receive this notification letter. If you have health concerns and wish to be medically evaluated, PLEASE BRING THIS LETTER WITH YOU TO THE NEAREST VA HEALTH CARE FACILITY. This letter will help you apply for the examination by providing needed documentation. Additional medical information about potential exposures is available through ‘environmental health coordinators’ located in every VA medical center.*  *Note: The examination itself does not constitute, or provide eligibility for, enrollment in the VA health care system. If you are not already enrolled, you are encouraged to apply for VA health care benefits at the time you apply for the examination.*  Include notification to the Veteran to contact DoD at (800) 497-6261 for questions about chemical or biological tests conducted during military service to include concerns about releasing classified information. |

|  |  |
| --- | --- |
| **e. Use of the Chem-Bio Database** | The U.S. DoD and VA Chemical Biological Warfare Exposure System (Chem-Bio) is a consolidated database for mustard gas, SHAD, and Chem-Bio participants.  All ROs must maintain primary and alternate points of contact who are authorized access to DoD’s database. These POCs are responsible for conducting preliminary research regarding claimed in-service chemical and biological agent testing-related exposures. Access should be requested in advance of receipt of a claim based on exposure in order to ensure that claims processing is not unnecessarily delayed.  ***Important***: To request access to the Chem-Bio Database, send a completed *DD Form 2875* to the CBRNE Mailbox at VAVBAWAS/CO/CBRNE. |

|  |  |
| --- | --- |
| **f. Procedure to Follow After Attempting to Verify Participation in CBRNE Testing** | Follow the steps in the table below after attempting to verify participation in CBRNE testing. |

|  |  |
| --- | --- |
| **Step** | **Action** |
| 1 | Veterans Service Representative (VSR) directly consults DoD’s online Chem-Bio Database (if he/she has access) or submits an inquiry through Compensation Service.  The minimum information that should be provided with an inquiry to Compensation Service is listed in M21-1 Part IV, Subpart ii, 1.I.8.g. |
| 2 | Can participation be verified by CO or the VSR?   * If *yes*, order disability benefits questionnaire(s) (DBQ(s)) and medical opinions, as appropriate. * If *no*, DoD needs to conduct a more thorough search of their records. Send copies of the Veteran’s personnel records, to include *DD Form 214,* to:   Department of Veterans Affairs  Compensation Service (211B)  ATTN: Chem-Bio Manager  810 Vermont Ave, NW  Washington, DC 20420  ***Note***: If a DBQ is not available, or information is required beyond that provided in the DBQ, continue to use the traditional examination worksheets as a supplement to, or instead of, a DBQ. |

|  |  |
| --- | --- |
| **g. Completing the Request to Compensation Service to Verify Participation in CBRNE Testing** | E-mail requests for verification of participation in CBRNE testing to the CBRNE mailbox at VAVBAWAS/CO/CBRNE.  In the subject heading of the e-mail, type *CBRNE Test*. In the body of the e-mail, include   * Veteran’s full name * VA claims folder number * branch of military service * SSN * service number, if applicable (older DoD records contain only the eight digit service number of test participants) * available test information (for example, test location, description of the test, or how exposure occurred), and * the nature of the disability(ies) claimed as due to exposure to chemical or biological test agents during service.   ***Important***: Even if the claim seems implausible based on evidence in the claims folder (for example, Veteran claims exposure before or after the period of 1955 to 1975), it is DoD’s sole authority to validate whether an individual participated in any chemical or biological test. |

|  |  |
| --- | --- |
| **h. Where to Schedule an Examination for Claims Based on CBRNE Testing** | If an RO determines that an examination is needed in order to decide a CBRNE claim, the RO must submit the examination request to a VA medical facility and not to a contract examiner. |

