MEMORANDUM TO: All Holders of Physical Plant Operating Policy and Procedures Manuals

DATE: December 2, 2003

SUBJECT: Handling and Receiving Hazardous Chemicals by Central Heating and Cooling Plants

PURPOSE

The purpose of this Physical Plant Operating Policy/Procedure (PP/OP) is to establish requirements and procedures for inspection, receiving, handling or working with hazardous chemicals by the Central Heating and Cooling Plants (CHACPS), which serve Texas Tech University, Texas Tech University Health Sciences Center, the Museum of Texas Tech University, and the International Textile center.

REVIEW

This PP/OP will be reviewed by October 1 of each odd-numbered year (ONY) by the director – utilities (DU) and recommendations will be forwarded to the managing director – physical plant.

POLICY/PROCEDURE

1. General Policy

   Utilities Section has the responsibility to operate both Central Heating and Cooling Plants as efficiently, economically, and safely as possible. It is the joint responsibility of each utility plant superintendent (UPS) and the utilities chemistry manager (UCM) to ensure that all chemicals are properly received, stored, used, inspected, and handled for optimum treatment control and employee safety.

2. Bulk Specialty Chemicals

   a. Procedures for Handling Chemicals

   Utility plant superintendents and the utilities chemistry manager will ensure that all personnel uphold the following guidelines when inspecting, receiving, handling or working with hazardous chemicals:
(1) Review the *PPE Requirements for Handling Bulk Chemicals* (Attachment A) and MSDS of the corresponding hazardous chemical.

(2) Deliveries will be accepted only between the hours of 0800 and 1500, Monday through Friday except under the approval of the plant superintendent and direct supervision of the utilities chemistry manager or utilities chemistry specialist. No deliveries will be made after dark or during inclement weather except with approval of the DU.

(3) All persons handling chemicals or repairing chemical systems will wear eye-shields AND face-shields and other PPE specified in Attachment A.

(4) Deliveries will be made under the supervision of the utility plant superintendent, utilities chemistry manager, foreman, or utilities chemistry specialist.

b. Casualties

(1) In event of a chemical spill, the lead operator will contact the utility plant superintendent, the utilities chemistry manager, the foreman, or the utilities chemistry specialist for instructions.

(2) In case of an emergency, dial 9911. Then notify the utility plant superintendent or utilities chemistry manager.

(3) No plant personnel should attempt to secure or contain a chemical spill if it cannot be done safely.

(4) If the spill has been safely secured and contained, Environmental Health and Safety (EH&S; tel. 742-3876) will be notified by the utility plant superintendent or utilities chemistry manager. It will be the responsibility of EH&S to clean up the spill.

3. Acid

a. Procedures for Handling Acid

Utility plant superintendents and the utilities chemistry manager will ensure that all personnel uphold the following guidelines when inspecting, receiving, handling, or working with acid:

(1) Review the *PPE Requirements for Handling Bulk Chemicals* (Attachment A) and MSDS of the corresponding hazardous chemical.
(2) Deliveries will be accepted only between the hours of 0800 and 1500, Monday through Friday except under the approval of the plant superintendent and direct supervision of the utilities chemistry manager.

(3) All dealings with sulfuric acid will be specifically cleared in advance with the plant foreman or next senior staff member in the absence of the foreman.

(4) Deliveries will be made under the supervision of utilities chemistry personnel.

(5) Inspection of a “live” acid system, repair of a tagged-out system, or carboy handling of acid will require the following PPE:

Note: Inspect PPE before donning. Check safety shower and eyewash.

(a) full chemical-resistant suit
(b) rubber boots
(c) chemical splash-proof goggles
(d) full face-shield
(e) chemical-resistant hood
(f) chemical-resistant gloves
(g) duct tape to seal sleeves over gloves and boots, and
(h) safety observer ready to suit up and assist in emergency.

After work or inspection is complete:

(a) do not track corrosives out of work area
(b) thoroughly rinse and sponge-off all PPE with water before removing. Use baking-soda to neutralize acid.
(c) after removing the PPE, rinse inside thoroughly
(d) saturate PPE in 10% bleach solution for sixty (60) seconds and rinse thoroughly with water
(e) inspect for damage and report to plant foreman  
(f) hang PPE to dry  
(g) properly store PPE after it dries.  

b. Casualties  

(1) In event of an acid spill, the lead operator will inform the utility plant superintendent, utilities chemistry manager, foreman, or utilities chemistry specialist for instructions.  

(2) In case of an emergency, dial 9911. Then notify the utility plant superintendent or utilities chemistry manager.  

(3) No plant personnel should attempt to secure or contain an acid spill if it cannot be done safely.  

(4) If the spill has been safely secured and contained, EH&Safety (742-3876) will be notified by the utility plant superintendent or utilities chemistry manager. It will be the responsibility of EH&S to clean up the spill.  

**RESPONSIBILITIES**  

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Approved:__________________________  
Reviewer  

Approved:__________________________  
Managing Director – Physical Plant  

PP/OP 08.04