

Reference	SOP 03
Inception date	March 2013
Version	6
Last Reviewed	March 2018
Author	J Mannheim
Approved by	BPG

### **1.0 Purpose**

To ensure that hazardous and non-hazardous containerised materials are stored in the Transfer Station (and supervised/monitored) in such a way as to prevent exposure to harmful substances and to prevent the occurrence of any adverse reaction that could initiate or propagate an incident involving the loss of control of the materials stored on site.

### **2.0 Scope**

This procedure is to be followed by all site personnel.

### **3.0 Responsibilities**

It is the responsibility of the site management and site chemists to ensure that all waste arriving on site is stored in accordance with this procedure.

### **4.0 Health & Safety**

The following PPE must be worn when handling waste:

- Safety Glasses (EN 166.1F)
- Protective Footwear (EN 345)
- PVC gloves (EN 388 and EN 374 complex design) or equivalent
- Kevlar Inners (EN 388)
- Hard Hat (EN 397)
- High-Visibility Jackets (EN 471 class 2)
- Overalls

Any additional PPE is to be worn as instructed by your supervisor.

### **5.0 Procedure**

#### **5.1 General**

Separate storage areas will be maintained for material combinations that have the ability to react adversely together. Examples of such prohibited combinations include but are not limited to: -

- Acids and Cyanides
- Acids and Alkalis
- Oxidisers and flammables
- Acids and Hypochlorites
- Acids and Nitrates/Nitrites
- Flammables and Ignition sources
- Reducing agents and oxidisers/acids
- Acids and Sulphides

Storage on site has been laid out according to chemical composition in accordance with HSE guidance notes HSG71 and HSG51 and DSEA Regulations.

The bay layout is shown on the site storage plan. Storage areas should be located to eliminate or minimise double handling of waste. Wastes can only be stored in the defined bays.

Storage areas shall be clearly labelled / marked in accordance with the prevailing Regulations to identify clearly the contents, the nature of the hazardous materials and the storage capacity within them. If due to particular circumstances (and in accordance with the Permit) an alternative bay is used to store waste that is necessarily compatible with other material stored therein, additional temporary signage will be incorporated to identify the nature of, and the hazards associated with, the additional stored materials.

The maximum annual storage capacity for the site is that which is stated within the Permit and this must not be exceeded.

No stored containers shall exceed the bay boundary and the total quantity of waste stored in each bay must not exceed the stated maximum.

Site Chemists will check and report on the operational status of the facility on a daily basis. This will include the current capacity, and an assessment of incoming-outgoing wastes, any safety related issues, and site drainage infrastructure.

## **5.2 Waste Storage & Segregation – Packaged Goods**

All containers will be labelled with:

- The date of arrival;
- The relevant hazardous property code(s);
- The chemical identity/composition (The sole use of trade names and/or acronyms to identify the contents is not permitted);
- A unique reference number that allows identification through stock control and cross reference back to the acceptance and pre-acceptance records.

All labelling must be weather proof and resilient enough to stay attached and legible throughout the whole time of storage on site and transportation to the disposal point.

A site chemist shall assign the storage area for wastes having completed the appropriate analysis in accordance with Waste Acceptance Procedure (SOP 02) and following an assessment concerning the compatibility of the materials that may already be in the area and any particular hazards associated with the waste e.g. water reactive materials must for example be stored under cover/indoors whilst light sensitive materials should be stored away from direct sun light.

Prior to any waste being allocated a storage destination, the integrity of packaging must have been confirmed and any remedial measures taken as a part of the Waste Acceptance Procedure (SOP 02) completed. Containers must **not** be put into storage or put into quarantine without well fitting lids, caps and valves etc.

The Bay Logs (incoming waste verification spreadsheet) shall be updated to show the location of each individual waste before the end of the day and displayed for access by the emergency services.

Drums, IBCs or other suitably secured palletised waste must **not** be stored more than two high (unless being placed into racking designed specifically for this purpose) and adequate aisle access must be provided for permit inspection / removal of containers from the bay. Containers must be stored in such a manner that their labels are visible.

Daily inspections of the conditions of the containers, pallets, bunding etc will take place to identify, in particular, signs of damage, deterioration and leakage. Records must be kept of these inspections and any remedial actions e.g. over-drumming / re-drumming etc taken to deal with leaks etc noted in the site diary. If it is necessary to over-drum or redrum any waste, the identification markings from the original container must be transferred to the new container. Large quantities of wastes in over-drums should be avoided by re-drumming as appropriate.

Pallets damaged to the extent that the stability of the containers is or may become compromised should be replaced. Plastic shrink-wrap should only be used to provide secondary stability to drum/container storage in addition to the use of sound pallets.

IBC containers are to be stored against walls in preference to palletised drums with their valves facing into the aisle for ease of leak detection. Where it is unavoidable to store drums directly against walls, a pallet label, with full BAT labelling requirements, will be applied facing into the aisle space identifying all the containers on that pallet. I.e. details can be seen for inaccessible containers.