|  |  |
| --- | --- |
| **i. Information to Include in Examination or Medical Opinion Requests for Claims Based on CBRNE Testing** | The Veterans Health Administration (VHA) has prepared Under Secretary for Health Information Letter, 10-2006-010, *Potential Health Effects Among Veterans Involved in Military Chemical Agent Experiments Conducted from 1955 to 1975,* to address questions about the potential health effects to Veterans involved in the testing of warfare agents. The letter should be brought to the examiner’s attention either on the examination request or in information placed in the claims folder.  When requesting an examination, also include a list of the agents, simulants, tracers, antidotes and other forms of exposure, as applicable, to which Compensation Service has verified exposure for the Veteran in the *Remarks* section of the examination request.  When requesting a medical opinion as to whether there is a relationship between a disease or disability and participation in CBRNE testing during service, include the exposure information provided in response to the request under M21-1, Part IV, Subpart ii, 1.I.8.g on the medical opinion request.  ***Important***: When requesting an examination and/or medical opinion for claims based on CBRNE testing, ensure that the examiner is provided with the claims folder for consideration. |

|  |  |
| --- | --- |
| **j. Actions to Take on EP When a Response From DoD Is Received** | Use the table below to determine the action to take on the EP when a response from DoD is received. |

|  |  |
| --- | --- |
| **If ...** | **Then ...** |
| DoD is unable to verify the Veteran’s participation in a CBRNE test | cancel (PCAN) the EP 683. |
| DoD confirms the Veteran’s participation in a CBRNE test | leave the EP 683 pending until all CBRNE issues are resolved by rating decision and the Veteran is notified. |

**9. Exhibit 1: Fact Sheet Burn Pits in Iraq, Afghanistan, and the Horn of Africa**

|  |  |
| --- | --- |
| **Change Date** | October 23, 2015 |

|  |  |
| --- | --- |
| **a. Fact Sheet: Burn Pits in Iraq, Afghanistan, and the Horn of Africa** | *Fact Sheet for Claims of Exposure Based on Burn Pits in Iraq, Afghanistan, and the Horn of Africa* is shown below. |

|  |
| --- |
| **FACT SHEET**  **Burn Pits in Iraq, Afghanistan, and Djibouti on the Horn of Africa**  NOTICE TO VA EXAMINERS  VA Considers this Veteran Exposed to Burn Pit Toxins  Large burn pits have been used throughout the operations in Iraq, Afghanistan, and Djibouti to dispose of nearly all forms of waste. It is estimated that such pits, some nearly as large as 20 acres, are or have been located at every military forward operating base (FOB). The pit at Joint Base Balad, also known as Logistic Support Area (LSA) Anaconda, has received the most attention. The burned waste products include, but are not limited to: plastics, metal/aluminum cans, rubber, chemicals (such as, paints, solvents), petroleum and lubricant products, munitions and other unexploded ordnance, wood waste, medical and human waste, and incomplete combustion by-products. Jet fuel (JP-8) is used as the accelerant. The pits do not effectively burn the volume of waste generated, and smoke from the burn pit blows over bases and into living areas.  DoD has performed air sampling at Joint Base Balad, Iraq and Camp Lemonier, Djibouti on the Horn of Africa. Subsequently, DoD has indicated that most of the air samples have not shown individual chemicals that exceed military exposure guidelines (MEG). Nonetheless, DoD further concluded that the confidence level in their risk estimates is low to medium due to lack of specific exposure information, other routes/sources of environmental hazards not identified; and uncertainty regarding the synergistic impact of multiple chemicals present, particularly those affecting the same body organs/systems.  The air sampling performed at Balad and discussed in an unclassified 2008 assessment tested and detected all of the following: (1) Particulate matter (PM-10) (and PM 2.5); (2) Polycyclic Aromatic Hydrocarbons (PAHs); (3) Volatile Organic Compounds (VOCs); and (4) Toxic Organic Halogenated Dioxins and Furans (dioxins). Each of the foregoing is discussed below.  Some of the PAHs that were tested for and detected are listed below. These results are from DoD testing from January through April 2007.  Acenaphthene Acenaphthylene  Anthracene Benzo(a)anthracene  Benzo(a)pyrene Benzo(b)fluoroanthene  Benzo(b)fluoroanthene Benzo(g,h,i)perylene  Benzo(k)fluoroanthene Chrysene  Dibenz(a,h)anthracene Fluoranthene  Fluorene Indeno(1,2,3-cd)pyrene  Naphthalene Phenanthrene  Pyrene  The following list reveals some of the VOCs that were tested for and detected at Balad. These results are from DoD testing from January through April 2007.  Acetone Acrolein\*  Benzene Carbon Disulfide  Chlorodifluoromethane Chloromethane  Ethylbenzene Hexane  Hexachlorobutadiene\* m/p-Xylene  Methylene Chloride Pentane  Propylene Styrene  Toluene  \* Acrolein and Hexachlorobutadiene were, although seldomly, detected far above the MEG ratio—once over 1800 percent above the MEG for Acrolein and over 500 percent above the MEG for Hexachlorobutadiene.  Below is a list of the dioxins and furans detected, all reportedly at low doses.  1,2,3,4,6,7,8 HPCDD 1,2,3,4,6,7,8 HPCDF  1,2,3,4,7,8,9 HPCDF 1,2,3,4,7,8 HXCDD  1,2,3,4,7,8 HXCDF 1,2,3,6,7,8 HXCDD  1,2,3,6,7,8 HXCDF 1,2,3,7,8,9 HXCDD  1,2,3,7,8,9 HXCDF 1,2,3,7,8 PECDD  1,2,3,7,8 PECDF 2,3,4,6,7,8 HXCDF  2,3,4,7,8 PECDF 2,3,7,8 TCDD  2,3,7,8 TCDF octachlorodibenzodioxin  octachlorodibenzofuran  For examination purposes, 22 of the VORs and PAHs, affect the respiratory system; 20 affect the skin; at least 12 affect the eyes; and others affect the liver, kidneys, central nervous system, cardiovascular system, reproductive system, peripheral nervous system, and GI tract. In at least seven, dermal exposure can greatly contribute to overall dosage. Therefore, when considering total potential exposure, please consider the synergistic effect of all combined toxins, primarily through inhalation and dermal exposure, but also through ingestion.  This information is not meant to influence examiners rendering opinions concerning the etiology of any particular disability; but rather to ensure that such opinions are fully informed based on all known objective facts. Therefore, when rendering opinions requested by rating authorities for a disability potentially related to such exposure, please utilize this information objectively and together with the remaining evidence, including lay evidence, in the Veteran’s record.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Adjudication Authority |

