

SECTION 1 - ADMINISTRATIVE PROCESSING

C3. SAFETY

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C3.1. References.

C3.1.1. List of references.

C3.1.1.1. DLAD 5025.30, DLA One Book, Safety.

C3.1.1.2. DLAD 4100.5, DLA Fire and Emergency Services Program, 13 Oct 95.

C3.1.1.3. DRMS Safety & Health website
<<https://www.drms.dla.mil/drms/intranet/suppservices/safetyhealth.htm>>.

C3.1.1.4. 29 CFR 1910.180, Subpart N, Crawler, Locomotive, and Truck Cranes.

C3.1.1.5. American National Standards Institute, (ANSI) Standards Z87.1-1989.

C3.1.1.6. ANSI Standards Z41.1.

C3.1.1.7. 29 CFR 1910.29.

C3.1.1.8. DRMS 4160.14, Section 2, Chapter 8 - Environmental.

C3.1.1.9. DOD **4160.28-M**, Defense Demilitarization Manual.

C3.1.1.10. MIL-STD-101, Color Code for Pipelines and for Compressed Gas Cylinders.

C3.1.1.11. DLAI 4145.25, Storage and Handling of Liquefied and Gaseous Compressed Gases and Their Full and Empty Cylinders.

C3.1.1.12. DLAM 6055.1, Defense Logistics Agency, Safety and Health Manual, August 1985.

C3.2. Reporting Mishaps/Accidents.

NOTE: How To Notify The DRMS Director About Urgent Incidents.

<https://www.dispositionservices.dla.mil/gov/publications/suppdocs/urgentincidents.pdf>

C3.2.1. Supervisory /Employee Responsibilities.

C3.2.1.1. Employees are to report all mishaps to their immediate supervisor, whether they result in injuries, illnesses, or property damage. Reporting the mishap allows the cause of the accident to be found, and when causes are removed, additional accidents are prevented.

To only consider serious lost-time injuries when reporting accidents is not taking full responsibility for accident prevention.

C3.2.1.2. Supervisors will all record and certify accidents/mishaps on a DLA Form 1591, "Supervisory Mishap Report". The DLA Form 1591 will be forwarded electronically to DES-WRH (Safety and Occupational Health Office), to desbattlecreeksafetyandhealth@dla.mil, within 1 working day of receiving information relative to the accident. Questions can be addressed to Safety and Health staff personnel at the same e-mail address, or contact any safety specialists located on the Safety & Health POCs web page.

C3.2.2. Types of Accidents/Mishaps & DLA Form 1591.

DLA Form 1591 must be completed for the following types of mishaps:

C3.2.2.1. Personal Injury Accidents - There are four categories of personal injury accidents:

C3.2.2.1.1. Occupational injury/illness cases involving days of restricted work activity and/or lost workdays.

C3.2.2.1.2. First aid or non-fatal cases without lost time workdays. This usually involves going to the first aid clinic and returning to work the same day.

C3.2.2.1.3. Exposure/possible exposure to hazardous items or environmental conditions.

C3.2.2.1.4. Fatalities.

C3.2.2.2. The following steps shall be taken for a personal injury accident:.

C3.2.2.2.1. Individuals at the accident scene shall only remove the injured person if conditions exist for further injury.

C3.2.2.2.2. The accident shall be reported as soon as possible to the injured employee's immediate supervisor/DRMO Chief. All accidents resulting in serious, fatal, or multiple injuries, should be reported immediately to the host safety office, FST and the DRMS Safety and Health Office at (269) 961-5866 or (DSN) 661-5866. After duty hours, emergencies maybe directed to the Battle Creek Staff Duty Officer at (DSN) 661-4233, or (269) 961-4233.

C3.2.2.2.3. The supervisor/DRMO Chief shall make sure that the injured person receives the needed medical care.

C3.2.2.2.4. The supervisor/DRMO Chief shall investigate the accident and record the findings on the Mishap Report.

C3.2.2.2.5. The supervisor/DRMO Chief shall then remove all hazards or conditions

that caused the accident.

C3.2.2.2.6. The supervisor/DRMO Chief shall complete the remainder of the Mishap Report and electronically forward it, to the Disposal Service Director (DSD). The DSD will review the mishap and electronically forward to DES-WRH at [DES Battle Creek Safety and Health](#).

C3.2.2.3. Personal Injury Involving a Contract Employee:

C3.2.2.3.1. DRMO employees discovering a downed or injured contract employee are to contact the nearest medical facility by dialing their respective emergency response numbers.

C3.2.2.3.2. If a Government employee, facility or equipment is a potentially causative factor in the injury, the Supervisor/DRMO Chief, COR or Contract Officer shall request a copy of the contract employee's accident report and forward to DRMS Headquarters, Battle Creek, Safety and Health Office.

C3.2.2.4. Property Damage Accidents. There are three categories of property damage accidents:

C3.2.2.4.1. Property damage caused by DRMS personnel regardless of to whom the property belongs.

C3.2.2.4.2. Property damage to a DRMS facility/equipment.

C3.2.2.4.3. Motor Vehicle accidents.

C3.2.2.5. Accidents/mishaps involving Government employees, equipment or vehicles:

C3.2.2.5.1. The accident shall be reported to the employee's immediate supervisor/DRMO Chief as soon as possible (and to emergency services personnel, if appropriate).

C3.2.2.5.2. Accidents involving property damage more than \$1,000. Property damage less than \$1,000 does not require a mishap report.

C3.2.2.5.3. The supervisor/DRMO Chief shall investigate the accident and record the findings on the Mishap Report.

C3.2.2.5.4. The supervisor/DRMO Chief shall then remove all hazards or conditions that caused the accident.

C3.2.2.5.5. The supervisor/DRMO Chief shall complete the remainder of the Mishap Report, including actual/estimated cost of property damage, and electronically forward it to either their DRMO Chief or Forward Support Team for review. The FST then electronically forwards it to DRMS-WH, safety@mail.drms.dla.mil.

C3.2.2.6. Accidents/mishaps involving Contractors. (In addition to the above):

C3.2.2.6.1. The Supervisor/DRMO Chief or COR shall investigate any property damage mishaps with the contractor supervisor.

C3.2.2.6.2. The Supervisor/DRMO Chief, COR or Contract Officer shall obtain and forward the contractor's mishap report to DRMS Headquarters, Battle Creek, Safety & Health Office.

C3.2.2.6.3. The Supervisor/DRMO Chief or COR shall identify the name of the contract employee on Line 6 of the DLA form 1591.

C3.3. Accident Investigation.

C3.3.1. Responsibilities of Investigation and Reporting.

C3.3.1.1. The occurrence of an accident may mean prevention was inadequate; a failure by management, the employee, or within the design of a machine, a process, or the working conditions. The purpose of accident investigation or reporting is to discover the point of failure, the causative factors, and the hazardous conditions or practices bringing about the accident, so to illicit proper action to take preventing a reoccurrence. There are many causes of accidents and usually several contributing factors, per incident. Learning where, when, how, and to whom accidents are happen is vital to learning how to avoid them.

C3.3.1.2. Accidents should be reported and investigated immediately. When a person is injured, the supervisor first obtains medical help for the employee, protects additional employees from injury (if a hazard still exists) and then takes immediate action to correct the hazard. The supervisor should complete the Mishap Report at the time of the initial event. He or she should look for both unsafe conditions and unsafe acts, which may have caused or contributed to the accident. Also remember that the purpose of the accident investigation is to prevent future accidents. Fixing blame is not the intent of the accident report; moreover, removing the causal factors of the accident is the main objective.

C3.3.2. Interviewing Witnesses.

C3.3.2.1. Witnesses should be interviewed promptly after the accident while memories are fresh and still unaffected by other's opinions. In addition, for that reason witnesses should be separately interviewed.

C3.3.2.2. Reassure witnesses of the investigation's purpose. Supervisors should explain that ascertaining the facts is important in preventing future accidents. Emphasis should be placed on the important service the witness is providing by giving honest responses. If municipal policy permits, they should reassure witnesses that their testimony would not result in disciplinary action against the injured employee.

C3.3.2.3. Obtain the witnesses' version with minimal interruption. Witnesses should be interviewed at the scene of the accident whenever possible. Supervisors should ask witnesses to recount the accident or incident in their own words and should not interrupt them unless a question is needed for clarity.

C3.3.2.4. Direct specific questions to clarify or amplify the witness's account. Supervisors should avoid leading questions and should maintain a friendly attitude to help the witness feel comfortable about answering the questions.

C3.3.2.5. Summarize witness statements. Clarify any questionable areas, to assure that the witness's account and the supervisor's understanding of it are in agreement.

C3.3.3. Establishing Accident Facts.

C3.3.3.1. Gather basic facts. In accident investigations, the first facts to be established are the identities of those directly involved and the time the accident occurred (date and exact time). These facts permit identification of possible witnesses; specify the shift, weather conditions, supervisors in charge and other factors that may be important.

C3.3.3.2. Check the scene. Begin where the accident occurred and reconstruct as much as possible without producing a reoccurrence.

C3.3.3.3. Collect the evidence. If an injury or near accident occurred because structures, equipment or machinery parts failed, it is essential to examine the failed parts to determine why the failure happened.

C3.3.3.4. Determining the location of the accident. The location is important, as it can be used in identifying high-risk areas. This information might also raise questions about the safety of other employees in the area.

C3.3.3.5. Identifying the employee's job description. The injured employee's position, occupation or job title should be determined so that the risk hazard by job or occupation can eventually be evaluated.

C3.3.3.6. Determining physical capabilities of the employee for performing the job. Determine whether the employee had sufficient experience to perform the task.

C3.3.3.7. Identify the task that was being performed when the accident occurred. This information will address specific duties within a job or occupation, such as changing a tire, demilling weapons, or lifting material. The task involved can be used to identify specific hazardous job task, equipment and/or procedures, as well as employee capability and the need for additional training.

C3.3.3.8. Determine a precise account of the accident. This should be a detailed account of the accident or incident and a description of the events leading to it. The following information is needed:

C3.3.3.8.1. Accident location description.

C3.3.3.8.2. Conditions at the time of the accident (Also other general information that may be considered as possible contributing factors.)

C3.3.3.8.3. Ascertain the injured employee's physical position in terms of the surroundings.

C3.3.3.8.4. Determine the employee's actions immediately preceding the accident.

C3.3.3.8.5. Describe the circumstances that might have precipitated the accident.

C3.3.3.8.6. Describe the accident or incident using specifics. Use descriptive words; for example: struck by, caught between, over exerted, rubbed against, abraded against, contact temperature extremes, or contacted caustics.

C3.3.3.8.7. Specifically describe the injury(s) or property/equipment damage. Injuries should specify the body part injured and the type of injury, such as low back strain, cut on forehead, crushed finger. Property/equipment damage should include an actual or estimated cost, and if not currently available, follow-up information should be forwarded when it becomes available.

C3.3.3.9. Accident prevention plans. An accident investigation is not completed until corrective action has been determined. Action to prevent recurrences should be identified on the basis of the direct and the indirect causes of the accident under study.

C3.3.4. Completing the Accident Mishap Form (DLA Form 1591).

C3.3.4.1. DLA Form 1591 must be completed in full.

C3.3.4.2. Line 2. Type in the day, month and year the mishap took place.

C3.3.4.3. Line 3. Place military or ZULU time in this space.

C3.3.4.4. Line 4. Mishap Organization. DRMO _____, (RIC Code).

C3.3.4.5. Line 5. Mishap Location. Type in the exact location of the Mishap, i.e., Southeast side of the scrap yard, Building 4c, Hazardous Storage location, etc. Use primary and secondary locations, if necessary. Draw a picture or diagram if necessary.

C3.3.4.6. Line 6. Mishap Description. Be specific and fully describe all circumstances. A notation of "tripped over forklift wheels" is not an adequate statement. There are causal factors to every accident and it is up to the investigator to determine all factors surrounding the incident, in order to seek their correction. This is vital in preventing future accidents. Continue to investigate until the root cause is found. See questions in table below as examples.

Figure 1 - Investigative Questions

Examples of Questions for Accident Investigations:

Was forklift parked or moving? Identify the operator, if machine/.vehicle was in motion.
In what direction was the employee walking when the accident occurred (or were they stationary)?
What was the employee doing prior to the accident occurrence?
Were there any witnesses? (Name them and get a statement from each.)
What did the witnesses observe?
Was the lighting sufficient? What was the time of day? If applicable, was the sun in the eyes of either the injured employee or the forklift operator?
Describe the surface the employee was walking on at the time of the accident.
Is the employee handicapped?
Does the injured employee wear corrective eyewear and were they wearing it at the time of the accident?

C3.3.4.7. Line 7. Mishaps involving Contractors. Information must include contractor's name, contract number, employee's name.

C3.3.4.8. Line 8. Motor Vehicle Information. Note all appropriate information, i.e. year, make, type of the vehicle, license number, VIN, permits, seat belts. Complete line 9, if two vehicles were involved in the mishap.

C3.3.4.9. Lines 9-12. Additional Vehicle Information. Use these spaces if two or more vehicles were involved in the mishap.

C3.3.4.10. Description of Property Damage. Describe all damage in detail. Attach pictures, if available. Note the vehicle number, the type of vehicle, etc. Write down the location of property damage, and the extent.

C3.3.4.11. Line 14. Equipment/Property/Motor Vehicle Damage Description. Be specific and describe the damage in detail. Complete information will assist the reviewer to provide a more accurate total estimate.

C3.3.4.12. Line 15. Provide Information about each person involved in the mishap and/or damage incident. Print the information clearly. Write the organization and the RIC code clearly. Check the boxes indicating whether the person involved is military or civilian, etc. As this section is extremely important, be sure all boxes are completed. Include specifics as to the injured area(s) of the body. If a person received a cut on the hand, note the exact location and description of the injury, etc.

C3.3.4.13. Line 16. Supervisor's Information. Print legibly; there is plenty of space. The supervisor should clearly write his/her phone number and e-mail address, along with the DRMO and the RIC identification information. This applies to Headquarters/HDI Federal Center staff supervisors of the injured employee, as well. The corrective actions should include all causal

factors and describe how the DRMO/facility has eliminated the mishap from reoccurring. Examples of notes regarding preventive measures: *“Painted aisle markers”*, *“Placed in a work order to fill in the holes”*, *“called equipment people to put a guard on the machine”*, *“contacted GSA”*.

C3.3.4.14. Line 17. Reviewer’s Information. The next person in the DRMO or Headquarters/HDI Federal Center Chain of Command will review the mishap information for completeness and comment. This person may be the DRMO Chief, the Central DRMO Chief, or the FST. He/She would review to ensure that all causal factors have been properly eliminated. Headquarters/HDI Federal Center Staff Division Chiefs/Deputies will also review and sign this section. The accident or Mishap Report does not place blame, it is used to investigate and eliminate causal factors of accidents/incidents for prevention actions. Continue to review accident information and statements from the employee/witnesses involved to arrive at a full and more accurate account of the occurrence. Upon noting information, do not write, *“the employee received refresher training.”* Note when the employee had his last refresher training and what was covered during this training, etc. Include whether or not the equipment was new and if the supervisor provided training prior to the employee doing the task.

C3.4. Medical Services.

C3.4.1. Right to Choice of Physician and Forms to be Used.

C3.4.1.1. An employee is entitled to choice of physician for treatment of an injury. He or she may choose any licensed physician in private practice who is not excluded, or he or she may choose to be treated at a government facility. Should the employee desire to see their private physician for any work related injuries or if the employee can no longer work, the following forms are necessary:

C3.4.1.2. CA-1. Federal employee’s Notice of Traumatic Injury and Claim for Continuation or Pay/Compensation (on Adobe Forms under Miscellaneous). Complete the employee portion, attach all medical back up and make sure that the supervisor/DRMO Chief completes and signs the form. See paragraph 5 for additional filing information.

C3.4.1.3. CA-16. If medical attention is required outside the facility, and within 48 hours of the incident, a Form CA-16 (on Adobe Forms under Miscellaneous) must be completed. The supervisor/DRMO Chief or medical personnel will complete the front page. The form should then be taken to the employee’s medical provider, who must complete the back page and forward it directly to the address noted on the form.

