

ADMINISTRATIVE PROCEDURES

SUBJECT: Procedures for Handling Ballast Malfunctions
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Electrical fluorescent lighting fixtures contain a ballast. Certain older models may contain a small quantity of PCB (polychlorinated biphenyl) material in the ballast. The following procedures have been developed to prevent any risk of exposure to the PCB material due to the malfunction of the ballast.

If overheating of a light ballast occurs, one of the following may happen:

1. The asphalt compound, which fills the ballast, may seep out of the joints of the casing and harden as it cools. This asphalt compound does not contain PCB material.
2. In very rare occasions, the capacitor can rupture resulting in oil (approximately 1.3 ounces) mixing with asphalt. In the highly improbable event of a rupture of the capacitor, no more than a fraction of the total oil, which may contain PCB material, could escape and mix with the asphalt. This oil will remain a liquid when cooled.

Please see the attached sketch, which shows the various parts of the light ballast and its position in a fluorescent light fixture. Note that the fluorescent tubes (bulbs) are not part of the ballast. A burnt out tube does not indicate overheating of the ballast.

School Procedures:

If a light ballast is observed to be smoking, smelling, hot, burning or dripping and the ballast has not been identified as being PCB free the following procedures should be followed at the school:

1. The Classroom Teacher/Staff Member will notify the School Principal that the ballast is leaking and evacuate the room.
2. The School Principal will notify the Maintenance Supervisor for their area and request immediate assistance.
3. The School Custodian should place a suitable poly-bag (garbage bag, etc.) under the fixture to prevent the ballast material from dripping onto desks, floors, etc.
4. Custodial Staff and other School Staff should not attempt any clean-up procedures.
5. Any person who comes into skin contact with the dripped material should wash the area of contact thoroughly with soap and water for a minimum of 15 minutes. Any contaminated clothing should be placed in a plastic bag for disposal.

Building Services Procedures:

Properly trained Maintenance Staff from the Building Services Department will service all ballast malfunctions. Such malfunctions should be treated on the assumption that they contain PCB material, until determined otherwise.

The Building Services Department will respond to a ballast failure as soon as possible in the following manner:

1. Locate the leaking ballast and check the serial number. Ballasts dated prior to April 1, 1978 should be assumed to contain PCB material, unless they contain an E in their letter code. The E indicates that the ballast is a non-PCB unit. The date codes, stamped on the lid of the ballast, contain 4 digits. Reverse the first 2 digits to determine the year of manufacture. If classified as potentially containing PCBs continue to follow these procedures.
2. Determine the extent and location of all dripped material. Continue to isolate the affected area from other people.
3. Use disposable rubber gloves and a respirator with organic vapour cartridges when handle the ballast and affect portions of the fixture.
4. Place all contaminated material and the ballast in a plastic bag and deposit in a storage container.
5. Clean all areas of the fixture that have evidence of residue from ballasts by scrapping and washing with varsol. Place all waste in the storage container. (Fixture may be discarded entirely depending on the extent of contamination.)
6. On completion of cleanup, carefully clean all tools with varsol and place any waste material and gloves in the storage container.
7. Wash hands and other any parts of the skin that may have been in contact with material from ballasts with soap and water for a minimum of 15 minutes.
8. Transport carefully all contaminated material for storage in the Ministry of Environment approved PCB Storage Facility located behind the Maintenance Building in Sarnia or another Ministry approved storage facility.

First Aid Procedures:

1. Skin Contact: Cut out or remove contaminated clothing and wash skin thoroughly with soap and water, flushing for a minimum of 15 minutes.
2. Eye Contact: Flush eyes for at least 15 minutes with water. Seek medical attention.
3. Inhalation: PCBs do not pose an inhalation problem in schools, as extreme temperatures must be reached before vaporization can occur. A fire situation may cause this vaporization. If overcome by smoke and/or vapour, remove to fresh air and seek medical attention.

Implementation Date: October 15, 2003

Reference: Policy
Health & Safety Act and Associated Regulations

The Ballast