**10. Exhibit 2: Fact Sheer Particulate Matter Throughout Iraq, Afghanistan, and Djibouti**

|  |  |
| --- | --- |
| **Change Date** | October 23, 2015 |

|  |  |
| --- | --- |
| **a. Fact Sheet: Particulate Matter Throughout Iraq, Afghanistan, and Djibouti** | *Fact Sheet for Claims of Exposure Based on Particulate Matter Throughout Iraq, Afghanistan, and Djibouti* is shown below. |

|  |
| --- |
| **FACT SHEET**  **Particulate Matter throughout Iraq, Afghanistan, and Djibouti**  NOTICE TO VA EXAMINERS  VA Considers this Veteran Exposed to High Levels of Particulate Matter  "Particulate matter” (PM), is a complex mixture of extremely small particles and liquid droplets made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The PM levels in Southwest Asia are naturally higher than most of the world and may present a health risk to service members. There are two sizes of particles in the air that are a health concern—particles with a 10-micron (PM10) diameter or smaller, and those 2.5 microns (PM2.5) and smaller. The size is directly linked to potential for causing health problems. Once inhaled, 10-micron sized particles or smaller can affect the heart and lungs and cause serious health effects.  Primary sources of PM in Southwest Asia and Djibouti on the Horn of Africa include dust storms and emissions from local industries. The DoD conducted a year-long sampling survey to characterize the chemistry and mineralogy of the PM at 15 sites in OIF and OEF. These results were published by the Desert Research Institute in 2008 and are being reviewed by the National Academy of Sciences Committee on Toxicology. DoD stated in their 2008 Balad assessment, that emission from burns pits, among other things, “may increase localized concentration of 2.5 micrometer PM and other potentially toxic air pollutants.”  Most studies relate PM exposure data to respiratory and cardiopulmonary health effects in specific susceptible general population subgroups to include young children, the elderly, and especially those with existing asthma or cardiopulmonary disease. Many variables influence the probability of health outcomes. The key variables are the size-fraction and chemical makeup of the PM, the concentration levels, the duration of exposures, and various human factors to include age, health status, existing medical conditions, and genetics. These variables combined with scientific data gaps limit the medical community’s ability to estimate health impacts to relatively healthy troops. Another key factor is that most studies have been on older or less healthy groups. Several studies to determine potential health effects/outcomes are currently underway.  DoD collected approximately 60 air samples at Balad from January to April 2007 and assessed for PM. The samples were taken from five different locations around Balad. The heaviest measured concentration of PM was taken in April 2007—the concentration level was 299 ug/m3 of PM10 sized particles. In total, 50 of the 60 samples registered above the military exposure guidelines.  This information is not meant to influence examiners rendering opinions concerning the etiology of any particular disability; but rather to ensure that such opinions are fully informed based on all known objective facts. Therefore, when rendering opinions requested by rating authorities for a disability potentially related to such exposure, please utilize this information objectively and together with the remaining evidence, including lay evidence, in the Veteran’s record.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Adjudication Authority |