C3.4.1.4. CA-7, CA-7a, and CA-20. If the employee has lost time at work and is not receiving pay, file a Form CA-7. A CA-7a or CA-7b may also be needed, depending on circumstances. The employee’s physician must fill in a Form CA-20. HROC will assist if any of these forms must be filed (on Adobe Forms under Miscellaneous).

C3.4.2. Processing of CA Forms and Medical Bills and Employee Responsibility.

C3.4.2.1. Mail all CA forms (except CA-16, which has a unique address on the form) to the following address:

DLA-HROC, Workers Compensation
Attn: DRMS Claims POC, P.O. Box 13919
Columbus, Ohio 43213-0919

C3.4.2.2. Forms may be faxed to (614) 692-0265. For a speedy routing, be sure to show the above address on a cover page.

C3.4.2.3. Within Approximately 10 days the employee should receive a Form CA-801 showing their OWCP claim number. This number must be entered on all medical bills. Forward all bills to:

U.S. Department of Labor
Office of Workers Compensation, Room 851
1240 East Ninth Street, Cleveland, Ohio 44199

C3.4.2.4. The employee must keep the supervisor/DRMO Chief informed of their condition, if the employee is unable to work due to the work-related injury or illness.

C3.4.2.5. Any questions can be directed to the DRMS Claims POC (DLA-HROC) at (614) 692-0200 or DRMS-WH (269) 961-5866 or (DSN) 661-5866.

NOTE: If the proper paper work is not completed or submitted on time, medical bills may become the employee's responsibility.

C3.5. Inspections.

In order to manage a Safety and Occupational Health Program, it is essential to have management and employees observe the conditions, equipment, and situations in which the workforce must deal with, during all job tasks. Self-inspections are an excellent method of assessment in the workplace. The following are the required self-inspections for DRMS employees.

C3.5.1. Types of Self-Inspections.

Types of self-inspection required at DRMS Field Activities (i.e., DRMOs, DEMIL Centers, and Controlled Property Centers (CPCs), and DRMS off-site storage locations (i.e., Scrap Venture locations, DRMS receipt in place locations (RIPLs), but not "generator" receipt in place sites)) to mitigate industrial accidents and assure a safe workplace are:

C3.5.1.1. Inside and Outside Storage Areas:

C3.5.1.1.1. DRMS Field Activities (See C3.5.1 for description of DRMS Field Activities) - inside and outside storage areas.

C3.5.1.1.2. Non-permitted hazardous waste (HW) storage facilities.

C3.5.1.1.3. General Safety Conditions - Inside/Outside.

NOTE: Paragraphs C3.5.1.1.3.1 thru .5 were revised, moved and re-numbered as C2.6.5.1. thru 4. Remaining paragraphs have been renumbered.

NOTE: These inspections utilize the DRMS Inspection Log CAMS Version. See C2.6.5 DRMS Inspection Log CAMS Version for additional guidance. DRMS Inspection Log CAMS Version has replaced the DRMS Form 2000 Sep 2007, DRMS Forms 352, 1840 and the unnumbered DRMO Usable/Scrap yard Inspection Checklist.

C3.5.1.2. Part B Permit DRMOs.

C3.5.1.2.1. Inspections utilizing DRMS Form 1713 for DRMOs operating a Part B permit.

C3.5.1.2.2. DRMOs operating under a Part B permit must follow the inspection procedures in their permit. The regulations in 40 CFR Parts 264 and 265.15 are essentially identical and specify criteria for determining what to inspect and how often to inspect it.

C3.5.1.2.3. Equipment and areas that must be inspected include:

C3.5.1.2.3.1 Personal protective equipment.

C3.5.1.2.3.2 Material handling equipment.

C3.5.1.2.3.3 Emergency equipment.

C3.5.1.2.3.4 Security equipment.

C3.5.1.2.3.5 Building.

C3.5.1.2.3.6 Container storage areas.

C3.5.1.2.3.6.1 Inspections of container storage areas must be conducted at least weekly. Areas subject to spills, such as loading and unloading areas, will be inspected daily when in use.

C3.5.1.2.3.7 Mobile equipment.

C3.5.1.2.4. It is very important to document in the log any problems found and when, the date and nature of corrective action, the date and time of inspection, and the name of the inspector.

C3.5.1.2.5. The DRMO is required to retain a written record of the inspection procedures and results for a minimum of 3 years.

C3.6. Radiation Program.

C3.6.1. Radiation Program.

The Defense Reutilization and Marketing Service (DRMS) Radiation Protection Policy is centered on Prevention. DRMS policy is not to physically accept any items or material containing any level of radioactivity. DoD 4160-21.M and DLA.I 4145.8 has policy and procedure for the Reutilization, Transfer, Donation, and Sales of Low Level Radioactive Material (LLR). Detection of LLR starts by visual inspection of receipts. Gate Monitors and hand held radiation meters alert the possible presence of LLR. NSN numbers have been programmed into DAISY as SALD (Safety Alert Latent Defect) items, alerting DRMO receivers to potential LLR material.

C3.6.2. Description-Radiation.

Radiation is an energy given off by an unstable atom as it decays. Many radioactive materials, such as radium, uranium, and others, occur naturally and are found in the ground. These and other sources of naturally occurring radiation make up what is commonly referred to as background radiation. This is low level radiation that is always present, and varies by geographic region or area. The Radiation Gate Detector System is primarily designed for Scrap metal. It can detect some radioactive materials in containerized receipts. The most important factors to consider when using gate monitors to detect radioactive materials is:

C3.6.2.1. Background radiation is not constant. It is continually changing due to cosmic events, weather, and other influences.

C3.6.2.2. The farther away from the source of radiation, the less it can be detected.

C3.6.2.3. The longer the time that the detectors have to look at the source, the better the reading will be. For this reason, the slower the vehicle passes through the system, the better the chance for detecting a potential source.

C3.6.2.4. The amount of scrap and its density play a large part in the detector's ability to detect a potential source. The more material between the sources, the more difficult for the instrument to detect.

C3.6.2.5. The larger the detector (Sodium Iodide), the more sensitive it will be.

C3.6.2.6. The more shielded the detector is, the more sensitive the detector will become.

C3.6.2.7. Considering all the above circumstances, the most effective way to monitor loads is to have large detectors as close to the receipts as possible, and moving past the system as slow as possible. Another factor is to monitor the system, making adjustments to the

detector in order to keep the alarm as close to background as possible without causing “false alarms”.

C3.6.3. Radiation Gate Monitors.

Most Radiation Gate Monitors or Radiation Detector Systems purchased by DRMS are manufactured by Ludlum Industries. The company is located in Sweetwater, Texas, their phone number is 1-800-622-0828. The Radiation Detector is designed to detect low levels of radiation in scrap passing through the system. Hand held detectors can also help to locate LLR material when processing material. When the Gate Monitor System detects a radioactive commodity, the alarm circuit will automatically activate and warn the user. Some systems are equipped with printers, which detail the time and date of the warning.

C3.6.4. Calibration.

Radiation Detectors should be calibrated every other year, and immediately if the detector is involved in a mishap. Calibration is done by using the Cesium Calibration source, which was provided with the gate monitor. Your Gate Monitor Manual illustrates and explains how to calibrate your monitor. The [Disposition Services Site](#) should also have a video which would also clarify the calibration procedure. Some host Radiation Protection Officers will calibrate the Gate Monitor. If your RPO is unable to provide this service, contact the [DLA Disposition Services Battle Creek Safety and Health Office](#) for assistance. If the [Disposition Services Site](#) does not have a copy of this service manual, another can be obtained by contacting the [Disposition Services Site/DLA Installation Support Safety and Occupational Health Branch](#). It is important that you store your calibration chip in a safe and secure place, as it is the only tool (source) recommended for calibration. Ask your host Radiation Protection Officer for storage assistance, to ensure it will not be misplaced. Check your equipment **daily, or prior to use, whichever is less**, to ensure it is operational. You can “walk” your Calibration chip through the monitor to ensure the alarm and system is operational. **Edited May 2012**

C3.6.5. Maintenance.

Consult your operator’s manual or trouble shooting guide, if your detector is experiencing any problems. If the detector was accidentally bumped or damaged, you are encouraged to contact the DES Battle Creek Safety Office or DES Battle Creek Facility Office for assistance. A SITREP report should be filed. The Ludlum Company does have a repair/calibration department and can be reached at 1-800-622-0828. To ensure your gate monitor gets serviced, follow these procedures:

C3.6.5.1. Contact DES Battle Creek Safety or DES Battle Creek Facilities to ensure funding is available.

C3.6.5.2. Call 1-800-622-0828, talk with a Ludlum technician to determine what needs to be repaired.

C3.6.5.3. Confirm with the Ludlum technician if a local electrician or host electrician can perform the repair. Provide Facilities/Safety with a repair estimate to include parts and labor (for

approval).

C3.6.5.4. Most repairs can be paid for using the IMPAC card.

C3.6.5.5. If the repair exceeds the limits of the IMPAC card DES Battle Creek Facilities will fund accordingly.

C3.6.5.6. Remember to follow all applicable procedures for the use of the IMPAC Card.

C3.6.5.7. You are advised to consult your operator's manual or trouble shooting guide, if your detector is experiencing any problems.

C3.6.6. Procurement.

Some DRMO's receive a higher amount of radioactive material (receipts) than others. DRMOs that are located on Military installations where there is a higher receipt rate of LLR are candidates for Gate Monitors. The following is the criteria for consideration:

C3.6.6.1. SITREPs indicating a high traffic of radioactive items through the DRMO.

C3.6.6.2. Quarterly Radiation Surveys indicating high item discovery. (Edited Sep 2012)

C3.6.6.3. Host Radiation Protection Officer Support.

C3.6.6.4. Volume of Scrap Metal.

C3.6.6.5. Headquarter Approval.

C3.6.6.6. Fund Availability.

C3.6.7. Procurement Procedures.

C3.6.7.1. DES Battle Creek determines, in coordination with DRMS Operations/DEMIL, where Radiation Detectors should be located, what type, and prioritizes.

C3.6.7.2. DES Battle Creek Facilities coordinates with DRMO personnel to have the DRMO submit a work order based on the arrival of the equipment, to the host, and obtain a cost estimate.

C3.6.7.3. DRMO will forward the Host work order cost estimate, to DES Battle Creek Facilities.

C3.6.7.4. DES Battle Creek Safety purchases the proper Radiation Detector(s) and has them shipped to the designated location(s).

C3.6.7.5. DES Battle Creek Facilities transfers funds to the appropriate FST to forward a

MIPR to the host. This transfer ensures the appropriate funding for the pre-installation of the detector. This includes engineering, laying of concrete, power, etc.

C3.6.7.6. The host installs the necessary equipment support elements: posts, power, communication, etc.

C3.6.7.7. DES Battle Creek Facilities will track the status of the equipment installation funds/projects and coordinate with DES Battle Creek Safety when the pre-installation is complete.

C3.6.7.8. DES Battle Creek Safety arranges for equipment installation, hook-up, calibration, and training for the detector.

C3.6.8. Hand-Held Radiation Meters.

If funds are available, and the DRMO has a need for a Radiation Meter (per recommendation from their host Radiation Protection Officer), DRMS Safety and Health and/or Facilities/Equipment can purchase one for you.

C3.6.8.1. All Radiac meters will be calibrated annually. Radiac Meters should be used for the receipt, transfer, storage, removal and transport of material back to the generator. Your host RPO can advise you regarding calibration of the Radiac Meter.

C3.6.8.2. Radiac Meters are very sensitive and can be placed closer to the source, especially during the receipt process. It is not necessary that the user become proficient in the use of the Radiac Meter, only to use it as a means of detection. Should the DRMO discover a potential source, the host Radiation Protection Officer can be summoned to assist with removal, storage, and transport back to the generator. The Radiac Meter can also be used to check outgoing shipments of material prior to release.

C3.6.9. Inter-Service Support Agreements (ISSA). In lieu of ISSA, sites can get radiation/industrial hygiene survey support by another means (e.g., contractor performance or DLA Installation support) as long as that support is documented and filed in the site administrative file. If your DRMO has a history of inadvertently receiving Low Level Radioactive items (LLR), then the DRMO should ensure that their ISSA complements their operation. A copy of an Inter Service Support Agreement is attached (Enclosure 7). At a minimum, the ISSA should have the following support from the host:

C3.6.9.1. Ensure at least **an annual** ~~4 quarterly~~ radiation surveys **are is** conducted at the ~~DRMO~~ **DLA Disposition Services field activity (Edited Sep 2012).**

C3.6.9.2. Ensure the host RPO will respond to assess materials identified as potentially containing radioactive material.

C3.6.9.3. Ensure the host has the capability to remove the radioactive source.

C3.6.9.4. Ensure the host could provide radioactive training if requested.

C3.6.9.5. Ensure the host can provide assistance in removal efforts by packaging,

labeling and storage. If the DRMO does not have this support, the DRMO should contact DES-Battle Creek (DES-WRH) (DES-WRH) Safety and Health Office.

C3.6.9.6. Ensure the host can assist the DRMO with calibration, training and usage of hand held Radiac Meters or the Radiation Detector.

C3.6.10. Training.

As part of the installation contract, a Ludlum Technician will provide training on the gate monitor, as well as the hand held Radiac Meter. The DRMO should allow at least three employees to participate in the training session. The training will consist of Start-up, calibration and troubleshooting. Each operator should become thoroughly familiar with the set up and operation of the monitor. The DRMO should advise the host Radiation Protection Office of the training and request their attendance. DES Battle Creek Safety and Health Office also have training films pertaining to your Gate Monitor, and are available upon request.

C3.6.11. Employee Awareness.

Radioactive materials arrive at the DRMO in many ways. It could be through improper identification of receipts, or material misplaced or mixed in a container. In any case, detection at the early stage of receipt is very important, because the identity of the generator is easier to determine. Every effort should be made to return the material to the generator as it is very expensive to dispose of radioactive materials. If generator identity is lost, DRMS then has the burden for disposal. It is important that the receiver opens enough packages to feel confident the remaining items are free of radioactive items. This is especially true for material being transshipped to outside contractors. If LLR is discovered, and the generator wishes to dispose of the radioactive items, DES Battle Creek, Safety and Health Office will offer assistance.

C3.6.12. Low Level Radiation.

Materials containing low level radiation may inadvertently be transported to our contractor facilities, such as our Demanufacturing Contractors. In some cases, these items have visible radioactive emblems. An even larger problem results when radioactive materials are shipped to a contractor scrap yard or smelter. Additional procedures that can be taken are:

C3.6.12.1. Review receiving documents closely for any labels, signs, etc., which may indicate low level radioactive material. Insure the turn in documents are certified.

C3.6.12.2. Return any material to the generator flagged by DAISY that indicates the material may contain a radioactive source.

C3.6.12.3. File a Situation Report (SITREP) for any radioactive material entering the DRMO. This includes those items returned to the generator. Be able to provide an NSN number, a copy of the DD Form 1348-1A, the emission source level, and a copy of the 917 (Return to Generator Document).

C3.6.12.4. Follow all guidance pertaining to R/T/D and Sales of Radioactive commodities according to DLAM 4160.21M.

C3.6.13. Radioactive Materiel at the contractor site.

The following procedures will be taken when Radioactive Material is discovered at the contractor's facility:

C3.6.13.1. The demanufacturing contractor notifies the COR/COTR immediately.

C3.6.13.2. The COR will contact DES Battle Creek Safety and Health Office and the Contracting Officer for assistance regarding the safety and health risks of the material. The COR will provide the safety office with the NSN, item description, and the level of radioactivity. The COR will advise DES-Battle Creek (DES-WRH) (DES-WRH) Safety and Health Office the location from which the material was shipped. A SITREP will be prepared and forwarded.

C3.6.13.3. Should radioactive material be discovered, the contractor (e.g., procurement and demanufacturing contractor) shall take appropriate steps to protect personnel and property. The contractor shall notify the COR/COTR and the CO immediately and the government will arrange to have the material removed.

C3.6.13.4. The DES-Battle Creek (DES-WRH) Safety and Health Office, in conjunction with the COR/COTR, will determine whether the material is to be returned to the generator or processed. DES-Battle Creek (DES-WRH) Safety and Health Office will coordinate with a Disposal Facility if the material has been determined Rad Waste. Any special handling requirements will be advised to the COR.

