



DEPARTMENT OF THE NAVY  
NAVAL TRAINING CENTER  
2701 SHERIDAN ROAD  
GREAT LAKES, ILLINOIS 60088-5001

NTCGLAKESINST 5091.1  
FAC

JUN 27 1995

NTC GREAT LAKES (COMPLEX<sup>2</sup>) INSTRUCTION 5091.1

From: Commander, Naval Training Center, Great Lakes

Subj: FLUORESCENT BULB DISPOSAL AS HAZARDOUS WASTE

Ref: (a) OPNAVINST 5090.1B  
(b) 35 Illinois Administrative Code 721.124  
(c) 40 CFR Part 261.24  
(d) NTCGLAKESINST 5090.1B

Encl (1) Requirements and Guidance

1. Purpose. To establish policy, responsibilities, and procedures for the disposal of spent fluorescent bulbs within the Naval Training Center (NTC) Complex<sup>2</sup> Great Lakes.

2. Scope. This instruction is applicable to disposal of fluorescent bulbs by NTC Simplex, Component and Tenant Commands and other organizations or contractors working within NTC Complex<sup>2</sup>. Fluorescent bulb disposal procedures are established for NTC Complex<sup>2</sup> in order to control and manage the disposal of mercury-containing bulbs as hazardous waste.

3. Background.

a. Commander, Naval Training Center (CNTC), Great Lakes is required by reference (a) to establish and implement programs that comply with Federal regulations as well as state and local environmental laws and regulations for disposal of hazardous waste.

b. A variety of fluorescent bulbs containing mercury are stored and used in small quantities for routine operations at NTC Complex<sup>2</sup>. Mercury is dispersible and highly conductive to the flow of electrical current. The very properties that make mercury so useful, also contribute to its ability to contaminate the environment. The fluorescent bulbs contain mercury vapor, which if not contained, will disperse into the atmosphere. Its dispersibility makes it particularly dangerous in water. References (b) and (c) establish the maximum toxicity level of .2mg/L for mercury. Spent fluorescent bulbs exceeding .2mg/L of mercury must be disposed as hazardous waste. The average 4-foot fluorescent bulb contains 50 mg of mercury and therefore must be disposed of as hazardous waste.

c. Disposal of harmful concentrations of mercury-containing fluorescent bulbs in landfills is prohibited. Until recently, bulbs were usually broken during the landfill process, and the mercury was released into the environment. The effect of dumping these bulbs creates lasting effects on wildlife in the surrounding area. For example, fish and other wildlife ingesting

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mercury pass it higher into the nutrition chain. Once in the nutrition chain, mercury is nearly impossible to remove.

4. Policy.

a. NTC Complex<sup>2</sup> will implement the requirements of references (a) through (d) for disposal of fluorescent light bulbs as hazardous waste.

b. Hazardous waste will be disposed of in accordance with reference (d) to prevent accidents, fires, and spills and by training personnel in procedures for the effective control of disposal of spent fluorescent bulbs. Management of fluorescent bulbs shall be in accordance with the NTC Hazardous Waste Plan, reference (d). NTC Great Lakes will strictly adhere to the equipment, logistics and personnel training requirements of the NTC Hazardous Waste Plan.

c. Per references (a) and (d), the Resource Conservation and Recovery Act (RCRA) regulates management of hazardous waste from its origin to ultimate treatment, storage, or disposal. Fluorescent bulbs shall be disposed of at a RCRA-permitted treatment, storage, or disposal facility. Evaluation of recycling will be continuously assessed as an alternative to disposal.

5. Action.

a. NTC Simplex Departments, Component and Tenant Commands, (except Navy Exchange, Navy Public Works Center (PWC) and Naval Hospital (NAVHOSP) Great Lakes) shall:

(1) Make arrangements for disposal of spent fluorescent bulbs through the NTC Staff Civil Engineer (SCE) (Code FAC). Drop off spent fluorescent bulbs at Building 5 prior to noon Monday through Friday. No fluorescent bulbs will be left overnight at Building 5. Spent bulbs shall be packaged in new bulb cardboard containers. Broken bulbs must be placed in separate cardboard containers and over-wrapped with puncture-resistant plastic bags.

(2) Ensure personnel handling the spent bulbs are familiar with contents of the Material Safety Data Sheets.

b. Navy Public Works Center (PWC), Naval Hospital (NAVHOSP) and Navy Exchange (NEX) shall:

(1) Make arrangements for disposal of spent fluorescent bulbs through PWC Environmental Department (Code 900). Spent bulbs shall be packaged in new bulb cardboard containers. Broken bulbs must be placed in separate cardboard containers and over-

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wrapped with puncture-resistant plastic bags. In the event cardboard containers are unavailable, PWC will accept unpackaged bulbs.

(2) Ensure personnel handling the spent bulbs are familiar with contents of the Material Safety Data Sheets.

c. NTC Staff Civil Engineer (SCE) shall:

(1) Receive and collect spent fluorescent bulbs delivered to Building 5.

(2) Coordinate with PWC for disposal of spent fluorescent bulbs. NTC SCE shall move the spent fluorescent bulbs each day to PWC Building 145 for disposal.

d. PWC Environmental Department (Code 900) shall make arrangements for removal of the fluorescent bulbs from the base within 90 days per Federal and State regulations. PWC shall continuously assess the potential for recycling of fluorescent lights through outside contractors and determine if it is cost effective to recycle vice disposal.

  
MACK C. GASTON

Distribution:  
NTCGLAKESINST 5216.5M  
Lists I, II (Case B) & III-A, B, C



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In accordance with the requirements and guidance contained in this procedure:

1. NTC, Staff Civil Engineer, FAC3, Bldg 5, Great Lakes is the drop off point of spent fluorescent bulbs for Naval Training Center, Recruit Training Command and Service School Command. Fluorescent bulbs must be dropped off prior to noon Monday through Friday. No fluorescent bulbs will be left overnight at Bldg 5. POC is CWO4 Ault or BUCS Moore 688-4194.

2. Commanding Officer, Navy Public Works Center (PWC), will pickup bulbs for all other commands in Complex<sup>2</sup> Great Lakes. Used fluorescent bulbs should be placed into cardboard lamp containers to avoid breakage. In the event cardboard containers are unavailable, PWC will accept unpackaged bulbs. Call PWC POC Kelly Devereaux at 688-5996 to schedule pickups.

Personnel handling the spent bulbs will familiarize themselves with the Material Safety Data Sheets. The materials will be transported in the State of Illinois using a licensed special waste hauler utilizing the state's Permit and Manifest System.



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