





MARINE CORPS AIR STATION BEAUFORT, SOUTH CAROLINA 29904-5000

ASO 5090.6A NREAO MAR 10 2004

AIR STATION ORDER 5090.6A

From: Commanding Officer To: Distribution list

Subj: MEDICAL WASTE MANAGEMENT PLAN

Ref:

- (a) BUMEDINST 6280.1A
- (b) South Carolina Infectious Waste Management Regulations, R.61-105, May 26, 2000
- (c) NAVHOSP BEAUFORT INSTRUCTION 6220.5E
- (d) NAVDENCEN PARRIS ISLAND INSTRUCTION 6600.2D
- (e) HAZARDOUS WASTE MANAGEMENT PLAN ASO 4570.3A

Encl:

- (1) Medical Waste Management Plan Guidelines
- (2) Regulated Medical Waste Container Packaging And Labeling Specifications
- (3) Standard Operating Procedures For ECO Cycle 10
- (4) Environmental Service Medical Waste Cleanup Protocol
- 1. <u>Situation</u>. The enclosure provides guidelines for the management of medical waste at Marine Corps Air Station (MCAS) Beaufort Branch Medical Clinic (BMC) and Branch Dental (BDC) Clinic.
- 2. <u>Mission</u>. The Natural Resources and Environmental Affairs Officer (NREAO), under the cognizance of the MCAS Logistics Officer (S-4), will provide overall coordination of the Medical Waste program at MCAS Beaufort.
- a. Medical waste is composed of solid and liquid waste from patient diagnostic and treatment procedures. There is a great deal of concern about the public image of hospitals and clinics as sources of environmental pollution resulting from the disposal of medical waste.
- b. The Medical Waste Management Plan for MCAS Beaufort has been developed to ensure the Clinics comply with the standards set forth in the references as well as all federal, state and local guidelines and regulations pertaining to proper management of regulated medical waste.

- 3. <u>Execution</u>. Specific aspects of the program with respective responsible persons are as follows:
- a. Per reference (c), the Environmental Manager, Naval Hospital Beaufort (NHB) is responsible for overseeing the medical waste disposal contract, treatment equipment, manifesting and record keeping.
- b. The head of the department generating medical waste is responsible for the proper segregation, packing and labeling of medical waste.
- c. Per reference (d), the Head, Staff Education and Development Department, Infection Control Officer (ICO), Naval Dental Center, Parris Island and ICO MCAS BDC will provide technical assistance and instruction as needed and provide medical waste training for BDC.
- d. Per reference (e), the Commanding Officer, MCAS Beaufort is designated the responsible officer for the proper management of all waste aboard MCAS Beaufort to include medical waste.
- e. NREAO will maintain and update the Medical Management Plan as appropriate with review of the plan at least annually.
- 4. Administration and Logistics. None.

5. Command and Signal

- a. Signal. This Order is effective the date signed.
- b. <u>Command</u>. This Air Station Order is applicable to all tenant commands and staff sections.

H. A. STOCKWELL

Distribution: A

- (7) Other Waste. In the event non-regulated waste becomes mixed with regulated waste, the entire mixture is designated as regulated waste and must be so managed.
- (8) <u>Plating</u>. Plating is the process of placing a medical culture on a glass plate for obtaining bacterial results.
- b. Generator (Hospital) Requirements. The Environmental Manager (EM) Naval Hospital Beaufort (NHB) will register BMC with the South Carolina Department of Health and Environmental Control (SCDHEC) utilizing SCDHEC forms and renew every 3 years. The EM will also apply to SCDHEC for permits by rule that authorizes the hospital and each clinic to treat waste in-house. The permits stipulate required documentation of proper operation of treatment units.
- (1) Each base under a Title V air permit will provide notification to SCDHEC seven days prior to putting treatment units on line.
- (2) The Infection Control Committee (ICC) for MCAS Beaufort and the ICC for Naval Dental Center (NDC) will review the Medical Waste Management Plan each October.