C3.6.13.5. If the material is to be returned, the COR will make arrangements with the shipping DRMO.

C3.6.13.6. The DRMO will contact the generator to make transportation arrangements.

C3.6.13.7. Every effort must be made to quickly remove radioactive items at contractor facilities, as it could result in fines or adverse publicity.

C3.6.14. Customer Receipts.

Oftentimes, the generator is unaware that radioactive material can be properly disposed of or stored by their respective services. This could be because they are unaware of who to contact. The below numbers can offer customer assistance:

C3.6.14.1. United States Army. Rock Island Radiation Retrieval. Phone number is (309) 782-0338.

C3.6.14.2. United States Navy. Navy Rad Office. (757) 887-4692.

C3.6.14.3. United States Air Force. Brooks Air Force Base. (210) 536-6029.

NOTE: Rock Island Radiation Retrieval is the Chartered Department of Defense Agency. They have Health Physicists on Staff which will assist towards labeling, handling, shipping, storage, and disposal of radioactive items.

DO NOT ACCEPT, HANDLE OR STORE RADIOACTIVE ITEMS.

DO NOT SELL RADIOACTIVE ITEMS.

DO NOT SELL RADIOACTIVE ITEMS ON THE INTERNET.

RAD ITEMS THAT HAVE HAD THE ISOTOPE REMOVED MUST BE CERTIFIED.

WHEN ITEMS HAVE BEEN CERTIFIED, LABELS MUST BE REMOVED.

C3.7. Safety and Occupational Health Instruction.

C3.7.1. References.

C3.7.1.1. 29 CFR 1910.180, Subpart N, Crawler, Locomotive, and Truck Cranes. American National Standards Institute, (ANSI) Standards Z87.1-1989.

C3.7.1.2. ANSI Standards Z41.1.

C3.7.1.3. 29 CFR 1910.29.

C3.7.1.4. Section 2, Chapter 8 - Environmental Program, this instruction.

C3.7.1.5. DOD 4160.28-M, Defense Demilitarization Manual.

C3.7.1.6. MIL-STD-101, Color Code for Pipelines and for Compressed Gas Cylinders.

C3.7.1.7. DLAI 4145.25, Storage and Handling of Liquefied and Gaseous Compressed Gases and Their Full and Empty Cylinders.

C3.7.1.8. DLAM 6055.1, Defense Logistics Agency, Safety and Health Manual, August 1985.

C3.7.2. General.

C3.7.2.1. The types of property that flow through the disposal system, the condition of this property, and its containers, present a variety of hazards that are unique to property disposal operations. The mitigation procedures in this instruction cover some of the disposal aspects that have either caused mishaps or have high mishap potential.

C3.7.3. Personal Protective Equipment.

C3.7.3.1. *Personal Protective Equipment (PPE)* is required for all job hazards that cannot be removed by engineering methods or otherwise controlled administratively. The

DRMO Chief or Supervisor is responsible to assure that the host industrial hygienist and/or safety office assist in making this determination. The employee's immediate supervisor is required to document that this hazard assessment was accomplished before the employee begins work, using a PPE Certification Form. If the hazard assessment determines that PPE is necessary, the DRMO is responsible to assure that the employee(s) receive training in the selection and proper use of the PPE. If there is a change in the equipment or process requiring PPE or a significant change in the PPE itself, new PPE Certification Forms and training will be accomplished.

C3.7.3.2. Training will consist of:

C3.7.3.2.1. when PPE is necessary.

C3.7.3.2.2. what PPE is necessary.

C3.7.3.2.3. how to properly don, doff, adjust, and wear the PPE.

C3.7.3.2.4. the limitations of the PPE.

C3.7.3.2.5. the proper care, maintenance, useful life, and disposal of the PPE.

C3.7.3.2.5.1 The employee must physically demonstrate their understanding of this training and the DRMO supervisor must attest to their demonstration of proficiency. A written certification will be prepared by the employee's supervisor to verify that the employee has received and understood the required training. The certification forms for the hazard assessment and the PPE proficiency demonstration may be found in Section 4, Supplement 1, Chapter 3, Enclosure 5, <<http://www.drms.dla.mil/publications/4160.14/section4/s4s1.pdf>>

C3.7.3.3. Protective Eyewear:

C3.7.3.3.1. Eyesight can be lost in a split second. This loss does not have to be the result of a heavy or severe blow. Eyesight can be lost from a very small object, such as a piece of flying metal from a grinder, a defective hand tool, or even debris blown by the wind.

C3.7.3.3.2. Only approved (ANSI Z 87.1, 1989) eye protection will be worn when operations pose the potential for eye injuries. When the hazard is from flying objects, side shields should be worn as attachments to the frames. Full time wear of eye protection is not considered excessive.

C3.7.3.3.3. Industrial Safety Glasses, Plano or prescription, will be issued at no cost if an individual is working in an eye hazard area. Casual employees or employees walking through hazard eye areas (intermittingly) should utilize eyeglass shields or goggles, which fit over their non-industrial eyewear.

C3.7.3.3.4. Eye examinations required for prescription safety glasses will be provided

at government expense, if the employee previously has not worn prescription safety glasses or where a vision screening discloses that the present prescription (or glasses) is inadequate. Eye examinations may be obtained at a nearby military installation, contract or by the employee's personal physician. An employee may obtain and be reimbursed for an eye examination provided their own private eye doctor only if it is impractical to obtain such services from a military installation. Prescriptions written by an employee's own doctor may be used provided that the prescription is less than 1 year old and the vision screening detects no change. Examinations other than those authorized are not reimbursed.

C3.7.3.3.5. The issuance of prescription industrial safety glasses will be recorded.

C3.7.3.3.6. The use of the goggles, full-face protection, or absorptive lenses will be required when indicated by the work involved.

C3.7.3.3.7. The government except where the FST has approved their use normally will not provide prescription sunglasses. Tinted glasses should not be worn unless called for by nature of particular occupations or when prescribed by the doctor.

C3.7.3.3.8. Photo-chromatic, phototropic variable tint or tinted lenses for safety glasses normally will not be issued. Such safety glasses meeting the impact, thickness, and optical requirements of ANSI Z87.1-1987 may be issued in those rare and unusual cases where the employee's doctor understands the intended on the job use of the glasses and certifies that the employee has a visual handicap that requires these lenses. In addition, the FST must determine that the employee will not be a hazard to himself or other employees. Individuals with such a visual handicap and their supervisors must be made aware of the fact that, while wearing variable tinted lenses, visual acuity is reduced when entering buildings and that these lenses are darkened by near ultra-violet radiation; therefore, they will become perceptibly darkened by many types of fluorescent lamps at normal working distances. Phototropic lenses are not allowed for indoor application and are only allowable for outdoor task, which do not involve hazardous ultraviolet or infrared radiation, or both.

C3.7.3.3.9. Employees shall be reimbursed for eye examinations, frames and lenses. Current reimbursement costs are located in the DRMS Safety and Health Reimbursement Web Page <<https://www.drms.dla.mil/drms/intranet/suppservices/glassshoes.pdf>>.

C3.7.3.4. *Eye Wash Requirements:*

C3.7.3.4.1. An emergency eyewash or deluge shower is needed where the eye or body may be exposed to hazardous materials. The showerhead should be capable of delivering 113.16 liters per minute (30 gallons per minute) of water at a velocity low enough not to be injurious to the user. The eyewash must be capable of opening (and staying open) within one second and deliver a minimum of 1.5 liters per minute (0.4 gallons per minute), with the flushing streams rising to the same height, flushing both eyes simultaneously, with a velocity low enough not to be injurious to the user. Eye/face wash units and emergency deluge showers both must be located within 100 feet of unimpeded travel distance from the hazard or, in the alternative, within the distance recommended by an industrial hygienist or safety manager. It is

recommended that showers and eyewashes be activated daily prior to the start of work. The receptacles of the eyewash must be protected from any airborne contaminants. Whatever means is used for this protection, its removal shall not require a separate motion by the operator upon activation. There shall be no sharp projections anywhere in the operating area of the unit. It is recommended all shower and eyewash units be flushed as often as needed to keep the water clean and clear.

C3.7.3.4.2. Other types of eyewashes include the pressurized eyewash, the non-pressurized eyewash, and the small personal eyewash units. The requirements for flushing these are dictated by the local requirements. DRMOs will contact their host safety and industrial hygiene departments for flushing time requirements. Many of these units use a bactericide to prolong life.

NOTE: Due to varying local and climactic conditions, DRMOs will request assistance from their host industrial hygienist for the frequency of water change, and whether or not a biocide would be advantageous. Using the space around eyewashes/deluge showers for storage, forklift-parking areas and lunch areas not only violates OSHA, but places the facility and its employees in an extremely dangerous situation. It is everyone's responsibility to ensure that the tools and the equipment needed to do the job are available, working properly, and that access to them is not blocked or littered.

C3.7.3.5. *Protective Footwear.*

C3.7.3.5.1. Protective footwear (such as leather work boots with or without steel toes) is required to prevent injuries to the feet resulting from punctures, pinching, or crushing caused by falling or rolling objects. Employees shall wear safety shoes with leather upper construction, when the PPE assessment requires them for personal protection. Employees working in the scrap yard shall wear steel toe work boots. Foot protection will meet ANSI Z 41.1 class 75 standards.

C3.7.3.5.2. Canvas steel-toed shoes can be worn in warehouses or in designated areas with the approval of the DRMO Chief, Forward Support Team or host safety manager.

C3.7.3.5.3. Steel-toed shoes will be purchased by the government when needed. The DRMO Chief or Forward Support Team will determine the frequency of purchase. The cost of shoes will be inherent on the geographic location of the DRMO, the DRMO Chief, and the FST. The government charge card (GPC) card will be used for procurement whenever possible.

C3.7.3.6. *Personal Hearing Devices.*

C3.7.3.6.1. Employees working in or entering a designated noise hazard area must have hearing protection available. When hazardous noise sources are operating, employees shall wear protective hearing devices.

C3.7.3.6.2. Noise hazards in the DRMO workplace are identified by the installation industrial hygienist.

C3.7.3.6.3. Personal hearing devices will be issued at no cost to personnel operating noise hazardous equipment or working in designated noise hazardous areas. Personnel working in or entering designated noise hazardous areas must have hearing protective devices in their possession at all times. In accordance with 29 CFR 1910.95, and when noise hazardous sources are operating, personnel shall wear their hearing protective devices regardless of exposure time.

C3.7.3.6.4. Supervisors will ensure that these protective devices are worn wherever personnel are exposed to noise levels at or greater than the standard prescribed in 29 CFR 1910.95

C3.7.3.6.5. Earplugs or muffs available through the Federal supply system that are listed in TB MED 501 will be supplied. Personnel will be permitted freedom of choice of various hearing protective devices (e.g., single or triple flange plugs or muffs) unless medically contraindicated or inappropriate for the noise hazardous area or operation.

C3.7.3.6.6. Pre-formed ear lugs shall be fitted only under medical supervision and will be issued with a carrying case. Insertion, seating, and cleaning techniques will be explained when earplugs are issued.

C3.7.3.6.7. Dry cotton provides essentially no noise attenuation and will not be used as hearing protective device.

C3.7.3.6.8. Employees will wear their hearing protective devices as instructed and maintain them in a sanitary condition as prescribed in 29 CFR 1910.95.

C3.7.3.7. *Respirators:*

C3.7.3.7.1. Our cutting operations involve oxygen-acetylene, plasma arc, burning bar, and "chop" saws. Every method of cutting involves a different gas, a different rod or bar, and most importantly, a different metal or alloy. This generates a variety of fumes, particulates and gases emitted at different concentrations, which will vary from DRMO to DRMO. As a result, supervisors are required to follow several steps to protect our employees and to comply with OSHA. The first step is to contact the host industrial hygienist for a hazard assessment. The host industrial hygienist will study the particular cutting operation, and perform air sampling to determine the need for a respirator, or engineering controls. If a respirator is required, the second step is to consult with the host industrial hygienist to arrange for a medical evaluation and to determine the best type of respirator for the operation. The host industrial hygienist will advise on the different types suitable. The third step is to have the host industrial hygienist fit test and train our employees. This training must include the discussion of the specific hazards of the chemicals/by-products generated from cutting; in addition to the testing, cleaning and caring for respirators. The fourth step is to complete a "*Personal Protective Equipment Hazard Assessment Certification*" form for every employee performing metal cutting. See Section 4, Supplement 1, Safety, Enclosure 1, for sample.

C3.7.3.7.2. Remember, if training is not documented, it has not been performed. Each supervisor will ensure the following is current and kept on file:

C3.7.3.7.2.1 A Personal Protective Equipment Hazard Assessment Certification Form for each metal cutter. See Section 4, Supplement 1, Safety, Enclosure 1.

C3.7.3.7.2.2 A log of all metal cutters attending hazard communication training.

C3.7.3.7.2.3 A written copy of the respirator program that includes the following:

C3.7.3.7.2.3.1 Standard operating procedures governing the selection and use of respirators.

C3.7.3.7.3. Respirators shall be selected based on the host industrial hygienist's hazard assessment.

C3.7.3.7.4. Training outline detailing the proper use of respirators and their limitations.

C3.7.3.7.4.1 An explanation of the engineering controls that are not in place or inadequate and what efforts are underway to reduce or eliminate respirator use.

C3.7.3.7.4.2 Cleaning and maintenance schedule approved by the host industrial hygienist. Respirators used by more than one worker shall be thoroughly cleaned and disinfected after each use.

C3.7.3.7.4.3 Respirators shall be stored in a convenient, clean, and sanitary location.

C3.7.3.7.4.4 Respirators used routinely shall be inspected during cleaning. Work or deteriorated parts shall be replaced.

C3.7.3.7.4.5 Surveillance of work conditions and degree of employee exposure or stress shall be maintained.

C3.7.3.7.4.6 There shall be regular inspection and evaluation to determine the continued effectiveness of the program.

C3.7.3.7.4.7 Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment.

C3.7.3.7.4.8 Respirators shall be selected from among those approved by the national Institute for Occupational Safety and Health under the provisions of 30 CFR Part 11.

C3.7.3.7.4.9 Written certification of respirator fit testing.

C3.7.3.7.4.10 Written certification of respirator training.

C3.7.3.7.4.11 Copies of a written examination for each employee trained. Each employee receiving metal cutting training will be tested and copies of the test will be filed by the supervisor. The test will be composed of job hazards, hazardous communication, and metal cutting safety. Each supervisor will keep a copy of this examination in his or her files.

C3.7.3.7.4.12 Records of annual refresher training for each employee.

C3.7.3.7.5. DRMOs will follow all the steps as above, when any new changes occur in the employee's operation. These changes may include different metals or different equipment.

C3.7.3.7.5.1 Baseline physicals for all employees metal cutting any heavy metals.

C3.7.3.8. *Protective Headgear:*

C3.7.3.8.1. All employees and visitors, in hardhat areas or operations designated by the DRMO Chief or the host Safety Manager, will wear protective headwear.

C3.7.3.8.2. Bump caps will not be worn as a substitute for hard hats. C3.7.3.8.3.

Drilling ventilation holes or trimming brims will not alter hard hats. C3.7.3.8.4.

Protective headwear should be inspected by the employee daily and the first line supervisor monthly to assure that the suspension is properly installed and the hats fits properly and is free of cracks, holes, or other imperfections which will negate its protective qualities.

C3.7.3.9. *Protective Clothing:*

C3.7.3.9.1. Protective clothing will be provided for the prevention of injury and disease; e.g., protection against hazardous and toxic chemicals, heat and hot metal cryogens, impact and cuts, and other hazards identified by the Safety and Health office.

C3.7.3.9.2. Rain gear is not considered PPE. Employees should provide their own rain gear for the performance of their normal duties during periods of poor to mildly inclement weather. If the weather does become a health factor, the host industrial hygienist or safety manager and the Forward Support Team can approve a waiver for government purchase. The rain gear will then be retained at the DRMO.

C3.7.3.9.3. Employees will be issued foul weather gear only when duties require working in harsh or severe weather. These items will not be issued for personal use, but will be retained at the DRMO. As with rain gear, the host industrial hygienist and/or safety manager and the FST must approve and a waiver be obtained from the Battle Creek Headquarters Safety

Office.