**11. Exhibit 3: Fact Sheet Sulfur Fire at the Mishraq State Sulfur Mine Near Mosul, Iraq**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Fact Sheet: Sulfur Fire at the Mishraq State Sulfur Mine** | *Fact Sheet for Claims of Exposure Based on the Sulfur Fire at the Mishraq State Sulfur Mine Near Mosul, Iraq*, is shown below. |

|  |
| --- |
| **FACT SHEET**  **Sulfur Fire at the Mishraq State Sulfur Mine Near Mosul, Iraq**  ***NOTICE TO VA EXAMINERS***  ***VA Considers this Veteran Exposed to Sulfur Dioxide and Hydrogen Sulfide***  In June 2003, a fire ignited at the Mishraq State Sulfur Mine in northern Iraq. The sulfur mine is the largest in the world and resulted in the largest manmade sulfur fire in recorded history. It burned for approximately 3 weeks and caused the release of roughly 42 million pounds of sulfur dioxide (SO2) per day; hydrogen sulfide (H2S) was also released.  In early 2007, medical personnel from the U.S. Army Center for Health Promotion and Preventative Medicine visited Ft Campbell, Kentucky, which is the U.S. home base for the 101st Airborne Division. Members of the 101st were firefighters at the Mishraq State Sulfur Mine fire. The medical personnel learned that from late 2004 through February 2007, 41 soldiers, citing exposures to the sulfur fire and reporting unexplained shortness of breath on exertion, had been referred by the Blanchfield Medical Center to a pulmonary specialist at the Vanderbilt Medical Center. As of February 2007, nineteen (19) personnel had an open lung biopsy and were all diagnosed with constrictive bronchiolitis. Constrictive bronchiolitis is an inflammatory and fibrotic lesion of the terminal bronchioles of the lungs. This diagnosis is very uncommon and has been associated with inhalation exposures, organ transplantation, certain drugs, and collagen vascular disorders. Individuals with this finding typically have shortness of breath on exertion, but may have normal chest X-rays and inconclusive findings on pulmonary function testing. Due to some similarities, symptoms of constrictive bronchiolitis may be attributed to asthma or chronic obstructive pulmonary disease (COPD).  Examiners may have a difficult time evaluating this population. In most cases, the affected soldiers are comfortable at rest and are able to perform the activities of daily living. They have normal or near normal pulmonary function tests, but at the same time they become short of breath on slight physical exertion, cannot meet physical training requirements, and are considered unfit for deployment.  This unique circumstance challenges those who must determine a disability rating.  While individual exposure levels cannot be accurately determined, DoD considers constrictive bronchiolitis (initially diagnosed as “bronchiolitis obliterans”) to be plausibly associated with exposure to the 2003 Mishraq State sulfur fire event. This health effect has been scientifically associated with high exposures to SO2.  Both sulfur dioxide and hydrogen sulfide are gases that can produce irritation and reddening of the nose and throat, eye irritation/pain, and coughing. At high levels, sulfur dioxide can burn the skin and can cause severe airway obstruction, hypoxemia, pulmonary edema, and even death. The firefighters involved with suppressing this fire experienced irritation, minor burns, and other effects such as blood-tinged nasal mucous. Some have been found to have long-term respiratory conditions such as “constrictive bronchiolitis.”  **Note**: If the claim is for a respiratory condition possibly related to the sulfur fire exposure consider requesting tests for “bronchiolitis” be conducted in addition to other respiratory testing, while noting that many standard test results may be normal.  This information is not meant to influence examiners rendering opinions concerning the etiology of any particular disability; but rather to ensure that such opinions are fully informed based on all known objective facts. Therefore, when rendering opinions requested by rating authorities for a disability potentially related to such exposure, please utilize this information objectively and together with the remaining evidence, including lay evidence, in the Veteran’s record.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Adjudication Authority |

