

# Storing & handling waste sodium lamps

**Recolight**

Guidance

Issued 2017

Waste sodium lamps (including SON and SOX lamps) predominantly arise because of street lighting maintenance activities.

This advice note has been prepared to help collectors of waste sodium lamps in the preparation of their own site-specific risk assessments and staff training.



1. Standard precautions associated with lamps should be adopted when handling sodium lamps. These include:
  - ✔ Cut resistant gloves containing Kevlar
  - ✔ Mask with incorporated face visor
  - ✔ Ear protection
  - ✔ Safety boots
  - ✔ Long sleeves to prevent cutting of the arms. Overalls or jumper is sufficient.
  - ✔ Do not eat, drink or smoke around the container.
  - ✔ PPE must be worn always.
2. Sodium lamps should not be stored in the same container as mercury containing lamps.
3. Sodium can react with water to produce explosive hydrogen gases, and heat. As a result, all necessary steps should be undertaken both to prevent lamp breakage, and water ingress into the container.
4. Consideration should be given to storing containers under cover, wherever this is possible. This is the safest method of storing the container. The container should be placed on a level impermeable surface – e.g. concrete and not located near a surface drain.
5. Containers should be kept away from operational areas, vehicles, employees, contractors, customers, and members of the public.
6. The container should not be placed near a thoroughfare, emergency exit or similar.
7. Those employees that do require access to the container to deposit waste lamps should be informed of the risks via a risk assessment and method statement.
8. Employees accessing the containers should be trained appropriately to prevent harm to themselves/others and the environment.
9. Container lids should always be replaced immediately after use, to prevent rainwater ingress. Lids should be secured, either by use of any locking mechanism that may exist, or by weighting down appropriately. This is particularly important if the container is left outside in a windy environment for any period.
10. Lamps placed in the container should be dry. If wet they become slippery to handle and can introduce water into the container.
11. Both plastic and metal containers are suitable.
12. Waste lamps should be gently placed inside the container, and carefully stacked in such a way to minimize any movement during transport.
13. In the event of fire, do not use a water-based fire extinguisher.
  - The site should NOT decant the lamps, as they need to know the best practice to observe in this instance.
  - Decanting can stir all the material up and may be dangerous for the member of staff.

- The best approach is to relocate the container down the yard as far away from the premises as possible with lid on, contact Recolight and in case of fire contact the local Fire Brigade making them aware that Sodium Lamps are in the container.
- Any fizzing will be due to broken low pressure sodium lamps (SOX). A high-pressure sodium (SON) won't react with moisture.

Points to consider for your site methodology/risk assessment

1. Choose experienced staff for storing the sodium lamps in the container – not young apprentices as this could place employer under a greater duty of care because they may be less knowledgeable about the risks and take less careful in performing the task. The task is to prevent harm to themselves, others and the environment.
2. If more than 10 lamps are broken in any one loading session, stop loading the container for at least 30 mins to allow the dissipation of vapours – if conditions are dry remove the container lid to assist in the dissipation of any vapour.
3. Make sure that the employees performing the task wear the correct PPE: As a minimum: Safety glasses/goggles, coveralls, safety boots, suitable gloves, hi-viz vest or jacket.
4. If there is a high risk of large amounts of lamp breakage (i.e. they are doing something wrong) then they will need to consider wearing a 3M mask with an appropriate filter.
5. Cardboard packaging surrounding each lamp must be removed before placing the lamp in the container. Recolight will charge collection points for excessive packaging found in containers.
6. It is advisable to store any broken lamps in a different container – e.g. very heavy-duty bag or RC8.
7. Keep the area around the container swept clear of debris and free from slip and trip hazards - do not compromise the work of loading the container.
8. The container must not be overfilled, as this may cause the sides of the bin to expand and make fitting the lid difficult.
9. Keep traffic away from the bins to avoid, for example, a vehicle reversing into the container.
10. Lamps should be stacked as uniformly as possible – not randomly. This will help to minimise breakage. They are randomly placed in the BAD photo. In the GOOD photos, they are arranged more carefully.