C3.7.3.10. Other PPE Clothing

C3.7.3.10.1. Work clothes can be the cause of mishaps and could be avoided by following a few simple rules:

C3.7.3.10.1.1 No loose sleeves, torn pants, neckties, or scarves.

C3.7.3.10.1.2 No rings or wrist bracelets.

C3.7.3.10.1.3 No grease, oil, or gasoline stained clothing.

C3.7.3.10.1.4 Do wear close fitting clothes, with long sleeves.

C3.7.3.10.1.5 Do wear the PPE.

C3.7.3.10.1.6 Short pants, cut-off shirts and tees are only worn when the supervisor or DRMO Chief gives permission. Short pants are not to be worn when working around scrap operations.

C3.7.3.10.2. Other PPE shall be furnished when required by the DRMO. These include face shields, protective creams, protective gloves, welding aprons, welding pants, or material deemed necessary by the host safety manager.

C3.7.3.11. Personal Protective Equipment Certification Forms.

C3.7.3.11.1. Personal Protective Equipment and Hazard Assessment forms are to be completed for all employees working at the DRMO. These forms are to be completed by the supervisor. Copies of these forms are located on the DRMS Safety web site and are required for this purpose.

NOTE: The purpose of the Personal Protective Equipment Certification Form is to ensure that all employees are properly trained and instructed on how to perform the job, the hazards pertaining to performing the job, and the correct personal protective equipment to wear when doing the job. See Section 4, Supplement 1, Safety, Enclosure 5, Attachments 1&2.

C3.7.4. Material Handling Equipment.

C3.7.4.1. *Conveyers.* Conveyers are an important part of the overall DRMO warehousing operation. Conveyers help move property quickly without the risk of having to manually move that property; but conveyers also pose a mishap potential. The following procedures and rules, when followed, will greatly reduce that mishap potential:

C3.7.4.1.1. The conveyor will be inspected to determine if any hazards are present

before starting options.

C3.7.4.1.2. Do not climb over or crawl under conveyors. Climbing devices, access ladders or elevated walkways will be used to get over conveyors.

C3.7.4.1.3. All exposed edges or conveyor areas near designated travel ways will be guarded, roped off, or barricaded.

C3.7.4.2. *Crane Operations.* The following is provided as guidance to be used in crane operating procedures. It is not all-inclusive; facility shall add precautions based on the requirements of the Host and the local area.

C3.7.4.2.1. *Operator Qualifications:*

C3.7.4.2.1.1 Only certified and licensed personnel will be allowed to operate a crane. Operators will be familiar with the requirements of subpart N, 29 CFR 1910.180, Crawler, Locomotive, and Truck Cranes.

C3.7.4.2.1.2 The operator's manual for each crane will be immediately available to the operator.

C3.7.4.2.2. *Testing:*

C3.7.4.2.2.1 All cranes will comply with the manufacturer's specifications. When manufacturer's specifications are not available, a qualified professional will establish operational limits. These limits will be documented locally in the master equipment file and copy sent to the DRMS-W equipment section.

C3.7.4.2.2.2 New, reinstalled, altered, repaired, and modified cranes shall be inspected by a designated person before initial use to verify compliance with applicable provisions of OSHA rules. For certification of cranes, please contact the DRMS Equipment or Safety Office.

C3.7.4.2.3. *Load Chart.* A rating chart or Serial Data Plate with clear legible letters and figures shall be provided for each crane. It will be securely fixed to the crane cab, clearly visible to the operator while seated at the control station.

C3.7.4.2.4. *Inspections:*

C3.7.4.2.4.1 The operator using DRMS Form 1655, Crane Operator Daily Checklist, shall inspect all cranes prior to use. Deficiencies noted will be carefully examined to determine whether they constitute a safety hazard and require immediate corrective action. Inspection records must be maintained for a minimum of 6 months.

C3.7.4.2.4.2 A trained and certified crane operator will perform complete inspection of all cranes and associated lifting devices monthly. This inspection will include the

following items and a written, dated, signed, report and record of condition will be maintained for 3 years. This report will be maintained in the master equipment file.

C3.7.4.2.4.2.1 Crane structure and hardware.

C3.7.4.2.4.2.2 Running wire ropes.

C3.7.4.2.4.2.3 Other wire ropes.

C3.7.4.2.4.2.4 Wire ropes termination and fittings.

C3.7.4.2.5. *Operating Requirements for Cranes:*

C3.7.4.2.5.1 Only qualified operators will operate a crane.

C3.7.4.2.5.2 Loads must not be carried over the heads of people.

C3.7.4.2.5.3 The operator will not leave his position at the controls while the load is suspended or while the crane is running.

C3.7.4.2.5.4 All cranes using a lifting magnet must have a switch in the magnet circuit to lock the switch in the open position.

C3.7.4.2.5.5 When the hook is in its lowest position and the boom is at its maximum elevation, at least two complete wraps of cable must remain on the drum and the ends must be securely attached to the drum.

C3.7.4.2.5.6 Hand signal charts will be posted so they are clearly visible to the operator.

C3.7.4.2.5.7 The minimum clearance of 15 feet must be maintained between any part of a crane and energized wires. If the status of the wires cannot be determined they will be treated as energized.

C3.7.4.2.5.8 Cranes shall not be used to lift personnel without approval from the host safety or DRMS Occupational Health Manager.

C3.7.4.2.6. *Slings:*

C3.7.4.2.6.1 Prior to use, slings and all fastenings and attachments will be inspected.

C3.7.4.2.6.2 The following practices are mandatory when using a sling:

C3.7.4.2.6.2.1 Damaged or ineffective slings will not be used.

C3.7.4.2.6.2.2 Slings will not be shortened with knots, bolts, or makeshift devices.

C3.7.4.2.6.2.3 Sling legs will not be kinked.

C3.7.4.2.6.2.4 Slings will be padded or protected from the sharp edges of their loads.

C3.7.4.2.7. *Wedge Sockets.* Wedge sockets must be properly rigged or the lifting capability will be affected. Never clip the dead end of the wire rope to the load end.

C3.7.4.2.8. *Rigging Magnets.* Power supply cables to a magnet must be supported in a vertical position to prevent cable damage. Power supply cables will not be clamped to the wire rope.

C3.7.4.3. *Forklifts:*

C3.7.4.3.1. *Modifications or Additions.* Forklifts are not permitted to have any modifications or additions without an approval of the DRMS Safety and Health Manager and the manufacturer of the equipment.

C3.7.4.3.2. *Overhead and Mast Screens.* Forklifts used in scrap yard operations will have a wire mesh screen, polycarbonate sheeting, or suitable material attached to the overhead guard, and mast. This does not replace or eliminate the need for hard hats and safe lifting practices. These guards will be attached without drilling or welding of the mast, lifting components, or overhead guards.

C3.7.4.3.3. *Speed Limits.* Recommended safe forklift speed limit inside a warehouse is 5 miles per hour. The DRMO Chief will establish speed limits inside and outside a warehouse.

C3.7.4.3.4. *Inspections.* All forklifts will be inspected prior to usage. Use DLA Form 1731, Operator's Inspection Guide and Trouble Report. Deficiencies noted will be examined to determine whether they affect the safety or operability of the forklift and require immediate corrective action. Inspection records will be maintained for a minimum of 6 months. Operators working in a contractor shared equipment environment will inspect the MHE every time it is turned back to their control. The contractor will inspect and record every time an MHE is turned over to their control.

C3.7.4.3.5. *Forklift Operation:*

C3.7.4.3.5.1 Only trained, certified operators will operate forklifts.

C3.7.4.3.5.2 No person shall be allowed to stand or pass under any elevated portion of a forklift.

C3.7.4.3.5.3 No riders shall be permitted on forklifts.

C3.7.4.3.5.4 When a forklift is left unattended, forks will be fully lowered, controls neutralized, power turned off, and brakes set. The wheels shall be chocked if the forklift is parked on an incline. The keys will be removed from the ignition.

C3.7.4.3.5.5 When ascending or descending grades in excess of 10 degrees, loaded forklifts will be driven with the load upgrade. Unloaded forklifts will operate on all grades with the forks downgrade.

C3.7.4.3.5.6 If any lifting components are repaired or replaced the forklift will be load tested prior to being place back into service.

C3.7.4.3.5.7 If the load obstructs the driver's view, the driver will travel with the load trailing.

C3.7.4.3.6. *Electric Forklifts:*

C3.7.4.3.6.1 All electric forklift operators will know the location and use of the emergency override (panic) controls. These panic controls will be function checked prior to use. Any power-operated industrial truck not in safe condition will be removed from service and repaired.

C3.7.4.3.6.2 Battery Charging Operations:

C3.7.4.3.6.2.1 Crane structure and hardware.

C3.7.4.3.6.2.2 Running wire ropes.

C3.7.4.3.6.2.3 Other wire ropes.

C3.7.4.3.6.2.4 Wire ropes termination and fittings.

C3.7.4.3.6.3 Deficiencies identified will be analyzed to determine if the crane should be taken out of operation until repairs are accomplished. Final determination of the operability of any crane rests with the operator.

C3.7.4.3.7. *Operating Requirements for Cranes:*

C3.7.4.3.7.1 Only qualified operators will operate a crane.

C3.7.4.3.7.2 Loads must not be carried over the heads of people.

C3.7.4.3.7.3 The operator will not leave his position at the controls while the load is suspended or while the crane is running.

C3.7.4.3.7.4 All cranes using a lifting magnet must have a switch in the magnet circuit to lock the switch in the open position.

C3.7.4.3.7.5 When the hook is in its lowest position and the boom is at its maximum elevation, at least two complete wraps of cable must remain on the drum and the ends must be securely attached to the drum.

C3.7.4.3.7.6 Hand signal charts will be posted so they are clearly visible to the operator.

C3.7.4.3.7.7 The minimum clearance of 15 feet must be maintained between any part of a crane and energized wires. If the status of the wires cannot be determined they will be treated as energized.

C3.7.4.3.7.8 Cranes shall not be used to lift personnel without approval from the host safety or DRMS Occupational Health Manager.

C3.7.4.3.8. *Slings:*

C3.7.4.3.8.1 Prior to use, slings and all fastenings and attachments will be inspected.

C3.7.4.3.8.2 The following practices are mandatory when using a sling:

C3.7.4.3.8.2.1 Damaged or ineffective slings will not be used.

C3.7.4.3.8.2.2 Slings will not be shortened with knots, bolts, or makeshift devices.

C3.7.4.3.8.2.3 Sling legs will not be kinked.

C3.7.4.3.8.2.4 Slings will be padded or protected from the sharp edges of their loads.

C3.7.4.3.9. *Wedge Sockets.* Wedge sockets must be properly rigged or the lifting capability will be affected. Never clip the dead end of the wire rope to the load end.

C3.7.4.3.10. *Rigging Magnets.* Power supply cables to a magnet must be supported in a vertical position to prevent cable damage. Power supply cables will not be clamped to the wire rope.

C3.7.4.3.10.1 Battery Charging Operations:

C3.7.4.3.10.1.1 Battery charging installations shall be located in well ventilated designated areas. No warehouse material, tools, etc, will be stored inside of the battery charging area.

C3.7.4.3.10.1.2 Equipment will be provided for flushing and neutralizing spilled electrolyte, fire protection, protecting charging apparatus from damage, and ventilation.

C3.7.4.3.10.1.3 Trucks shall be properly positioned and the brake applied prior to charging batteries.

C3.7.4.3.10.1.4 When charging batteries, the manufacturer's supplied procedures will be followed.

C3.7.4.3.10.1.5 Smoking shall be prohibited in the charging area.

C3.7.4.3.10.1.6 Precautions will be taken to prevent open flames, sparks, or electric arcs in battery charging areas. Consult the local fire department for guidance.

C3.7.4.3.10.1.7 Tools and other metallic objects will be kept away from the battery terminals. Personal Protective Equipment will be available within the battery charging area, and consist of no less than face shield, rubber aprons and rubber gloves.

C3.7.4.3.10.2 Battery installation and removal is not the responsibility of the DRMO. Maintenance personnel will accomplish these tasks.

C3.7.4.4. *Pallets.* Pallets are a part of the material handling operation. To ensure proper usage and condition, the following elements must be considered:

C3.7.4.4.1. No material must be stored on broken pallets.

C3.7.4.4.2. All pallets will be of sound construction.

C3.7.4.4.3. Loads must fit securely on the pallet.

C3.7.4.4.4. Loads must be distributed evenly on the pallet.

C3.7.4.5. Warehouse Tractors and Trailers:

C3.7.4.5.1. Warehouse tractors are designed to pull a train of warehouse trailers. When used with forklift trucks, the warehouse tractor-trailer train operation must:

C3.7.4.5.1.1 Comply with traffic regulations.

C3.7.4.5.1.2 Proper trailer coupling.

C3.7.4.5.1.3 Not exceed the maximum number of trailers.

C3.7.4.5.1.4 Latch loads being transported.

C3.7.4.5.1.5 Position the load in a manner, which will not block the

operators view.

C3.7.4.5.1.6 Comply with the maximum speed limit of 5 miles per hour, inside a warehouse. The DRMO Chief or supervisor will establish speed limits, for tractor-trailer combination, outside the warehouse.

C3.7.4.5.1.7 Come to a complete stop, sound horn, and proceed only when the way is clear, when entering or leaving a warehouse.

C3.7.4.5.1.8 Reduce speed when crossing railroad tracks and unleveled roadways and cross at an angle, when possible.

C3.7.4.5.1.9 Maintain trailers in a safe condition. Deck planking must be complete and in good condition.

C3.7.4.6. *MHE Training:*

C3.7.4.6.1. Operators will be trained by their host or installation offices whenever possible.

C3.7.4.6.2. In addition, all MHE operators will receive supplemental training, addressing specific conditions and situations at their DRMO, by the FST MHE trainer.

C3.7.4.6.3. All training shall be in accordance with the rules and regulations pertaining to the host installation, and 29 CFR 1910.178 (1).

C3.7.4.6.3.1 Operators are required to have annual refresher training and whenever the following conditions occur:

C3.7.4.6.3.2 The operator has been involved in a mishap.

C3.7.4.6.3.3 The operator is assigned to operate a different type of MHE.

C3.7.4.6.3.4 The workplace conditions or environment changes in a manner that could affect the safe operation of the truck.

C3.7.4.6.3.5 Crane Training will consist of 40-hour initial crane training at a commercial training facility. Every third, crane operator will refresh their crane training at the same or comparable training facility. Videos are available, online on the Safety Web Site for DRMS (<https://www.drms.dla.mil/drms/intranet/suppservices/safetyhealth.htm>), for crane operators to view during the off years. If the host installation requires annual crane training, the operator will abide by this regulation.

C3.7.5. Machinery and Support Equipment.

C3.7.5.1. *Balers (Metal and Paper).* All balers must be guarded to ensure the ram or

compacting device cannot be activated until workers are out of the danger area. On balers where scrap is put into a pit prior to compression, an interlocking device, which allows operation of a ram only after the loading gates are closed and in place, must be used. Check the operating manual for any specific safety instructions. The employee should also contact the host Industrial Hygienist to ensure proper ventilation and dust screening.

C3.7.5.2. Fire Extinguishers. The type of fire extinguisher provided depends on the type of exposure (fire). The location of fire extinguishers must be clearly identified. Regardless of the owner, extinguishers will be visually inspected monthly and a log maintained. This log may be a sticker, card, or computer generated log. All employees must be trained in the proper use of all firefighting equipment in their work area. This training should be performed annually. The DRMO Chief or supervisor should contact the host fire marshal or safety office to determine host policy for fire control. If the policy for the host is evacuation and fire control is accomplished entirely by the host, then training would not be required. All fire extinguishers should be serviced annually. A monthly inspection should consist of checking the seal (if one is provided), pressure gauges, hose and general condition of the extinguisher. Additionally, it allows the inspector to ensure the extinguisher is found at the proper location and its access is clear. A fire extinguisher is a tool; just as all tools are checked before beginning work for the day, all fire extinguishers are to be checked and inspected regularly to verify they are in working order. This daily check will aid the person tasked with the monthly check in catching and preventing problems. As a part of the annual training, the host fire marshal will provide information on the types, care, and rules and regulations pertaining to the DRMOs fire extinguishers.