**12. Exhibit 4: Fact Sheet Qarmat Ali Water Treatment Plant in Basrah, Iraq**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Fact Sheet: Qarmat Ali Water Treatment Plant** | *Fact Sheet for Claims of Exposure Based on the Qarmat Ali Water Treatment Plant in Basrah, Iraq*, is shown below. |

|  |
| --- |
| **FACT SHEET**  **Qarmat Ali Water Treatment Plant in Basrah, Iraq**  NOTICE TO VA EXAMINERS  VBA Considers this Veteran Exposed to Hexavalent Chromium  From approximately April through September of 2003, Army National Guard (NG) personnel from Indiana, West Virginia, South Carolina, and Oregon operated at the Qarmat Ali Water Treatment Plant in Basrah, Iraq. They were assigned to guard contract workers who were restoring the plant. During that time, sodium dichromate, a source of hexavalent chromium was found on the ground and measured in the air. Hexavalent chromium, or Chromium VI (six), in sodium dichromate is a lung carcinogen through inhalation. Chromium VI is also an acidic compound that can cause immediate irritation of the eyes, nose, sinuses, lungs, and skin.  DoD provided a medical evaluation for certain soldiers there at the time, which took place in October 2003. Accordingly, 137 service members were evaluated. The results at the time showed some abnormalities in individuals, such as complaints of eye, nose, throat and/or lung irritation, or abnormal pulmonary function, kidney, or liver tests. However, the Army stated that it could not specifically trace these symptoms to chromium exposure.  The Veterans Health Administration (VHA) has begun to augment the Gulf War Registry to reflect service at Qarmat Ali. VHA is verifying the numbers of these Veterans who have either enrolled in care or received a Gulf War Registry examination. The involved Guard members who have had an initial examination will be recalled to have a complete exposure assessment as well as a more targeted physical examination and ancillary testing to detect indications of health outcomes that may be related to hexavalent Chromium. The Veteran, whose case you are reviewing, may or may not have completed this type of examination. Therefore, please be sure to review any such records if they exist in the VHA health record system for this Veteran.  This information is not meant to influence examiners rendering opinions concerning the etiology of any particular disability; but rather to ensure that such opinions are fully informed based on all known objective facts. Therefore, when rendering opinions requested by rating authorities for a disability potentially related to such exposure, please utilize this information objectively and together with the remaining evidence, including lay evidence, in the Veteran’s record.    Adjudication Authority |

**13. Exhibit 5: Fact Sheet Naval Air Facility, Atsugi, Japan**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Fact Sheet: Naval Air Facility in Atsugi, Japan** | *Fact Sheet for Claims of Exposure Based on the Naval Air Facility in Atsugi, Japan*, is shown below. |

|  |
| --- |
| **FACT SHEET**  **Naval Air Facility, Atsugi, Japan**  NOTICE TO VA EXAMINERS  VBA Considers this Veteran Exposed to Incinerator Emissions  The Department of Defense (DoD) has indicated that during the years between 1985 and 2001, personnel at Naval Air Facility (NAF) Atsugi, Japan were exposed to environmental contaminants. The source was an off-base waste incinerator business owned and operated by a private Japanese company. Known as the Jinkanpo or Shinkampo Incinerator Complex, the operation consisted of a combustion waste disposal complex equipped with four incinerators burning up to 90 tons of industrial and medical waste daily. The complex was located approximately 100 yards south of the NAF Atsugi perimeter and during the spring and summer months the prevailing winds would blow the incinerators’ emissions over the NAF.  Environmental assessment reports conducted during the years of incinerator operations stated that there was significant degradation of air quality at the sites sampled and identified the sources as incomplete burning of wastes in uncontrolled incinerators and evaporation of solvents poured onto outdoor waste piles prior to incineration. The identified chemicals of potential concern included: chloroform; 1,2-dichloroethane; methylene chloride; trichloroethylene; chromium; dioxins and furans; and other particulate matter.  Since the 1990s, the Navy has informed sailors and their family members about the possible long-term health effects of living at Atsugi. The Navy has also published various health information about Atsugi at the following website:  <http://www.med.navy.mil/sites/nmcphc/environmental-programs/Pages/Atsugi.aspx>  This information is not meant to influence examiners rendering opinions concerning the etiology of any particular disability; but rather to ensure that such opinions are fully informed based on all known objective facts. Therefore, when rendering opinions requested by rating authorities for a disability potentially related to such exposure, please utilize this information objectively and together with the remaining evidence, including lay evidence, in the Veteran’s record.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Adjudication Authority |

