

# DISPOSAL OF FLUORESCENT TUBES AND HIGH INTENSITY DISCHARGE (HID) LAMPS - CHW

## PROCEDURE <sup>®</sup>

### DOCUMENT SUMMARY/KEY POINTS

- Fluorescent tubes and High Intensity Discharge (HID) lamps contain mercury.
- **ONLY Engineering/Maintenance Department staff and authorised Contractors are to remove and replace fluorescent tubes, starters and HID Lamps.**
- Maintenance requests should be submitted to replace fluorescent tubes or HID lamps that no longer work or are faulty.

### CHANGE SUMMARY

- Inclusion of WHS responsibilities for persons completing task.
- Updated legislative references.

### READ ACKNOWLEDGEMENT

- Managers are to read and acknowledge this document.
- All Engineering/Maintenance staff and authorised Contractors working on site should be aware of this document.

<b>Approved by:</b>	SCHN Policy, Procedure and Guideline Committee	
<b>Date Effective:</b>	1 <sup>st</sup> August 2018	<b>Review Period:</b> 3years
<b>Team Leader:</b>	Electrical Engineer	<b>Area/Dept:</b> Maintenance Department

## 1 Introduction

CHW recognises the potential risks associated with working with and around electricity, and specifically the potential risks associated with changing fluorescent tubes and High Intensity Discharge (HID) lamps. Prior to undertaking these tasks Engineering/Maintenance staff or authorised Contractors should identify, assess hazards and associated risks and put in place adequate control measures to eliminate or minimise risks.

Fluorescent tubes and HID lamps contain mercury and phosphor powder. To a lesser extent, mercury is also found in starters. Mercury is a potent neurotoxin and exposure should be avoided.

Linear fluorescent tubes are required by Australian Standards to contain less than 15mg. HID lamps contain between 50 and 1000 milligrams of mercury per lamp. Generally, the higher the power usage the more mercury that is required to operate the lamp.

There is a potential risk of exposure to mercury if the tubes/lamps are not removed and replaced correctly and are inadvertently broken. For this reason:

- **ONLY Engineering/Maintenance Department staff and authorised Contractors are to remove and replace fluorescent tubes, starters and High Intensity Discharge (HID) Lamps.**

### Compliance with this document:

- Promotes a safe and healthy working environment by preventing human exposure to hazardous chemicals.
- Disposes of the used products in accordance with the CHW Waste Management Policy, thereby complying with:
  - NSW Health: [Clinical and Related Waste Management Guidelines for Health Care Services](#) – August 2017 [PD2017\_026].
  - NSW Environment and Protection Authority (EPA), [Protection of the Environment Operations \(Waste\) Regulation](#) 2014.
  - [Environmentally Hazardous Chemicals Act 1985 No. 14](#)
  - [NSW Work Health and Safety Act 2011](#)

All CHW Engineering/Maintenance staff and authorised Contractors shall follow this procedure for the disposal of used fluorescent tubes, starters and High Intensity Discharge (HID) lamps.

## 2 Procedure

### For staff other than Engineering/Maintenance Staff:

1. If a fluorescent tube or HID lamp no longer works or is faulty, a maintenance request (BIEMS) should be submitted. Go to:
  - i. The *Applications* screen and click on the icon labeled “Maintenance Request”.

- ii. Follow the prompts to complete the request.
2. Engineering/Maintenance staff will arrange a time to replace and dispose of the fluorescent tubes and/or HID lamp. Starters may be replaced at the same time.
3. Engineering/Maintenance staff and authorised Contractor will complete the work according to the 'responsibilities' listed below.

Unsure if your Department/Unit/Ward has a High Intensity Discharge (HID) lamp? Please contact Engineering/Maintenance Department ext 52640.

### 3 Responsibilities

#### 3.1 Engineering/Maintenance Manager/Supervisor

1. Ensure compliance with statutory requirements.
2. Ensure off site transportation and disposal contractor is licensed for DECC waste code D120 (mercury).
3. Consult with workers, Engineering and WH&S Committee or representative for risk identification.
4. Ensure staff and contractors aware of the health risk associated with broken fluorescent tubes (e.g. exposure to mercury), starters and HID lamps.
5. Ensure Safety Data Sheets (SDS's) are obtained from the product manufacturer and filed for the duration of the products service.
6. Ensure Engineering/Maintenance Department staff receive appropriate training and education relating to handling and disposal of hazardous waste materials.
7. Supervise workers and authorised Contractor to encourage co-operation with agreed safe work practices.
8. Ensure any breakages resulting in exposure to hazardous chemical are reported on IIMS and cleaned to an acceptable standard.

#### 3.2 Engineering/Maintenance Staff and Authorised Contractor

1. **Only trained staff/authorised Contractors are to remove and replace tubes, lamps and starters** using the Engineering/Maintenance Department Electrical Procedures for replacing lamps.
2. Appropriate Personal Protective Equipment (PPE) is to be worn when handling tubes and lamps.
3. Used tubes, starters and lamps are not to be broken for disposal.
4. Used tubes and lamps are to be carefully placed in the manufacturer's original packaging to protect from accidental breakage.
5. Used HID lamps to be stored separately.

6. Starters to be stored separately.
7. Bulk storage of tubes, starters and lamps to be in containers designed for such purposes.
8. Breakages are to be cleaned up as per the [Safe Work Practice \(SWP\)](#) and reported to the Engineering/Maintenance Manager or Supervisor.

## 4 Related information

- **Risk Assessment of Fluorescent Lamps/Tubes:**  
[http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe\\_work\\_practices/electrical/risk\\_assessment\\_-\\_disposal\\_of\\_fluorescent\\_lamps\\_-\\_tubes.pdf](http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe_work_practices/electrical/risk_assessment_-_disposal_of_fluorescent_lamps_-_tubes.pdf)
- **Risk Management Action Plan for Disposal of Florescent Lamps/Tubes:**  
[http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe\\_work\\_practices/electrical/risk\\_management\\_-\\_disposal\\_of\\_fluorescent\\_lamps\\_-\\_tubes.pdf](http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe_work_practices/electrical/risk_management_-_disposal_of_fluorescent_lamps_-_tubes.pdf)
- **Safe Work Practice for Disposal of Florescent Lamps/Tubes:**  
[http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe\\_work\\_practices/electrical/safe\\_work\\_practice\\_-\\_disposal\\_of\\_fluorescent\\_lamps\\_-\\_tubes.pdf](http://chw.schn.health.nsw.gov.au/ou/maintenance/resources/safe_work_practices/electrical/safe_work_practice_-_disposal_of_fluorescent_lamps_-_tubes.pdf)

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