C3.7.5.3. First Aid Kit/CPR:

C3.7.5.3.1. The decision to place a first aid kit in any vehicle is based upon local policy and/or requirements. DRMOs are to seek advice on policy from their host safety and Industrial Hygiene departments regarding rules and regulations for first aid kits in their government or GSA vehicles. The types of first aid kits, contents, etc., are to be determined by the host.

C3.7.5.3.2. Recently, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) issued citations to a Navy activity for noncompliance with the blood-borne pathogen standard. These citations were written for: (1) failure to have a written exposure control plan; (2) failure to provide blood-borne pathogen training; (3) and failure to offer Hepatitis B vaccinations to first aid responders. The standards for this subject are written on the Safety and Health Web Page <<https://www.drms.dla.mil/drms/intranet/suppservices/safetyhealth.htm>>, under "Blood-borne Pathogens".

C3.7.5.3.3. In order to comply with the blood-borne pathogen standard, all DRMO Chiefs must offer Hepatitis-B vaccinations and blood-borne pathogen training to all employees trained in CPR and First Aid. The vaccinations are available on some bases, at local health departments, Red Cross, local colleges or medical providers. The host industrial hygiene/safety department will assist and direct the employee in obtaining a source. It is the responsibility of the DRMOs to fund for all safety expenses for individual employees.

C3.7.5.3.4. A minimum of one person for every 25 employees must be trained in CPR and First Aid. There must be enough trained people at a DRMO so a trained person is present at all times. A waiver will be issued, provided the DRMO can obtain written proof that a medical responder can provide emergency treatment within 5 minutes or less.

C3.7.5.3.5. To determine who is covered under the DRMS Occupational Health Program Exposure Control Plan, it is required that all personnel be categorized by ***always exposed, never exposed, and sometimes exposed.***

C3.7.5.3.6. Most positions or classifications in DRMS are never exposed. Personnel trained to perform First Aid/CPR, housekeeping, recreation specialists, firefighter, physical security specialist are considered sometimes exposed and are covered under this standard. Positions such as nurse, doctor, or paramedic are considered always exposed and are covered under this standard. No matter what the classification, a person may be (never exposed, sometimes exposed, or always exposed.) Exposure can occur to anyone. Determination of an exposure should be made by a medical professional and a mishap form and CA-2 form should be completed.

C3.7.5.3.7. It is imperative that all CPR and First Aid designated personnel be trained in Blood-borne Pathogens requirements and receive the Hepatitis-B vaccination series, or sign a declination statement. DRMOs must make this available free of charge and at a reasonable time and place to all employees. The host safety/industrial hygiene department should be able to provide these requirements under the ISA or it may be obtained by them from a community source.

C3.7.5.3.8. For CPR/First Aid, below is a list of items all activities should have readily available for use and all items can be purchased local, if necessary:

C3.7.5.3.8.1 Latex gloves, NSN 6515-01-342-3002, Description: Package of 50 pair of disposal and non-sterile rubber latex, contaminated fluid protective gloves. Roll beaded cuff, size 8 ½ large; protects medical personnel from contamination in trauma situations where bleeding and/or other bodily fluids are present.

C3.7.5.3.8.2 Red bags, NSN 8105-01-361-1746I; Description: High density 3-ply material, puncture resistant; holds infectious wastes for ultimate processing within an autoclave oven; fits any container round; square; oblong, etc./ 8, micron; 45 gallon capacity; 40 x 46; printed with the warning message and biohazard symbol, 100 per package.

C3.7.5.3.8.3 One-way valve CPR mask, NSN 6515-01-354-1082, Description: Facemask, cardiopulmonary resuscitation; clear plastic disposable, used to prevent cross contamination during CPR.

C3.7.5.4. *Grinders:*

C3.7.5.4.1. All grinders will be equipped with a work tool rest, adjusted to no more

than one-eighth inch from the grinding wheel. The adjustable tongue or guard on the top of the peripheral member shall never exceed one-fourth inch from the grinding wheel. An end guard must be placed on all grinding wheels. Eye and face protection will be worn at all times when using grinders. The host industrial hygienist should be contacted to conduct a noise hazard assessment and determine if hearing protection will be required.

C3.7.5.4.2. All new grinding wheels will be “ring tested” prior to use. The bursting of a grinding wheel may cause serious or fatal injuries to personnel working in the near vicinity of the unit. Despite precautionary measures taken by manufacturers, occasional wheel bursts or breaks still may occur.

C3.7.5.4.3. Ring testing: A new wheel will be checked for cracks by tapping it with a wooden mallet. A faultless, vitrified wheel will give a clear ring; an organic, bonded wheel makes a less ringing tone. Both can be differentiated from the cracked sound of a defective wheel. When in doubt, do not use the wheel without having it checked by the supplier or other knowledgeable person.

C3.7.5.4.4. Testing: Prior to putting a new wheel into service, check to ensure that the rating of the wheel is the same or greater than the rating of the grinder. All new wheels are marked with the maximum operating RPM. If the wheel does not have a rating label attached, or the maximum operating RPM of the grinder is not known, do not use it. The wheel will be tested at maximum operating speed while exercising due caution.

C3.7.5.5. *Hand and Portable Power Tools:*

C3.7.5.5.1. Each employer is responsible for the safe condition of the tools and equipment used by employees, including tools and equipment which may be furnished by employees.

C3.7.5.5.2. It is important to have on hand only those tools and equipment that will be needed to do the job. It is even more important to ensure that tools and equipment are in serviceable condition. Common problems to look for when using hand tools are:

C3.7.5.5.2.1 Hammers with broken or cracked handles.

C3.7.5.5.2.2 Chisels and punches with mushroomed heads.

C3.7.5.5.2.3 Bent or broken wrenches.

C3.7.5.5.2.4 Inoperative automatic shutoff on hand-held power tools; usually a device, dead-man or quick release control, so that the power is automatically shut off whenever the operator releases the control.

C3.7.5.5.2.5 Improperly grounded or single insulated portable electrical equipment.

C3.7.5.6. *Ladders:*

C3.7.5.6.1. Ladders must be inspected on a set schedule. Any ladder that cannot be repaired must be replaced. All unserviceable ladders will be disposed of following the local installation's instructions.

C3.7.5.6.2. Some suggested ladder inspection items to look for:

C3.7.5.6.2.1 Loose rungs, nails, screws, bolts, or other metal parts.

C3.7.5.6.2.2 Cracked or split uprights and rungs.

C3.7.5.6.2.3 Wooden ladders that are painted.

C3.7.5.6.2.4 Broken or missing locks or defective rope on extension ladders.

C3.7.5.6.2.5 Broken or missing hinge spreaders on stepladders.

C3.7.5.6.2.6 Missing or inoperative safety feet on the base of a ladder.

C3.7.5.6.3. When using the ladder:

C3.7.5.6.3.1 Never use a metal ladder near electrical equipment or circuits.

C3.7.5.6.3.2 Never place a ladder in front of a door without locking or guarding the door.

C3.7.5.6.3.3 Place the ladder with the base one-fourth the length of the ladder away from the building or structure.

C3.7.5.6.3.4 Place the ladder on a level, substantial and non-moveable base.

C3.7.5.6.3.5 When climbing or descending, face the ladder and use both hands. Wear shoes with heels. Do not carry material up or down ladders.

C3.7.5.6.3.6 When working from a portable ladder, do not reach out too far; instead move the ladder.

C3.7.5.6.3.7 Never climb to the top step of a portable ladder or place feet on the brace portion.

C3.7.5.7. Shears. All shears will have a guard that prevents the operator from having any part of his/her body in the danger zone during the operating cycle. The employee will also have a hold down device(s) to keep the material from moving during the operating cycle. Do not use shears without these safeguards.

C3.7.5.8. *Fire Watch:*

C3.7.5.8.1. Fire watchers shall be required to be in attendance, by the individual responsible for authorizing cutting and welding, whenever cutting and welding is performed in a location where other than a minor fire might develop, or where/when any of the following conditions exist:

C3.7.5.8.1.1 Appreciable combustible material in building construction or contents closer than 35 ft (11-m) to the point of operation.

C3.7.5.8.1.2 Appreciable combustibles are more than 35 ft (11-m) away, but are easily ignited by sparks.

C3.7.5.8.1.3 Wall or floor openings within a 35-ft (11-m) radius expose combustible material in adjacent areas, including concealed spaces in walls or floors.

C3.7.5.8.1.4 Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.

C3.7.5.8.2. Fire watchers shall have fire-extinguishing equipment readily available and be trained in its use, including practice on test fires.

C3.7.5.8.3. Fire watchers must be familiar with facilities and procedures for sounding an alarm in the event of a fire.

C3.7.5.8.4. Fire watchers shall watch for fires in all exposed areas and try to extinguish them first; only when it is recognized as being within the capacity of the equipment available. Otherwise, sound the alarm immediately.

C3.7.5.8.5. A fire watch shall be maintained for at least a half hour after completion of cutting or welding operations to detect and extinguish smoldering fires.

C3.7.5.9. Hot Tapping. "Hot tapping" or other cutting and welding on a flammable gas or liquid transmission or distribution utility pipeline shall be performed by a crew qualified to make hot taps.

C3.7.5.10. *Torch Cutting:*

C3.7.5.10.1. When cutting involves coating, fluxes, or base metals containing elements such as zinc, fluorine, beryllium, lead or cadmium, and their compounds, breathing the vapors and fumes generated can be hazardous. Therefore, the area must be adequately ventilated. Outdoor cutting involving lead, mercury, and cadmium requires the workers to wear respiratory protective equipment. An appropriate respirator will be provided, based upon the industrial hygiene survey. Whenever a respirator is used, the DRMO must also have a written respiratory SOP and must assure that training is provided to the affected employees. See Section 4, Supplement 1, Safety, Enclosures 1 & 2. For torch cutting operations a written fire

safety SOP is required.

C3.7.5.11. *Video Display Terminals*. When installing a VDT keep in mind the following points:

C3.7.5.11.1. Keyboard should be elbow high. A ledge under the key guard will provide support.

C3.7.5.11.2. Copyholders should be placed near the screen to reduce visual search.

C3.7.5.11.3. Leg-room should be sufficient to allow feet to be flat on the floor with the knees at a 90-degree angle. Footrests should be provided, if needed.

C3.7.5.11.4. Chairs should have adjustable seat height, arm rest and back rest to support the lumbar region (lower back).

C3.7.5.11.5. Eliminate high contrast variation between screen and hard copy. Generally, use the lowest lighting that allows the operator to comfortably read the hard copy. Screen luminance should be kept low to minimize reflected glare. Do not place the VDT in front of a window. VDT Screens should be cleaned frequently to reduce dust accumulation that causes glare.

C3.7.5.11.6. The top of the VDT should be at or below the operator's eye level, at a seated position.

C3.7.6. DRMS Operations:

C3.7.6.1. *Carbon Monoxide*. Carbon monoxide is an extremely toxic colorless and odorless gas. Its principal source is from internal combustion, engine exhausts, e.g., coal, or oil space heaters. Since its threshold limit value is 50 parts per million (PPM), and this is only measurable with safety engineering detection equipment, the following precautions will be employed:

C3.7.6.1.1. When powered material handling equipment (MHE) is used inside warehouses and storage buildings, the host industrial hygienist should be contacted to air sample for same operating parameters. These samplings should be done in both warm and cold weather operations.

C3.7.6.1.2. If carbon monoxide in excess of 50 PPM is detected in any building, the building must be evacuated. DRMO personnel will not be permitted back until the source of carbon monoxide is found and corrected.

C3.7.6.2. *Cold Weather Work*. Exposure to cold weather can cause the following:

C3.7.6.2.1. Frostbite - Crystallization of tissue fluids in the skin or subcutaneous tissues. Cause is prolonged exposure to cold, and usually wetness, in temperatures just above

freezing to about 50 degrees F. Edema, tingling, itching, and severe pain may occur, followed by blistering and ulceration.

C3.7.6.2.2. Chilblains - An inflammatory swelling or sore produced by exposure of the feet or hands to the cold.

C3.7.6.2.3. Raynaud's disease - repeated exposure to cold and prolonged vibrating (as in the use of hand tools) resulting in numbness and blanching of the fingers with loss of muscular control.

C3.7.6.2.4. Dry skin - conditions resulting from repeated exposures to dry cold.

C3.7.6.2.5. Hypothermia - Rapid, progressive mental and physical collapse that accompanies the chilling of the inner core of the body. First symptom is generally shivering.

C3.7.6.3. Functional Testing of Excess/Surplus Property:

C3.7.6.3.1. Functional testing of property is limited to common type items such as vehicles office machines, household/kitchen appliances, hand tools, floor polishers, vacuum cleaners, etc.

C3.7.6.3.2. Items with Supply Condition Code "F" and Disposal Code "9" or better may be tested. Items with Supply Code G, H, or S or disposal Code S or X will not be tested. Refer to C2.11. - Testing Electrical Equipment this chapter.

C3.7.6.3.3. Items with obvious defects such as broken or grayed wires, loose attachments, broken or cracked guards will not be tested.

C3.7.6.3.4. No one will alter an item to allow it to be tested. This includes DRMO EMPLOYEES AND CUSTOMERS.

C3.7.6.3.5. DRMO escort personnel will be present when customers are conducting the tests to ensure safety procedures are followed.

C3.7.6.3.6. DRMS and/or host activity safety personnel must adhere to the appropriate safety precautions pertaining to the items being tested.

C3.7.6.3.7. Electrical items are allowed to be plugged into a 15 amp GFCI equipped circuit only.

C3.7.6.4. Housekeeping:

C3.7.6.4.1. Good housekeeping is important to mishap prevention. It is proven that good housekeeping accompanies low mishap rates. Good housekeeping also improves morale.

C3.7.6.4.2. These are examples of poor housekeeping and their mishap potential:

C3.7.6.4.2.1 Loose objects on the floor and stairs - tripping hazards.

C3.7.6.4.2.2 Slippery material on the floor and stairs - slips and falls.

C3.7.6.4.2.3 Loose objects overhead - falling objects.

C3.7.6.4.2.4 Large objects out of place - may strike employees.

C3.7.6.4.2.5 Protruding nails - punctures, scratch.

C3.7.6.4.2.6 Rubbish, trash, hazardous materials - fire.

C3.7.6.5. Good housekeeping must be a part of any plan of operation and must be part of an individual's job responsibility.

C3.7.6.6. Manual Handling of Equipment:

C3.7.6.6.1. The preferred method for the manual movement of large, heavy cumbersome, or rough material is by MHE. Using two or more employees to lift heavy objects is to be considered only as a last resort.

C3.7.6.6.2. Any property, which exceeds 50 pounds, or is not easily handled by one person, will be moved or lifted by means of MHE or by two or more employees. The maximum lifting limit per person is 50 pounds.

C3.7.6.7. Out-Loading and Off-Loading of Property:

C3.7.6.7.1. It is a DRMS policy that DRMOs will out-load property for customers as a condition of sale when the following conditions are met:

C3.7.6.7.1.1 Availability of MHE of the right type and size to safely lift and load the property onto the customer's vehicle.

C3.7.6.7.1.2 Availability of trained and licensed MHE operators.

C3.7.6.7.1.3 Availability of proper terrain at the out-loading locations.

C3.7.6.7.2. The DRMS shall have the Personal Protective Equipment, and personnel certified in its use when required to handle hazardous or toxic materials.

C3.7.6.7.3. DRMO employees will not climb or stand on customer's vehicles during out-loading or off-loading operations. Forklifts may be driven onto vehicles provided the floor of the vehicle is smooth, free of debris, and strong enough to support the weight of the forklift and its load. During all loading operations, the wheels of the vehicle must be chocked.

C3.7.6.7.4. During off-loading and out-loading, vehicles will have the motor off, parking brake set, wheels chocked and personnel will not be allowed in or on the vehicles.

C3.7.6.7.5. During the tailgate loading process, an observer/spotter must be used to ensure that no damage results in the process. The observer/spotter should be a government employee.