**14. Exhibit 6: Internet Websites Related to the Issue of Contaminated Water at Camp Lejeune**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Internet Websites Related to Contaminated Water at Camp Lejeune** | *Internet Websites Related to the Issue of Contaminated Water at Camp Lejeune* are shown below. |

|  |
| --- |
| **Appendix A**  *Internet websites related to the issue of contaminated water at Camp Lejeune*  *US Marine Corps Site for Camp Lejeune Contaminated Water*  [https://clnr.hqi.usmc.mil/clwater/home.html](https://clnr.hqi.usmc.mil/clwater/index.html)  *NRC Report on Water Contamination at Camp Lejeune*  <http://books.nap.edu/catalog.php?record_id=12618>  *US Navy Funding of ATSDR Camp Lejeune Studies*  <http://www.navy.mil/submit/display.asp?story_id=51453>  *ATSDR Home Page for Camp Lejeune*  <http://www.atsdr.cdc.gov/sites/lejeune/index.html>  *ATSDR Feasibility Assessment for Future Studies of Camp Lejeune*  <http://www.atsdr.cdc.gov/sites/lejeune/docs/feasibility_assessment_Lejeune.pdf> |

**15. Exhibit 7: Diseases Potentially Associated With Exposure to Contaminants Present in the Camp Lejeune Water Supply Between 1953 and 1987**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Diseases and Exposure to Camp Lejeune Water Supply Between 1953 and 1987** | *Diseases Potentially Associated With Exposure to Contaminants Present in the Camp Lejeune Water Supply Between 1953 and 1987* are shown below. |