c. Segregation

- (1) Each clinic or other generator shall separate regulated medical waste (as defined in paragraph 2a of this enclosure) from non-regulated medical waste at its point of origin.
- (2) The head of each department that generates medical waste is responsible for ensuring proper segregation.
- d. Management of Medical Waste. MCAS BMC will collect medical waste in Eco-Cycle 10 processing chambers and take to Building 940 for treatment. Operating instructions for Eco-Cycle 10 are contained in Attachment B. MCAS BMC will maintain a logbook at the treatment unit in which they will record weight, source, date, verification of release of chemical, results of plating tests and operator's name for each treatment cycle. Waste that cannot be processed will be packaged according to Enclosure 2 and stored in Building 940 for bi-weekly contractor pickup.

MEDICAL WASTE MANAGEMENT PLAN GUIDELINES

1. <u>Introduction</u>. The purpose of this plan is to provide guidelines for management of regulated medical waste at Marine Corps Air Station (MCAS) Beaufort Branch Medical Clinic (BMC) and Branch Dental Clinic (BDC), which are consistent with federal, state and local regulations. (See Enclosures 2, 3 and 4.)

2. Regulated Medical Waste.

- a. <u>Definitions</u>. Regulated medical waste refers to liquid or solid waste that potentially contains pathogens of sufficient virulence and in sufficient quantity that exposure of a susceptible host could result in host infection. The categories below are regulated medical wastes.
- (1) <u>Generator</u>. The person or department producing infectious waste.
- (2) Sharps. Any discarded, potentially contaminated article that may cause puncture of cuts, including but not limited to needles, scalpel blades, Pasteur pipettes, lancets, specimen slides, cover strips, glass petri dishes and broken glass.
- (3) <u>Microbiological</u>. Microbiological specimens and cultures, including but not limited to materials which have been exposed to human pathogens in the production of biologicals, discarded live vaccines and culture dishes/devices used to transfer, inoculate and/or mix cultures.
- (4) <u>Blood and Blood Products</u>. Waste unabsorbed human blood/blood products or supersaturated absorbents.
- (5) <u>Pathological Waste</u>. Body parts (e.g., tissues, organs, limbs) from surgery or autopsy procedures.
- (6) Other Potentially Infectious Materials. Unfixed tissues, semen, vaginal secretions, fluid, peritoneal fluid, pericardial fluid, amniotic fluid, saliva from dental procedures and any body fluids visibly contaminated with blood. This category does not include feces, nasal secretions, sputum, saliva, sweat, tears, urine and vomitus unless they contain visible blood.

(1) Minimize exposure to regulated waste during transport to storage areas. Wear protective apparel or equipment such as gloves, coveralls, aprons, masks and goggles appropriate for the level of risk associated with the particular task.

e. Storage

- (1) MCAS BMC and BDC shall store their regulated waste on site and meet the storage requirements of reference (b). The storage shed at MCAS BMC is Building 940.
- (2) Entry to this area is restricted to authorized Public Works and BMC personnel.
- (3) The universal biohazard symbol and the word BIOHAZARD must be clearly visible on the outside of this storage area at all times.
- (4) Public Works personnel shall ensure this area is secure from pest and rodent entry.
- (5) BMC personnel shall ensure this area is kept clean. They shall also log generator, date transported to the storage area and weight of each box.

f. Treatment and Disposal

(1) At MCAS BMC and BDC, the medical waste shall be stored in Building 940 and treated as needed in the Eco-cycle 10 processor located in that building.

g. Transportation Off-site of Regulated Waste

- (1) EM shall coordinate transportation and contractor pickups.
- (2) When awarding or administering the regulated waste contract, the EM shall ensure that the contractor is properly registered with the state in accordance with reference (b).
- (3) In accordance with reference (b), contractor has accepted responsibility or custody of the waste once waste is loaded onto the transport vehicle.
- h. Manifesting and Record Keeping. The EM is responsible for the manifesting and record keeping requirements associated with regulated medical waste generation and disposal.