C3.7.6.8. Property Stored Above Eye Level:

C3.7.6.8.1. It is frequently necessary at DRMOs to store and stack property through the use of approved storage racks or storage aids, sometimes three or four pallets high.

C3.7.6.8.2. 29 CFR 1910.29 requires the use of mobile work platforms or mobile ladder stands in these situations. This equipment is usually made of tubular welded frames with wheels or casters for ease of movement.

C3.7.6.8.3. Extension ladders are not authorized for access to property stored above eye level.

C3.7.6.9. Recontainerization and Over packing of Chemicals, Pesticides, or other Hazardous Materials:

C3.7.6.9.1. Generally, DRMO personnel will not perform recontainerization/over packing of chemicals. Host installation or service contractor personnel who have the equipment necessary to perform the work and have been specially trained to perform these tasks in a safe manner, may accomplish such work.

C3.7.6.9.2. Should it become necessary for a DRMO to perform a recontainerization or over pack pesticides, chemicals or other dangerous material, the DRMS Safety and Health office shall be contacted. PPE requirements will be determined on a case-by-case basis by the DRMS Safety and Health officer.

C3.7.6.9.3. Additional guidance on over packing and spill procedures are contained in DRMS-I 6050.2, Instructions for Environmental Compliance for the DRMS Hazardous Property Program.

C3.7.6.10. Remote Operations:

C3.7.6.10.1. Precautionary measures and procedures will be instituted for remote operations in order to prevent and prepare for medical emergencies and injuries requiring immediate medical attention. Operations in any of the following work environments are included:

C3.7.6.10.1.1 DRMO facility having remote or isolated work areas.

C3.7.6.10.1.2 RIPL work site occupied full or part-time by DRMS personnel.

C3.7.6.10.1.3 One person operations

C3.7.6.10.1.4 Remote or work alone cross-docking

C3.7.6.10.1.5 Remote hazardous waste pick-up points/generators/storage areas

C3.7.6.10.1.6 Multiple person sites when one person is left to work alone (leave, TDY, remote warehouses without telephone contact, etc.)

C3.7.6.10.2. When workload permits, two or more employees will be dispatched to these work-sites. When two or more employees cannot be sent together, at least one of the following control mechanisms must be implemented, in order to protect the single employee/worker:

C3.7.6.10.2.1 The employee will contact his/her supervisor upon arrival at the remote work-site, and hourly thereafter. This may be accomplished by telephone or portable communication equipment.

C3.7.6.10.2.2 A procedure shall be established by the supervisor to ensure the employee's whereabouts are checked hourly throughout the day. This may be accomplished with the assistance of the host installation or portable communication equipment.

C3.7.6.10.2.3 The employee working alone will be provided a cell phone, at government's expense, to make contact IAW (1) and (2) above.

C3.7.6.10.3. Under most circumstances, a single employee shall not be permitted to perform any work considered hazardous or dangerous. Such operations include, but are not limited to, the use of MHE, cranes, shears, balers, shredders, strippers, torch cutting and sites that have physical custody of hazardous property. Only in the case of adverse mission impact can a single employee be permitted to perform basic loading and unloading of a customer's conveyance. In this instance, the following conditions must be met prior to commencement of work:

C3.7.6.10.3.1 A second DOD employee (designated host installation personnel, etc.) agrees to act as the "2nd man" or "spotter". This requires the single DRMS employee to provide the DOD employee local orientation training, including locating and operating emergency communication equipment and a general review of contingency procedures. Additionally, the DOD employee must commit to remain visibly present and remain an active observer.

C3.7.6.11. *Thermal Stress:*

C3.7.6.11.1. Prolonged exposure to working environments in a high temperature atmosphere can produce the following adverse conditions:

C3.7.6.11.1.1 Heat cramps usually occur in employees who are exposed to prolonged high temperature and who drink great amounts of water. Excessive sweating occurs, depleting the body of its normal salt supply. Heat cramps in a person produce severe muscle cramps in the abdomen and legs, faintness, dizziness, and exhaustion.

C3.7.6.11.1.2 Heat exhaustion is characterized by excessive pooling of blood in the vessels of the skin from the body's effort to reduce its temperature. In case of heat exhaustion, the employee may feel weak and nauseated; with the skin becoming pale and clammy. These symptoms are usually accompanied by considerable perspiration and faintness. The body temperature is usually normal, or slightly above normal. Vomiting may occur, but unconsciousness is rare.

C3.7.6.11.1.3 Heat stroke (sun stroke), the most severe of the heat related conditions, is not necessarily the result of exposure to the sun. However, it does occur more frequently on hot humid days. Physical exertion is a contributing factor. Heat stroke results from a disturbance of the body's temperature regulation, with fever and often collapse occurring. The body temperature will often rise to 105 or 106 degrees F. This factor alone makes heat stroke a dangerous situation. Other symptoms may include: dry or red and hot skin and rapid strong pulse; convulsions or unconsciousness.

C3.7.6.11.2. Control of the physical working environment is the first consideration to be given to control employee exposure to excessive heat. This control is best accomplished by improved ventilation, more effective cooling systems and a possible modification of employee work patterns during periods of excessive heat. For example, work normally accomplished in the afternoon in areas of excessive heat will be scheduled in the morning, when the temperature is cooler. In areas where there are normally extended period of time of high temperatures the DRMO may provide their employees with ice and chilled drinking water.

C3.7.6.12. Warehouse Markings. Guidance for floor markings is found in OSHA, EPA, and DRMS manuals (Environmental). When floor markings become worn or deteriorated or are no longer readily identifiable, they will be repainted following OSHA and environmental guidance.

C3.7.6.13. Facility Inspections. DRMOs are required to schedule the following safety and industrial hygiene inspections as stipulated in their Interservice Support Agreement (ISA) with their host:

C3.7.6.13.1. Safety inspections. A comprehensive safety inspection of the DRMO must be conducted annually.

C3.7.6.13.2. Industrial Hygiene Inspections. A comprehensive industrial hygiene inspection of the DRMO must be conducted annually. If the host industrial hygiene department determines an annual inspection is not required, the DRMO may submit a waiver to DRMS-WS (Section 4, Supplement 1, Safety, Enclosure 3). The Industrial Hygienist must indicate the frequency of surveys and the reasons for determining or classifying the DRMO as requiring an inspection other than annually. The Industrial Hygienist and the DRMO Chief/Site Manager/Supervisor must sign the waiver indicating that the Industrial Hygienist will immediately review any personnel change, equipment change or process change.

C3.7.6.13.3. DRMOs must ensure that ~~annual~~ **quarterly** radiation surveys are conducted by the host Radiation Protection Officer, **a contractor, or DLA Installation Support Safety and Occupational Health.** ~~or designate.~~ These surveys are to include shipping and receiving areas; DEMIL areas; and the scrap yard. Any radioactive materials identified during these surveys are to be immediately returned to the generator. **(Edited Sep 2012)**

C3.7.6.13.4. DRMS Field Activities (See C3.5.1 for description of DRMS Field Activities) are required to conduct weekly/monthly walk-around safety self-assessments and record the results on the DRMS Inspection Log Checklist CAMS Version.

C3.7.6.13.5. Copies of the host inspections are to be forwarded to the Safety and Health Office, DRMS, headquarters, DES-WRH, for review. The DRMS Field Activity is responsible to correct all deficiencies identified during the inspections.

C3.7.6.14. *Contractors.* Many different contract partners assist DRMS in providing disposal services. The contractor is responsible for the safety and health of their employees and protection of the public at contractor facilities. This paragraph is applicable to those DRMS contractors directly supporting, receiving, storage, RTDS and disposal functions and not support services contractors such as janitorial and copier maintenance. Contracts where the contractor operates on-site may have provisions that provide government furnished equipment (GFE) and facilities (GFF). Additionally, DRMS personnel work at contractor facilities while performing COR/COTR surveillance, inspections, etc. When managing or monitoring our contracted partner's performance, follow these DRMS Safety and Occupational health (SOH) Program guidelines:

C3.7.6.14.1. Contractors performing on a DOD installation. Generally, each contract has provisions that require the contractor to comply with all Federal, State, Local, host nation, and installation safety and health regulations. During the transition or phase-in period of a new contract, it is important to provide the contractor's management team with a DRMS SOH overview. The COR/COTR shall provide the overview. Other personnel such as the DRMO safety Monitor may assist, as necessary. The overview should include a review of the SOH related contract clauses; sites-specific contingency and emergency procedures; local GFE and GFF storage, operational and host installation Safety Program. The contractor is to provide the COR/COTR with a copy of the contractor's Safety Program, to include all aspects of safety, at a minimum:

C3.7.6.14.1.1 MHE program.

C3.7.6.14.1.2 Safety inspections.

C3.7.6.14.1.3 Industrial hygiene program.

C3.7.6.14.1.4 Noise control program.

C3.7.6.14.1.5 Hazardous Communication Program.

C3.7.6.14.1.6 Emergency response program.

C3.7.6.14.1.7 Training Program.

C3.7.6.14.1.8 Fire extinguisher program/Training.

C3.7.6.14.1.9 Accident Prevention Program (Mishap Reports, Mishap Investigation reports, etc).

C3.7.6.14.1.10 Personal Protective Equipment Program.

C3.7.6.14.2. The COR/COTR is to conduct with the contractor a reciprocal review of the DRMO/RIPLs Safety program and Hazardous Communication Program.

NOTE: The contractor is required to have a written HCP if they manage any DOD chemical, or introduce ***any*** of their own chemicals into the workplace.)

C3.7.6.14.3. The COR/COTR shall document the reciprocal overviews by preparing a memorandum for record (MFR) for the COR/COTR file. The contracting officer shall be notified immediately if there are any issues that cannot be addressed at the local level. During the course of the contract, DRMS personnel shall monitor the contractor's safety performance as directed by the contracting officer. A reference sheet is provided at See Section 4, Supplement 1, Safety, Enclosure 4.

C3.7.6.14.4. DRMS personnel working at contractor facilities. Again, each contract has provisions that require the contractor to comply with all Federal, State, local and host nation safety and health regulations. DRMS personnel that are at the contractor's demilitarization, demanufacturing, HW/HM recycling and disposal, etc., are not to assume the role of an OSHA inspector. The focus of this portion of the DRMS SHO Program is to protect the safety and health of the DRMS personnel entering the contractor's facility. Accordingly, DRMS personnel should anticipate the contractor providing a safety overview if there are any hazards present. If the contractor declines to provide a safety overview and the COR/COTR feels there are hazards present, the matter shall be elevated to the contracting officer. The overview should include a review of the hazards present; site-specific contingency and emergency procedures; personal protective equipment (PPE) availability and usage; and the contractor's HCP, if applicable. Generally, the contractor would be required to have a written HCP if they have employees and any chemicals present in the workplace. The COR/COTR shall document the overview by

preparing a MFR for the COR/COTR file. The MFR shall identify the workplace(s) evaluated, date, DRMS employees present, name and title of contractor representative providing overview and a summary of the overview content.

NOTE: OCONUS DRMS personnel shall coordinate with the DLA Europe and Pacific safety office to determine what host nation requirements are applicable and for translation assistance, where necessary.

C3.7.6.14.5. The supervisor or site leader of an employee working at a contractor facility shall provide for the employee's safety just the same as at a DRMO/RIPL worksite:

C3.7.6.14.5.1 Ensure that the pertinent aspects of the safety overview at the contractor's facility are documented.

C3.7.6.14.5.2 Ensure that when PPE is required, it is provided at DRMS expense. Additionally, employees shall be trained on the proper use and care of PPE. The supervisor or site leader will certify in writing that the employee received and understood the required training, with the name of each employee trained, the date of the training, and the subject of the certification.

NOTE: PPE and Hazard Assessment certification forms can be found on the DRMS Safety and Health web page at <https://www.drms.dla.mil/drms/intranet/suppservices/certificationofppehazardassessment.pdf>.

C3.7.7. Storage and Handling.

C3.7.7.1. *Material Potentially Presenting an Explosive Hazard (MPPEH).* Although physical custody of MPPEH by a DRMO is prohibited, occasionally items of this nature are mixed with items turned in for disposal. The DEMIL safety and reporting procedures of Section 2, General Processing, Chapter 4, Demilitarization Program, should be reviewed prior to and complied with during any DEMIL operation. Some DRMOs have used ammunition and artillery items as office displays, paperweights and doorstops. The use of munitions list items (9MLIs) for these purposes is not permitted. Even categories III, IV, and V items that have been certified as "inert" must be demilitarized according to the provision of DOD 4160.28-M.

C3.7.7.2. *Batteries.*

C3.7.7.2.1. As of April 3 2009, 49 CFR 172.101 required insulating all batteries to prevent short circuit, sparks, or a dangerous evolution of heat with non-conductive caps, non-conductive tape, or by other appropriate means. DOT has since revised their guidance and certain dry batteries of a specific type and voltage are exempted from the insulation and comingling requirements. (PHMSA 09-0295, January 8, 2010). See Section 3 Pg S3-45 for guidance. DRMO personnel handling batteries shall wear proper PPE to include splash-proof goggles, face shield, acid proof gloves, aprons, boots, and use battery carriers. Emergency eyewash and showers will be available near the battery storage areas.

C3.7.7.2.2. MHE batteries will be charged while remaining on the equipment. Proper charging areas will be designated; marked and appropriate battery charging equipment will be used. Barriers will be placed around the battery charging equipment to prevent damage by the MHE. Personal Protective equipment will include all in (C3.6.7.2.1. above) and be placed neatly in the immediate area of the battery chargers. DRMO personnel will never remove and replace MHE batteries.

C3.7.7.3. *Chemical Compatibility.* Extreme care must be exercised in the storage, and/or handling of chemicals. For DRMS policy on storage compatibility, refer to Section 2, General Processing, Chapter 1, Logistics Program (C1.12.2.2.).

C3.7.7.4. *Compressed Gas Cylinders*

C3.7.7.4.1. DRMO personnel will not have owner markings obliterated, or torch cut, mutilate, or crush compressed gas cylinders. Residual amounts of gas could remain in these cylinders and can be very dangerous.

C3.7.7.4.2. Although compressed gas cylinders may be listed as being “empty” when they are received at the DRMO, they must be handled and stored as “full” cylinders. Valve protection caps, where cylinders are designed to accept caps, must be in place. If the cylinder(s) have been devalved or have visible hoses they can be considered empty. Oxygen cylinders in storage must be separated from fuel cylinders.

C3.7.7.4.3. Consult MIL-STD-101, Color Code for Pipelines and for Compressed Gas Cylinders and DLAI 4145.25, Storage and Handling of Liquefied and Gaseous Compressed Gasses and Their Full and Empty Cylinders, for additional information.

C3.7.7.5. *Organic/Inorganic Peroxide and Ether Chemicals:*

C3.7.7.5.1. Organic and inorganic peroxide are strong oxidizers and will cause spontaneous combustion when brought into contact with combustible and metallic substances. Organics peroxides are also heat and shock sensitive. Even the more commonly known hydrogen peroxide (obtainable at most drug stores in weak concentrations) exhibits these same characteristics.

C3.7.7.5.2. As these peroxide chemicals age, many decompose into substances that are heat and shock sensitive and can explode. Additionally, most ethers such as ethyl, benzyl, isopropyl, and butyl ether, dioxane and tetrahydrofuran will, upon exposure to air, combine with oxygen to form peroxides that can detonate.

C3.7.7.5.3. This family of chemicals can become very dangerous to handle and must be treated with great care and caution. Explosive Ordnance Disposal (EOD) personnel, due to age and the danger of explosion, will destroy organic peroxides, ether, and partially used containers of ether.

C3.7.7.5.4. DRMS will not accept custody of these items because of their high

potential for spontaneous combustion and explosion. However, if through error such items are received, the above listed cautions will be observed. If assistance is needed, call the host or DRMO Industrial Hygienists.

C3.7.7.5.5. Organic peroxides are considered to be carbon-based chemicals that contain the characteristic peroxide oxygen-oxygen bond. The primary types of peroxides that could be stored at some DRMOs are hydro peroxides (R-O-O-H) and dialkyl peroxides (R1-O-O-R2), where the R1 and the R2 are alkyl moieties. There are some other types of peroxides that have been identified, such as ackyl peroxides, poly peroxides, peroxyesters, alkylidene peroxides, peroxyacids, and cyclic peroxides.