|  |
| --- |
| **Appendix B**  *Diseases potentially associated with exposure to contaminants present in the Camp Lejeune water supply between 1953 and 1987*  **I. National Research Council**  The National Academy of Sciences’ National Research Council (NRC) published its *Contaminated Water Supplies at Camp Lejeune, Assessing Potential Health Effects*, in 2009. This report included a review of studies addressing exposure to Trichloroethylene (TCE), andTetrachloroethylene or Perchloroethylene (PCE), as well as a mixture of the two, and a discussion of disease manifestations potentially associated with such exposure. Fourteen disease conditions were identified as having limited/suggestive evidence of an association with TCE, PCE, or a solvent mixture exposure. They include:   * esophageal cancer * lung cancer * breast cancer * bladder cancer * kidney cancer * adult leukemia * multiple myeloma * myelodysplastic syndromes * renal toxicity * hepatic steatosis * female infertility * miscarriage, with exposure during pregnancy * scleroderma * neurobehavioral effects   NRC uses the category “limited/suggestive evidence of an association” when the evidence is “limited by the inability to rule out chance and bias, including confounding, with confidence” [see online report page 6, Box 1]. More specifically, the NRC “concluded that the epidemiological studies give some reason to be concerned that sufficiently high levels of the chemical may cause the disease, but the studies do not provide strong evidence that they actually do so” [see page 7]. While the NRC noted that animal testing showed adverse health effects of TCE and PCE, it also noted that the “highest levels of either TCE or PCE measured in the mixed-water samples at Camp Lejeune were much lower than the lowest dose that caused adverse effects in the most sensitive strains and species of laboratory animals. The lower levels of exposure may be of some concern for effects on neurotoxicity and immunotoxicity, but further research is needed to evaluate the specific effects of TCE and PCE and whether they are relevant to humans” [see page 9].  The National Research Council’s report also contained a listing of disease conditions classified as having inadequate/insufficient evidence to determine whether an association existed. This listing can be found in the report, which is available on the Internet and can be accessed in Appendix C of this training letter.  **II. Other Scientific Organizations**  Assessments of potential long-term health effects resulting from exposure to TCE and PCE, as well as benzene and vinyl chloride, are available from a number of scientific sources. Among the reliable sources are the Chemical Abstract Services (CAS) of the American Chemical Society, the Agency for Toxic Substances and Disease Registry (ATSDR), and the Environmental Protection Agency (EPA). Succinct “substance profiles” are available from CAS, each with a statement of “carcinogenicity” for the chemical compound evaluated. More extensive analyses of the compounds of interest are provided by ATSDR’s “toxic substance portal” and EPA’s “integrated risk information system” (IRIS).  Regarding the reliability of this group of assessments, a distinction is not always made between potential health effects due to inhalation versus ingestion and dermal contact. The contaminants involved are volatile organic compounds and are most commonly encountered by humans in the air rather than dissolved in water, as was the case at Camp Lejeune. However, any of the exposure routes may have occurred.  The health assessments provided by the scientific organizations are summarized below for each contaminant. Their Internet websites, which contain detailed analyses and explanations, are provided in Appendix C of this training letter.  *Trichloroethylene* (TCE), according to CAS, “is reasonably anticipated to be a human carcinogen” based on limited evidence from human studies and sufficient evidence from experimental animal studies. It has been associated with excess incidences of liver cancer, kidney cancer, non-Hodgkin’s lymphoma, prostate cancer, and multiple myeloma. According to ATSDR, drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear. Additionally, animal studies suggest that high levels are associated with liver, kidney, and lung cancer.  EPA revised its assessment of TCE on September 28, 2011, and characterized it as “carcinogenic to humans” by all routes of exposure.  *Tetrachloroethylene or Perchloroethylene* (PCE), according to CAS, “is reasonably anticipated to be a human carcinogen” based on limited evidence from human studies and sufficient evidence from experimental animal studies. It has been associated with esophageal and cervical cancer and non-Hodgkin’s lymphoma. According to ATSDR, pregnant women may be affected, and the rresults of animal studies, conducted with amounts much higher than those to which most people are exposed, show that tetrachloroethylene can cause liver and kidney damage.  *Benzene*, according to CAS, “is known to be a human carcinogen” based on sufficient evidence from human studies. It is primarily associated with increased risk for lymphatic and hematopoietic cancers, total leukemia, and specific histologic types of leukemia, including chronic lymphocytic leukemia, as well as acute myelogenous leukemia. According to ATSDR, epidemiological studies and case reports provide clear evidence of a causal relationship between occupational exposure to benzene and the occurrence of acute nonlymphocytic leukemia, particularly the myeloid cell type or acute myelogenous leukemia. Some studies also provide suggestive evidence of an association with non-Hodgkin’s lymphoma and multiple myeloma. According to EPA’s current IRIS report, benzene is characterized as a known human carcinogen for all routes of exposure based upon convincing human evidence as well as supporting evidence from animal studies. Epidemiologic studies and case studies provide clear evidence of a causal association between exposure to benzene and acute nonlymphocytic leukemia and also suggest evidence for chronic nonlymphocytic leukemia and chronic lymphocytic leukemia. Other neoplastic conditions that are associated with an increased risk in humans include hematologic neoplasms, blood disorders such as preleukemia and aplastic anemia, Hodgkin's lymphoma, and myelodysplastic syndrome.  *Vinyl Chloride*, according to CAS, “is known to be a human carcinogen” based on sufficient evidence from human studies. It is primarily associated with liver cancer, especially angiosarcoma of the liver, as well as cancer to a lesser extent at other tissue sites including the brain, lung, lymphatic system, and hematopoietic system. According to ATSDR, vinyl chloride is a known human and animal carcinogen. It has been associated with both an increased incidence of hepatic angiosarcomas and hepatotoxicity. According to EPA’s current IRIS report, studies demonstrate a statistically significant elevated risk of liver cancer, specifically angiosarcomas, from vinyl chloride exposure. There is also a possible association with brain, soft tissue, and nervous system cancer, as well as cancers of the hematopoietic and lymphatic systems. |