Manifesting is required for medical waste being transported offsite for treatment and disposal.

- (1) The EM will randomly inspect regulated waste red bags for proper segregation and boxes for proper labeling and packaging.
- (2) As part of the regulated waste contract, the EM will ensure a practical system to monitor disposal of waste. Basic elements of this system include the date, type of waste, amount and disposition. The NHB ICO will conduct inspections monthly.
- (3) Manifests at MCAS BMC will be signed by the clinic director or designee with a copy provided to NREAO and promptly returned to the EM at NHB.
- (4) In accordance with reference (b), the EM will maintain all records and manifests for a minimum of three years.
- i. Training. The BMC Head, Education and Training Department is responsible for administering the Command Regulated Waste Management Training Program for BMC. The BDC Head, Staff Education and Development Department is responsible for administering the training for BDC. The ICO for each clinic will provide technical information and instruction as needed and requested by the Head, Education and Training Department at NHB and Head, Staff Education and Development Department at NDC.
- (1) The Command Regulated Waste Management training will include a briefing on regulated medical waste handling and occupational disease hazards for all new employees and staff.
 - (2) Annual refresher training is required for all staff.
- (3) MCAS BMC and BDC will include regulated waste handling and segregation training in their regularly scheduled in-service training programs.
- 3. Non-Regulated Waste. Medical waste that is non-regulated waste will be treated as general waste according to currently acceptable methods for collection, storage, transport and disposal. Example: Absorbent materials containing small amounts (20 cc or less) of blood or body fluids (e.g., dressings, chucks, diapers, facial tissues and sanitary napkins with blood or body fluids which are fully absorbed or not free-flowing) may be placed into trash receptacles lined with durable plastic bags and discarded with other solid waste.

4. Clean up of Regulated Medical Waste Spills

- a. <u>Internal Spills</u>. Promptly notify Natural Resources and Environmental Affairs (NREAO) at 228-6461/7370 during working hours or 911 after hours of waste spills in any area of the clinics in Building 598. Personnel will follow the approved methods of cleanup and disinfection outlined in Enclosure 4 of this instruction.
- b. External Spills. In the case of a discharge of infectious waste during transportation or storage, take appropriate and immediate action to prevent potential effects to human health or to the environment. For spills outside the confines of Building 598, external spills, NREAO should be notified at 228-6461/7370 during working hours or 911 after hours and immediately telephone the SCDHEC's 24-hour emergency telephone number 803-253-6488, giving all requested information.
- 5. Medical Waste Contingency Plans. The Duty Personnel or ICO will contact the EM as soon as there is a problem with a treatment unit. The EM will contact Public Works repair person or the vendor and arrange for expeditious repair or maintenance of the equipment. In the event that the treatment units are inoperable for more than one week, the EM will ensure that the infectious waste contractor picks up waste as necessary. Do not transport medical waste from one facility to another for the purpose of treating waste.

6. Quality Assurance Plan

- a. <u>Medical Waste Management Plan Review</u>. The ICC for each clinic will review the plan every October for accuracy, contents, applicability and effectiveness. Necessary changes will be made following their review.
- b. Operations Review. Per reference (d), the NHB Command Evaluation Officer will review the operating logs, staff training status and the general operation of the program at BMC every six months. Per reference (e), the Infection Control Officer (ICO), NDC, will review the operating logs, staff training status and the general operation of the program at BDC at least quarterly.
- c. <u>Verification of Proper Treatment</u>. The Eco-Cycle 10 at MCAS BMC has an indicator on the cap that must turn purple following each treatment to indicate presence of sterilant. The color change will be recorded in the logbook for each treatment

ASO 5090.6A

cycle. Once a month a sample of treated waste will be plated by Preventive Medicine personnel and checked to verify there are no viable organisms. Plating results will be logged in the logbook.