C3.7.7.5.6. Some organic chemicals, that spontaneously form peroxides by free radical reactions of the hydrocarbon with molecular oxygen during autoxidation, can be initiated by light or contaminants. Some of the most notorious peroxide formers are: acetyls, certain allylic alkenes, chloro and flouroalkenes, dienes, aldehydes, amides, lactams, urea's, some alkylarenes, ketones, vinyl monomers, and some alcohols. The rate of peroxidation is considered to be a function of the parent chemical. The risk of hazardous peroxidation is generally decreased with an increase of the molecular weight of the chemical. Peroxidation can be accelerated by exposure to heat, light, and oxygen or air.

C3.7.7.5.7. A recommended guidance for the minimum concentration of peroxides in solution on organic chemicals is in the range of 0.005-1.0% as hydrogen peroxide. In most industrial hygiene peroxide programs, a concentration of 100 ppm of peroxides is used as a control point. It has been proposed, from a theoretical perspective, that it should be impossible for most solutions of <1% peroxides to explode. Normally, dilute solutions of peroxidizable chemicals do not usually use a peroxide hazard. Recommendations:

C3.7.7.5.7.1 If any ether or other volatile peroxide formers are being stored in a refrigerator, it must be spark proof.

C3.7.7.5.7.2 If there are any questions concerning suspicious organic chemicals or chemicals, in general, the host industrial hygienist must be contacted first.

C3.7.7.5.7.3 Sealed containers of hazardous materials that have failed the RTDS within the appropriate time, should be disposed as soon as possible, unless assurance that the hazardous material contains no peroxide forming ingredients.

C3.7.7.5.7.4 If any peroxidizable organic chemicals are received by the DRMO, the containers must be dated when they were received.

C3.7.7.5.7.5 All peroxide formers (peroxidizable organic chemicals) should be stored in sealed, air-impermeable containers.

C3.7.7.5.7.6 Diethyl ether should be stored in steel containers because the iron tends to neutralize peroxides.

C3.7.7.5.7.7 A responsible person should maintain an inventory of peroxidizable chemicals or establish a general chemical inventory to indicate which chemicals are subject to peroxidation.

C3.7.7.5.7.8 Any chemical with peroxide content of ≥ 100 ppm should be disposed of.

C3.7.7.5.7.9 Before the DRMO receives physical custody and accountability of any hazardous material that could be peroxidizable, the receiver must ensure that the host industrial hygienist has certified through any valid peroxide detection method (i.e., iodine detection, ferrous thiocyanate, or redox dip strips), the containers are peroxide free or less than the recommended value.

C3.7.7.6. Radioactive Property.

C3.7.7.6.1. Materials containing low level radioactive materials are mistakenly being transported to our DRMOs and consequently, transported to our demanufacturing facilities. In most cases, the outer shipping containers have visible radioactive emblems indicating they contain radioactive sources. The problem becomes even more difficult should any of these items contaminate a smelter. DRMO personnel are neither trained nor qualified to handle low-level radioactive commodities. The following procedures are to be taken when radioactive material is discovered at the DRMO or accidentally shipped to a contractor:

C3.7.7.6.1.1 Ensure the Inter-services Support Agreement includes quarterly radiation inspections by a qualified person from the host. This can be a Radiation Protection Officer, safety professional, or an industrial hygienist.

C3.7.7.6.1.2 Ensure the DRMO receives these quarterly inspections. This may prevent a small piece of radioactive material from becoming a large pile of radioactive scrap.

C3.7.7.6.1.3 Look at the receiving documents closely for any labels, signs, etc., which may indicate low-level radioactive material. Insure the turn-in documents are properly certified.

C3.7.7.6.1.4 Return any material to the generator flagged by DAISY (or detected) that indicates the material contains a radioactive source.

C3.7.7.6.1.5 File a Situation Report (SITREP) for any radioactive material inadvertently entering the DRMO. This includes those items returned to the generator. Be able to provide an NSN number, a copy of the DTID and if possible, any test results taken by the Radiation Protection Officer.

C3.7.7.6.1.6 Follow all guidance pertaining to R/T/D and S of radioactive commodities, written in DOD 4160.21M.

C3.7.7.7. Should Low Level Radioactive Material (LLR) inadvertently be shipped to a

contractor facility:

C3.7.7.7.1. Have the COR/COTR of the contractor notify DRMS Safety and Health Office within 24 hours of discovery.

C3.7.7.7.2. The COR/COTR will contact the DRMS Safety and Health Office and the SCO for assistance towards determining the health risks of the material. The COR will provide the safety office with the NSN, item description, generating DRMO, and the level of radioactivity.

C3.7.7.7.3. The DRMS Safety and Health Office, in conjunction with the contractor, will determine whether the material is to be returned to the generator, processed or shipped to a disposal site. Any special handling requirements will be determined.

C3.7.7.7.4. If the material is to be returned to the DRMO, the COR will contact the DRMO to determine the correct shipping and labeling instructions. The DRMO will contact the generator to make transportation arrangements.

C3.7.7.8. Monthly Safety Meetings:

C3.7.7.8.1. DRMOs will conduct and document monthly safety meetings.

C3.7.7.8.2. Topics of discussion will be the responsibility of the DRMO Chief and the Safety Monitor.

C3.7.7.8.3. Safety meetings may be held in conjunction with monthly (or weekly) staff meetings.

C3.7.7.8.4. All safety meetings will be documented using attendance rosters, which include the safety meeting topic.

C3.7.7.8.5. It will be the DRMO Chief's responsibility to ensure attendance of all employees working at the DRMO and their offsite branches.

C3.7.7.8.6. Monthly Safety meetings are mandatory. It provides the DRMO an opportunity to discuss any safety related matters in an open forum manner. It should also allow the DRMO Chief or the Safety Monitor to discuss host related requirements or issues presented at the host safety meetings.

C3.7.7.8.7. Topics for good safety meetings are located on the DRMS Safety and Health Web page (Safety Smart). Other matters, which would provide good conversation, would be discussion over job performance (hazard assessments), PPE, and even away from work topics (hiking, biking, etc.).

C3.7.7.9. Walk Around Safety Inspections:

C3.7.7.9.1. The Safety Monitor or Field Activity Area Manager, DEMIL Center,

Controlled Property Center (CPC) Chief or designee will conduct weekly/monthly, as required, facility walk around inspections. **The DRMS Inspection Log CAMS Version Checklist is** a very good reminder as to what to look for. The DRMS Field Activity Manager must certify these inspections. Offsite storage locations (i.e., Receipt in Place Locations (RIPLs), etc.) will be included. The safety monitor or Field Activity Manager or designee does not have to be a professional to observe and report unsafe working conditions or unsafe acts. These should be written down, reported, and corrected.

C3.7.7.10. CPR Training.

C3.7.7.10.1. The DRMO will ensure that there is at least one person for every 25 employees trained in Cardio Pulmonary Resuscitation (CPR). Additional employees will be trained as alternatives because of vacations, TDY, etc. CPR responders will be provided Hepatitis vaccinations at government expense. Please refer to the section on First Aid on the DRMS Web Site <<https://www.drms.dla.mil/internal/Support/Safehealth/safehealth.html>> for additional information on CPR requirements.

C3.7.8. Industrial Hygiene.

C3.7.8.1. General.

C3.7.8.1.1. Industrial Hygiene is that science devoted to the recognition, evaluation, and control of those environmental factors or stresses arising in or from the workplace which may cause sickness, impaired health, and well-being, or significant discomfort and inefficiency among workers or among the citizens of the nearby community.

C3.7.8.1.2. The environmental stress in the workplace that influence the health of the worker are chemicals in the forms of liquids, dusts, fumes, mists, vapors, and gases; physical agents, such as ionizing radiation, lasers, microwaves, noise, vibration, extremes of temperature and illumination, biological agents, such as insects, molds, fungi, and bacteria; and ergonomic factors including monotony, repetitive motion, and fatigue.

C3.7.8.2. Industrial Hygiene Principles.

C3.7.8.2.1. Everyone at the DRMO should be alert to the potential health hazards in day-to-day operations. If something is observed which could become a health hazard, employees are urged to immediately contact their host safety and industrial hygiene departments.

C3.7.8.2.2. The host industrial hygiene department should conduct comprehensive annual evaluations of all potential workplaces. These evaluations may be conducted on other intervals, provided the industrial hygiene department stipulates the reasons, and the DRMO submits an Industrial Hygiene waiver to DRMS Safety and Health Department.

C3.7.8.2.3. The industrial hygienist will investigate all industrial operations, chemicals being used, and provide a professional judgment as to the health hazard associated with that

chemical. Any potential physical or biological exposures shall be evaluated in accordance with applicable DOD and OSH standards. These results will be used as a baseline assessment to determine possible abatement or required Personal Protective Equipment.

C3.7.8.2.4. Problems of a technical nature or associated with Industrial Hygiene shall be referred to the host industrial hygienist or to DRMS Safety and Health Manager.

C3.7.8.3. Industrial Hygiene Records.

C3.7.8.3.1. The DRMO will maintain all records associated with annual inspections, and personal monitoring. Industrial Hygiene monitoring and survey data will be forwarded to DRMS Headquarters in the event of closures or reassignment.

C3.7.8.4. Health Hazard Inventory.

C3.7.8.4.1. A Local Health Hazard inventory or similar to (LOHHI) must be developed to ensure an effective occupational health program. The inventory should consist of the name of the installation, activity, directorate, work location, date the information was collected, name of the evaluator, name of the operation, potential exposures, controls, name of people involved, and relevant follow-up actions and recommendations. This information should be compiled from onsite inventories. The information obtained is used to establish medical surveillance, health education, and personal protective equipment.

C3.7.8.5. Medical Surveillance. Employees will be considered for medical surveillance if exposed to chemicals or environmental factors which are one half of the OSHA PEL.

C3.7.8.5.1. Hearing Conservation. Engineering controls will be considered the primary means to protect personnel from the hazards of noise. Engineering controls of noise should be assessed and implemented where the technology exists and where economically feasible.

C3.7.8.5.1.1 Any new equipment purchased should have the lowest noise emission levels technologically and economically feasible.

C3.7.8.5.1.2 Acoustics shall be included in developing criteria from which plans and specifications for all new facilities are developed.

C3.7.8.5.1.3 The proper use of hearing protective devices will be purchased and worn in accordance with the industrial hygiene recommendations.

C3.7.8.6. *Vision.* Occupational eyewear has been discussed. Further instruction is given in the Safety and Health Web site.

C3.7.8.7. *Ionizing Radiation.* The DRMO will not accept physical custody of any radioactive materials. Should any radioactive materials inadvertently arrive at the DRMO, the DRMO Chief should immediately contact the host Radiation Protection Officer. If radioactive

material is shipped from another DRMO, the radioactive material is to be returned to the shipper. While awaiting shipping or waiting shipping instructions, the material is to be placed in an isolated area of the DRMO (if the host Radiation Protection Officer does not have the storage space). Any questions pertaining to shipping, storage, etc., should at first be directed towards the host Radiation Protection Officer. DRMS Safety and Health should be immediately notified.

C3.7.8.7.1.1 DRMOs should obtain an ISA with their host Radiation Protective Officer to ensure that at least 4 radiation surveys of the DRMO are performed per year. These radiation surveys are to be performed as quality control, only.

C3.7.8.7.1.2 Some DRMOs have radiation gate monitors to detect radioactive materials in their scrap. The purpose of these monitors is to ensure any scrap shipments to a foundry or commercial scrap yard are free of radioactive materials. These monitors are the same used in commercial scrap yard facilities and smelters. Should any problems occur with the gate monitor, contact the DRMS Safety and Health Office.

C3.7.9. Occupational Medicine Service.

C3.7.9.1. *Purpose.* DRMS will ensure that occupational medicine services are available or provided for employees at risk of health effects due to workplace exposures, or for employees being placed in positions requiring medical fitness determinations.

C3.7.9.2. *Scope.* The Safety and Occupation Health Officer (SOHO) will assist commanders and directors in arranging for occupational medicine services to be provided by DRMS health staff and by ISA or MOU with host military health staff. Overseas organizations will follow contract or Host Nation rules regarding Local National Employees. Employee wellness programs and services not related to workplace exposures are not part of occupational medicine services and are not covered in this program.

C3.7.9.3. *Confidentiality.* Confidentiality of medical data will be maintained at all times in accordance with DOD Directive 5400.11, "Department of Defense Privacy Program," (reference 28), and DOD Instruction 6055.5, "DOD Industrial Hygiene and Occupational Health". An EMFS (Employee Medical File System) Manager will be appointed in accordance with DOD 6055.5. In DRMS the EMFS is the lead Occupational Health Nurse. The EMFS Manager may authorize medical data access to other members of the Occupational Health Program staff as necessary to perform his/her duties.

C3.7.9.4. *Examinations.*

C3.7.9.4.1. *Medical Surveillance for Workplace Exposures.* Medical examinations will be provided where the industrial hygiene evaluations have found the potential for work-related adverse health effects, or where required by OSHA standard (DODI 6055.5, reference 7). The protocol for each medical examination will be based on DOD 6055.5-M, Occupational Medical Surveillance Manual (reference 8), in consultation with the health staff providing the examination. At no time will Shoos make medical determinations concerning the actual exam protocols to be utilized nor evaluate the results medically.

C3.7.9.4.1.1 Baseline examinations will be performed to provide baseline measurement for comparison to periodic measurements in the detection of early or sub-clinical health effects.

C3.7.9.4.1.2 Periodic occupational medical examinations will be offered to detect early or sub-clinical health effects. Abnormal findings will be used to evaluate and treat the individual employee, and will be provided to industrial hygiene for workplace evaluations to prevent further workplace exposures to this or other employees.

C3.7.9.4.1.3 Termination of exposure examinations will be offered when the employee's exposure to a specific hazard has ceased due to employee reassignment, changes in existing work processes, or termination of employment. DOD 6055.5-M (reference 8) identifies required termination of exposure examinations.

C3.7.9.4.1.4 Termination of employment examinations is required by OSHA standards for more chronic exposures to document employee's health condition upon leaving the current employer (e.g., 29 CFR 1910.1001, Asbestos [reference 18]). These examinations will be offered at termination of employment to all employees who have previously been offered periodic examinations. When the most recent periodic examination is less than one year old (at the effective termination date), it may serve as the termination examination.

C3.7.9.4.2. Fitness and Risk Determination. Fitness medical examinations are provided to ensure an employee is capable, from a medical standpoint, of performing specific tasks with or without reasonable accommodation, without placing the individual or someone else at risk of significant harm. The content of pre-placement and periodic examinations will be determined for each position by the workplace supervisor and the Human Resources office, with the assistance of the occupational medicine staff. Supervisors and Human Resources will review the results of the fitness and risk determination prior to placing an employee in a position with medical requirements.

C3.7.9.4.3. Certified Temporary Medical Condition. Employees should notify the occupational medicine staff about their certified temporary medical condition (e.g., pregnancy, broken arm, etc.) as early as possible so an initial assessment of their work environment and assignment can be made. Where necessary and justified, specific job limitations should be recommended after coordination with the employee's private physician.

C3.7.9.4.4. Administrative examinations or evaluations will be offered as necessary and in accordance with appropriate regulations. Such examinations will be requested and justified in writing by management officials through Human Resources channels. Human Resources officials and the SOHO will ensure that such examinations are not used abusively.

C3.7.9.4.5. Employee Participation. Employees may decline to participate in any medical examination offered however; their nonparticipation may result in reassignment or personnel action if they are otherwise unable to demonstrate that they are medically fit for the hazards, exposures, and duties of their position. The SOHO may require declining employees

to sign a statement that a medical examination was offered but the employee declined.

C3.7.9.5. Medical Treatment.

C3.7.9.5.1. Emergency medical treatment. Supervisors will ensure that immediate first aid and medical care are provided to an injured employee.

C3.7.9.5.1.1 At locations with medical treatment capability, emergency treatment will be provided for all DRMS employees, contractors, and visitors in accordance with locally developed procedures.

C3.7.9.5.1.2 At locations without medical treatment capabilities, emergency treatment will be provided by outside sources (e.g., contract, local emergency medical services).