**16. Exhibit 8: Internet Websites Describing Potential Health Effects of Exposure to Chemical Contaminants Present in the Water Supply of Camp Lejeune Between 1953 and 1987**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Internet Websites Describing Health Effects of Exposure to the Water Supply of Camp Lejeune** | *Internet Websites Describing Potential Health Effects of Exposure to Chemical Contaminants Present in the Water Supply of Camp Lejeune Between 1953 and 1987* are shown below. |

|  |
| --- |
| **Appendix C**  *Internet websites describing potential health effects of exposure to chemical contaminants present in the water supply of Camp Lejeune between 1953 and 1987*  **General**  Committee on Contaminated Drinking Water at Camp Lejeune, NRC  <http://books.nap.edu/catalog.php?record_id=12618>  ATSDR (Summary for all contaminants)  <http://www.atsdr.cdc.gov/sites/lejeune/tce_pce.html>  **Trichloroethylene (TCE)**  National Toxicology Program  <http://ntp.niehs.nih.gov/testing/status/agents/ts-10175-p.html>  *ATSDR*  <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30>  *EPA*  <http://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=199>  **Tetrachloroethylene or Perchloroethylene (PCE)**  National Toxicology Program  <http://ntp.niehs.nih.gov/testing/status/agents/ts-10176-t.html>  *ATSDR*  <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=264&tid=48>  *EPA*  <http://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=106>  **Benzene**    National Toxicology Program  <http://ntp.niehs.nih.gov/testing/status/agents/ts-10389-y.html>  *ATSDR*  <http://www.atsdr.cdc.gov/ToxProfiles/TP.asp?id=40&tid=14>  *EPA*  <http://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=276>  **Vinyl Chloride**  National Toxicology Program  <http://ntp.niehs.nih.gov/testing/status/agents/ts-10961-h.html>  *ATSDR*  <http://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=282&tid=51>  *EPA*  <http://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1001> |

**17. Exhibit 9: Notice to Examiners Evaluating Claims Based on Service at Camp Lejeune**

|  |  |
| --- | --- |
| **Change Date** | August 7, 2015 |

|  |  |
| --- | --- |
| **a. Notice to Examiners Evaluating Claims Based on Service at Camp Lejeune** | *Notice to Examiners Evaluating Claims Based on Service at Camp Lejeune* is shown below. |

|  |
| --- |
| **Appendix D** Notice to Examiners Evaluating Claims Based on Service at Camp Lejeune Examiner,  The water supply at Camp Lejeune, North Carolina, was contaminated between 1953 and 1987 with a number of chemical compounds that have been associated by scientific organizations with the potential for developing certain diseases. These include a limited/suggestive association for trichloroethylene (TCE) and tetrachloroethylene, also known as perchloroethylene (PCE), as well as benzene, and vinyl chloride. The Veteran you are examining has verified service at Camp Lejeune during that period and is claiming service connection for (specify disease or diseases claimed). Please evaluate the available evidence, determine whether it is at least as likely as not that the claimed disease is related to the Veteran’s exposure to contaminated water while serving at Camp Lejeune, and provide a medical rationale for that determination.  For assistance, we are providing a document that identifies diseases which have a limited/suggestive association with exposure to the known contaminants in the Camp Lejeune water supply between 1953 and 1987. We are also providing a list of Internet websites from scientific organizations, which analyze the potential long-term health effects of exposure to the contaminants. The web addresses can be copied and pasted into a search engine such as Google in order to access them.  Please conduct any required tests and consider any evidence in the file, or obtained by you, which identifies the duration or extent of contaminated water exposure experienced by the Veteran. Information on how long the Veteran served at Camp Lejeune, and whether the Veteran lived off base, should be considered. Unfortunately, there are many unanswered questions regarding potential exposure to contaminants at Camp Lejeune. They include: the levels of water contamination at various base locations, the amount and duration of exposure experienced by any given Veteran who served there, and the scientific probability that a Veteran’s particular claimed disease resulted from service at Camp Lejeune and not from some other source. |