- d. Records, including Material Safety Data Sheets for test media must be kept on file in the MCAS BMC director's Office for three years.
- e. <u>Biological Indicator Review</u>. The chairman of the ICC will review the plating test results every six months. The unit operator is to report any failure of indicators immediately to his supervisor and to the ICC Chairman.

ENCLOSURE 2

REGULATED MEDICAL WASTE CONTAINER PACKAGING AND LABELING SPECIFICATIONS

- Generator will properly seal each box by taping. The top seam, side top seams and side bottom seams must be single taped.
- Box should be filled 3/4 full as long as weight does not exceed a maximum weight of 40 pounds.
- Box liner must be taped shut prior to sealing box.
- All boxes will be stamped in indelible ink with the information below and contain the universal biohazard symbol.

MCAS BRANCH MEDICAL CLINIC
GEIGER BLVD BLDG 598
MCAS BEAUFORT SC 29904
SCDHEC # SC07-0095G
843-228-7711
DEPT:
PACKED BY:
DATE:
WEIGHT:

- All generators will fill in the stamped label with their department, name of packer and the date sealed.
- Generators will weigh each box on the scales in the storage area and mark the weight on the box

ENCLOSURE 3

STANDARD OPERATING PROCEDURES ECO CYCLE 10

- 1. Put processing chamber into processor/remove collection top.
- 2. Add appropriate decontaminant (SW if<100ml liquid; LW if>) press CHEMICAL ADDED BUTTON. (Keep MSDS's on file near unit)
- 3. Put cap liner in opening of process chamber with lettering and indicator facing up.
- 4. Put on processor top and down (4 clamps). Connect water hose to side of chamber.
- 5. Close unit lid and PRESS **START BUTTON**. Cycle takes 10 minutes-COMPLETE LIGHT will come on when done.
- 6. Open processor, remove cap and check to see that indicator turned purple. Record in and fill out operating log.
- 7. Put lower left handle in tipping bracket and disconnect water hose. Tip into liquid separation unit.
- 8. After the 20 second rinse cycle, remove process chamber and return it to waste generation site. Unit will spin dry in 1 minute. If **CHANGE BAG LIGHT** comes on, change the bag (see next procedure).

ENCLOSURE 4

ENVIRONMENTAL SERVICE MEDICAL WASTE CLEANUP PROTOCOL

- 1. The BMC Infection Control Officer (ICO) or designee shall be responsible for directing cleanup of infectious waste spills within the MCAS BMC and BDC.
- 2. In the event of spills, department heads shall assign a staff member to secure and stay at the site of the spill until cleanup operations are completed or released by the ICO.
- 3. <u>Personal Protective Equipment</u>. Depending upon the nature of the spill, the following personal protective equipment shall be worn as directed by the ICO.
 - a. Mask
 - b. Gown
 - c. Rubber gloves
 - d. Safety goggles
- 4 . Materials. The following items shall be available through the MCAS BMC Supply Officer for cleanup procedures.
- a. Disinfectant approved for use by the Infection Control Committee (ICC).
 - b. Dust pan and broom.
 - c. Absorbent material, mop and pail.
- d. Forceps or similar items to pick up sharps (e.g., needles, glass, etc.)
 - e. Signs or cones to secure area.
 - f. Sharps containers.
 - g. Red plastic bags for rebagging infectious waste.

- 5. Cleaning Procedures. Under the supervision of the ICO, the following procedures shall be followed:
 - a. Wear gown, mask, gloves and safety goggles as directed.
- b. Place all sharps in sharps container to be carried to Building 940 for proper disposition as medical waste.
- c. Place all liquid regulated waste in seal containers to be double red-bagged for disposal.
- d. Place all solid regulated waste (e.g., paper products, or dressings) in double red bags for disposal.
- e. Use current housekeeping procedures for cleaning the spill site.
- f. Double red bag all cleaning equipment including facemask, utility rubber gloves, safety goggles and reusable gowns in a separate bag for disinfection by CSR.