C3.7.9.5.1.3 At contractor-operated facilities, first time emergency medical treatment of injuries may be provided by the contractor.

C3.7.9.5.2. CPR and first aid training.

C3.7.9.5.2.1 All DRMS workplaces regardless of distance from an infirmary, clinic or hospital, will provide CPR and first aid training and response for employees. For those workplaces, 1 in 25 must be trained in first aid and a sufficient number must be trained in CPR. The determination of sufficiency is up to the DRMS commander.

C3.7.9.5.2.2 Non-emergency medical treatment. DRMS will offer medical diagnosis and treatment to employees for occupationally related health conditions. Employees will be advised that they have the option of selecting health care provided by DRMS or their own private provider.

C3.7.9.5.3. Medical Treatment Evaluations:

C3.7.9.5.3.1 Supervisors may encourage, but not require, employees to report injury/illness to DRMS-provided medical services before seeking medical care from their own health care provider.

C3.7.9.5.3.2 Employees who become injured or ill because of an occupational incident or exposure are expected to report to DRMS-provided medical service facility, as soon as possible, for evaluation and documentation in the employee's medical folder of the event. The necessary treatment is offered appropriate to the problem, but the worker has the option of receiving treatment at the facility of his or her choice.

C3.7.9.5.3.3 Employees returning to a duty status from work related injury/illness should clear through the DRMS-provided medical service facility with documentation from his/her health care provider. This will help ensure it is safe for the employee to return to a specific work setting in order to avoid premature return to work and risk of aggravation of the injury/illness or re-injury to the employee.

C3.7.9.5.4. Treatment of non-occupational medical conditions. The occupational medicine physician, staff, or supervisor will refer employees to their private health care provider for definitive diagnosis and treatment of non-occupational medical conditions. The staff may provide, to the extent possible, any treatments requested in writing by the employee's private physician. Such written authorization must be renewed every 3 months. The occupational medicine physician must approve any exceptions to the above.

C3.7.9.5.5. Flu immunizations may be offered to employees.

C3.7.9.5.6. Travel immunizations. DRMS employees will receive appropriate immunizations at DRMS expense prior to official travel outside the United States. The Centers for Disease Control are the federal authority for recommending immunizations for each country visited (DOD Instruction 6205.2, "Immunization Requirements" [reference 29]). Current immunization recommendations are posted to the CDC web site at <http://www.cdc.gov>.

C3.7.10. Blood-borne Pathogens Program:

C3.7.10.1. *Purpose:* DRMS will protect employees who could be "reasonably anticipated," as a result of performing their job duties to face contact with blood and other infectious materials. DRMS will follow the requirements of 29 CFR 1910.1030, "Blood-borne Pathogens" (reference 21), as outlined in this enclosure.

C3.7.10.2. *Scope.*

C3.7.10.2.1. OSHA's blood-borne pathogen rule applies to those people who are trained in CPR and first aid and are expected to provide assistance in an emergency, and any other employees who may be exposed to blood-borne pathogens as part of their job duties (such as, but not limited to: nurses, EMTs, ambulance drivers). See Safety Toolbox. <<https://www.drms.dla.mil/drms/intranet/suppservices/safetyhealth.htm>>. At the screen, scroll down to the Safety Toolbox. Open Blood borne Pathogens.

C3.7.10.2.2. Infectious materials include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. They also include any unfixed tissue or organ other than intact skin from a human (living or dead) and human immunodeficiency virus (HIV)-containing cell or tissue cultures, organ cultures and HIV or hepatitis B (HBV)-containing culture medium or other solutions as well as blood, organs or other tissues from experimental animals infected with HIV or HBV.

C3.7.10.3. *Exposure Control Plan.* DRMS' plan identifies tasks and procedures as well as job classifications where occupational exposure to blood or other infectious material occurs without regard to personal protective clothing and equipment. This plan also specifies the procedure for evaluating circumstances surrounding exposure incidents. This plan is accessible to employees and available to OSHA. This plan is reviewed and updated at least annually and

as necessary to accommodate workplace changes.

C3.7.10.3.1. Exposure Determination by Job Classification.

C3.7.10.3.1.1 *ALWAYS EXPOSED* - General Position Titles:

C3.7.10.3.1.1.1 Nurse.

C3.7.10.3.1.1.2 Contract Physician.

C3.7.10.3.1.1.3 Emergency Response Team Members.

C3.7.10.3.1.2 *SOMETIMES EXPOSED* - General Position Titles:

C3.7.10.3.1.2.1 Recreation Specialist.

C3.7.10.3.1.2.2 Designated First Aid/CPR Personnel.

C3.7.10.3.1.2.3 Firefighter.

C3.7.10.3.1.2.4 Contract Physical Security Specialist.

C3.7.10.3.1.2.5 Housekeeping.

C3.7.10.3.1.3 *NOT EXPOSED* - General Position Titles.

C3.7.10.3.1.3.1 All other employees.

NOTE: Occupational exposure may occur to “*sometimes exposed*” employees when administering first aid, under “*Good Samaritan*” or “*Volunteer*” status.

C3.7.10.3.2. Exposure Control. DRMS activities will practice universal precautions, (treating body fluids/materials as if infectious) emphasizing engineering and work practice controls. 29 CFR 1910.1030 (reference 21) identifies specific exposure control procedures.

C3.7.10.3.3. Protective Equipment. DRMS activities will provide, at no cost, and require employees to use appropriate personal protective equipment such as gloves, gowns, masks, mouthpieces and resuscitation bags and must clean, repair and replace these when necessary. DRMS will provide non-latex gloves at no cost to employees with latex allergies. Gloves are now required for routine phlebotomies in volunteer blood donation centers.

C3.7.10.3.3.1 The employer must ensure that the employees observe the following precautions for handling and using personal protective equipment.

C3.7.10.3.3.1.1 Employees wear appropriate gloves when there is a potential for hand contact with blood, or other body fluids; or touching any object that is contaminated

with fluids.

C3.7.10.3.3.1.2 Disposable (single use) gloves shall be replaced as soon as possible when contaminated or torn, punctured. They shall not be reused, or washed, but disposed.

C3.7.10.3.3.1.3 Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised. They must be discarded if they are ripped, cracked, peeling, punctured or show any signs of deterioration.

C3.7.10.3.3.1.4 Employees are not to wear at work or go home in clothing that is penetrated with blood or other body fluids.

C3.7.10.3.3.1.5 Eyewear should be worn to protect against exposure, such devices are: goggles, glasses with solid side shields or chin-length face shields.

C3.7.10.3.4. Cleaning procedures:

C3.7.10.3.4.1 DRMS has a written schedule for routine cleaning at headquarters and all off sites will keep a record when clean-ups are done.

C3.7.10.3.4.2 Supervisors will insure that contaminated work surfaces be decontaminated with a disinfectant when splashes, spills, or any contact with blood or other body fluids occur.

C3.7.10.3.4.3 Off sites should notify their host to accomplish the cleanup. At Headquarters clean up will be with approved solutions. Gloves must be used in all clean ups.

C3.7.10.3.4.4 Protective equipment should be handled with gloves. Contaminated equipment should be bagged and cleaned at the expense of the work place.

C3.7.10.3.5. Hepatitis B Vaccination. Vaccinations will be made available to all employees who have occupational exposure to blood or other infectious material within 10 working days of assignment, if in an Exposed or Potential to be Exposed classification, at no cost, at a reasonable time and place, under the supervision of licensed physician/licensed healthcare professional, and according to the latest recommendations of the U.S. Public Health Service (USPHS) or CDC. Vaccinations are not required to be provided where the employee has previously received the complete Hepatitis B vaccination series, where antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons. Employee participation in prescreening will not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. Should booster doses later be recommended by the USPHS, employees must be offered to them. See CDC Hepatitis B Guidelines at Center for Disease Control <<http://www.cdc.gov>>.

C3.7.10.3.6. Post-Exposure Evaluation and Follow-Up. DRMS activities will refer to

medical facility for evaluation suspected exposures to blood-borne pathogens to determine appropriate follow-up and treatment. Supervisors are required to report all incidents to the Safety Manager within 24 hours of the suspected exposure. Follow-up (by clinic and Safety) must include a confidential medical evaluation documenting the circumstances of exposure; identifying and testing the source individual if feasible; testing the exposed employee's blood if he/she consents; post-exposure prophylaxis if recommended by a licensed health-care provider; counseling and evaluation of reported illnesses. Healthcare professionals must be provided specified information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer. All medical diagnoses must remain confidential.

C3.7.10.3.7. Hazard Communication. Containers of regulated waste, refrigerators and freezers and other containers, which are used to store or transport blood or other potentially infectious materials will be affixed with warning labels including the orange or orange-red biohazard symbol. Red bags or containers may be used instead of labeling. Signs must be used to identify restricted areas with the potential of exposure to HIV and HBV, such as treatment rooms.

C3.7.10.3.8. Information and Training. Employees at risk of exposure to blood-borne pathogens will be trained in program requirements initially upon assignment and annually. Training must include making accessible a copy of the regulatory text of the standard and explanation of its contents, general discussion on blood-borne diseases and their transmission, exposure control plan, engineering and work practice controls, personal protective equipment, hepatitis B vaccine, response to emergencies involving blood and infectious materials, how to handle exposure incidents, the post-exposure evaluation and follow-up program, and signs/labels/color-coding. There must be opportunity for questions and answers, and the trainer must be knowledgeable in the subject matter. Laboratory and production facility workers must receive additional specialized initial training.

C3.7.10.3.9. Recordkeeping.

C3.7.10.3.9.1 Medical records will be kept for each employee with occupational exposure for the duration of employment plus 30 years (DODI 6055.5, reference 7; 29 CFR 1910.1020, reference 21), must be confidential and must include name and social security number; hepatitis B vaccination status (including dates); results of any examinations, medical testing and follow-up procedures; a copy of the healthcare professional's written opinion; and a copy of information provided to the healthcare professional. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA, and NIOSH. Medical records will not be made available to the employer except as approved by the employee. Disposal of records must be in accordance with OSHA's standard covering access to records.

C3.7.10.3.9.2 Training records must be maintained for 3 years and must include dates, content of the training program or a summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

C3.7.10.3.9.3 Where sharps are used a Sharps Injury Log must be maintained. All percutaneous injuries from sharps must be recorded and in a manner that assures confidentiality of the person is maintained at all times. The log will include: the type and brand of device involved in the incident, the department or work area where the exposure incident occurred, and an explanation of how the incident occurred.

C3.7.10.3.10. Declination Statement.

Figure 2 - Declination Statement - Example

<u>DECLINATION STATEMENT</u>	
<p>The following statement of declination of hepatitis B vaccination must be signed by an employee who chooses not to accept the vaccine. The statement can only be signed by the employee following appropriate training regarding hepatitis B, hepatitis B vaccination, the efficacy, safety, method of administration, and benefits of vaccination, and the availability of the vaccine and vaccination free of charge to the employee. The statement is not a waiver; employees can request and receive the hepatitis B vaccination at a later date if they remain occupationally at risk for hepatitis B.</p> <hr/>	
<p>I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.</p>	
<hr/> Employee Signature	<hr/> Date

C3.7.11. Tuberculosis Policy.

C3.7.11.1. *References.*

C3.7.11.1.1. Mandatory TB Guidelines Workshop. Pathfinder Associates, Inc. (1994).

C3.7.11.1.2. Tuberculosis [online]. Please see OSHA Tuberculosis Information <<http://www.osha.gov/SLTC/tuberculosis/index.html>>.

C3.7.11.1.3. The Tuberculosis Detection and Control Program. Reg. 48-115 (Air Force 1994).

C3.7.11.1.4. Medical Services: Preventive Medicine. Reg. 40-5 (Army 1990).

C3.7.11.1.5. Tuberculosis Control Program. BUMEDINST 6224.8 (Navy 1993).

C3.7.11.2. *Purpose.*

C3.7.11.2.1.1 To provide policy and responsibilities in the event that an employee is exposed to or develops tuberculosis.

C3.7.11.2.1.2 In 1993, OSHA released a new report and set of guidelines for employees who work in high-risk areas such as health care, correctional and long-term facilities, homeless shelters, and drug treatment centers. This report was released in response to the re-emergence of TB in the mid 1980's (OSHA, 2000). TB is responsible for about three million deaths each year (OSHA, 2000). Contributing to the recent outbreaks are new drug resistant strains of *Mycobacterium tuberculosis*. Individuals particularly at risk have weakened immune systems.

C3.7.11.2.1.3 It is not mandated that DRMS, DLIS, DSIO have such a policy, however, OSHA policy nonspecifically refers to "*Federal agencies*" as being covered by the policy. The HDI Federal Center has nurses on staff to provide health care to the employees at these agencies; therefore, it is in the best interest of the agencies to have a general written policy on TB.

C3.7.11.2.1.4 The Army (Reg. 40-5), Air Force (Reg. 48-115), and Navy (BUMEDINST 6224.8) have detailed written policies regarding Tuberculosis. Depending upon the site location, these policies may be more appropriate.

C3.7.11.3. *Applicability and Scope.* This directive is applicable to all employees (military, civilian, contract, student and volunteer) at the HDI Federal Center and all DRMS activities.

C3.7.11.4. *Definitions.*

C3.7.11.4.1. *TB* - Tuberculosis.

C3.7.11.4.2. *OSHA* - Occupational Safety and Health Administration.

C3.7.11.4.3. *Mycobacterium tuberculosis* - A bacterium that causes the infection known as tuberculosis, spread in the air by droplet nuclei when a person coughs, sneezes, talks, or spits (Mandatory Tuberculosis Guidelines Workshop, 1994). When an individual is infected with TB, symptoms may be either latent or active. During a latent stage infection, the individual shows no signs or symptoms of TB, as the immune system keeps the bacteria in check (Mandatory Tuberculosis Guidelines Workshop, 1994); however, 5-10% affected will develop into clinical or active TB. The CDC defines symptoms of active TB as "*sputum-producing cough, coughing up blood, weight loss, loss of appetite, lethargy/weakness, night sweats, [and] or fever.*" (OSHA, 2000).

C3.7.11.5. *Policy.*

C3.7.11.5.1. When an employee presents with symptoms of active TB, as identified by the nurse on staff or by any other health care provider, that employee will not be allowed to work until given a physician's approval.

C3.7.11.5.2. The diagnosing physician will report the incidence of tuberculosis to the local health department or community agency. The State or local health department decides on the necessary course of action, based upon their policies, for follow up.

C3.7.11.5.3. When an employee has a positive Mantoux skin test, but not active symptoms, a physician determines eligibility to work, based on diagnostic test results (chest x-ray and sputum culture).

NOTE: If the test results are positive and there are no symptoms, expect prophylaxis medication (Isoniazid) for about 6 months, blood tests, and chest X rays. These tests are necessary to prevent against the appearance of active symptoms.

C3.7.11.5.4. As the HDI Federal Center and off-site work areas are not health care facilities, the OSHA regulations for the provision of air masks, annual skin tests, and air filters required to control droplet nuclei do not apply at this time.

C3.7.11.5.5. If an employee suspects they have been exposed to TB, the facility nurse or health care staff should request a skin test. The nurse / health care staff will refer the employee to an agency, such as a local Health Department that provides the Mantoux skin test.

C3.7.11.6. Responsibilities.

C3.7.11.6.1. Employee will:

C3.7.11.6.1.1 Report symptoms of, or exposure to, TB to health care provider.

C3.7.11.6.1.2 Cooperate with health care provider and local health department officials with required testing, treatment, and information gathering. DRMO employees must comply with local or host national health requirements.

C3.7.11.6.1.3 Comply with entire recommended treatment regime.

C3.7.11.6.1.4 Request sick leave and provide employer with written recommendations from health care provider or local health department.

C3.7.11.6.2. Employer will:

C3.7.11.6.2.1 Require employee provide written recommendations from health care provider or local health department.

C3.7.11.6.2.2 Cooperate with local health department with any required testing, treatment or information gathering. DRMOs must comply with local or host national health requirements.

C3.7.11.6.3. The Safety and Occupational Health Office (DRMS-WH) will:

C3.7.11.6.3.1 Maintain this directive in a current status and review it biennially.

C3.7.11.6.3.2 Provide guidance and medical expertise to employee and employer.