All spillages of waste should be logged in the site diary and should be dealt with in accordance with the Incident Management/Emergency Plan. Where spillages >200l occur the Regulator should be informed if appropriate.

Activities that create a clear fire risk (e.g. grinding, welding, and charging of FLT batteries) should not be carried out within the storage area, even if it is not formally classified as storage and may need to be carried out under a permit to work system.

Storage areas for containers holding flammable or highly flammable wastes should be within bays that have appropriately constructed firewalls and/or meet the requirements of HSG51, HSG71 and CS21.

The Bay Logs must be amended showing all new waste entries and outgoing waste exiting the site. This shall be updated a minimum of once a day.

Storage areas should be clearly marked with the quantity and hazardous characteristics of the wastes stored therein. Signs should comply with The Health and Safety (Safety Signs and Signals) Regulations 1996.

### **5.3 Waste Storage & Segregation – Aerosols**

Aerosols shall be stored in suitably ventilated containers away from any sources of ignition and separated from other wastes in accordance with HSG71 and HSG 51. Storage areas should be free from combustible materials other than aerosols packaging and wooden pallets on which they stand. Where they are not stored under cover or indoors, suitable lidded and ventilated containers shall be used to prevent contact with rain and reduce the potential for rusting. During storage all closures should remain secured in place. Aerosols should not be stored in open containers (e.g. cut off IBCs).

Aerosols received in insecure or flammable containers/package e.g. in cardboard boxes, shrink-wrapped on pallets must be stored in cages or transferred to secure ventilated containers to prevent the risk of them spreading fires by missileing or ejection. Cages should be robust, fire-resistant and of an appropriate mesh size to constrain the aerosols and prevent ejection. The cage shall have a mesh roof.

Aerosols held in containers that are not able to collect and hold liquids released from the aerosols should be provided with suitable containment measures e.g. drip trays or transferred to secure containers that are able to retain free liquid.

Containers used to store aerosols should not be overfilled as this can result in canisters being actuated and releasing their contents.

Wherever possible and practical aluminium aerosols should not be stored with rusty steel aerosols or in direct contact with unprotected or rusty steel containers.

#### **5.4 Waste Storage & Segregation – Laboratory Smalls**

All lab smalls received on site packed by a Biffa Hazpak Chemist will be packed in accordance with the Laboratory smalls working practice procedure (SOP 06) and will have been inspected in accordance with the Waste acceptance procedure (SOP 02). Lab smalls packed by third parties not deemed to be in accordance with the procedure shall have been re-packed prior to storage. The Laboratory smalls working practice procedure and the waste acceptance procedure preclude the mixing of incompatible materials within the same drum.

Packed laboratory smalls shall be labelled with a single generic label that most accurately describes the contents and hazard and should bear the words “laboratory smalls”.

Packed laboratory smalls shall be stored in the appropriate storage bay away from the lab smalls processing area.

#### **5.5 Waste Storage – Gas cylinders**

Gas cylinders, whether full, part full or nominally empty should be stored in the relevant gas cage/bay dedicated to this purpose taking into account segregation and the potential for adverse reaction.

Cylinders must be stored upright and if necessary secured in this position. Cylinders must not be double stacked.

#### **5.6 Waste Storage-Oily Rags**

Inspections of oily rag containers in their storage area should be carried out at the end of each shift using an infrared thermometer. Any containers which are showing an increased temperature or hot spots should be removed from the storage area and the issue notified to site management for further investigation.

#### **6.0 Turnover**

Stock records must be checked and reported on a weekly basis to prevent accumulations of waste and to ensure expeditious removal from site to ensure the prevailing maximum storage period is not exceeded.

Storage within the reception area is not permitted where this also serves as the dispatch area (subject to appropriate scheduling and management) and in any case should not extend beyond 5 days. The total storage time on site will depend upon a number of factors e.g. the nature, characteristics and quantity of the waste. However all waste should be removed from storage in the transfer station within a maximum of six months from the date of receipt.

Should it seem likely that waste will be stored beyond the 6 month limit, Site Management are to notify the EA, in advance, to request approval of prolonged storage, providing adequate justification and target date for disposal. The request to the EA should be recorded on non conformance form (QF 659/28) noting the above details, EA response and final close out on completion.

#### **7.0 Site Inspection**

Site personnel are to conduct daily inspections of the sites storage facilities to ensure compliance with Permit and licence requirements and general safety systems. Inspections are recorded on form QF659/005 (Kilsyth QF766/412).

Site personnel are to conduct an inspection of the sites security, safety and welfare facilities on a weekly basis as listed on Form QF 659/005a (Kilsyth QF766/412a).

The person carrying out the inspection must record any issues identified, the remedial action required, and the priority to be given to the actions and sign the form to confirm that each area has been inspected.

Once complete the inspection form is passed to the COTC holder or authorised person who will sign and date the form and monitor completion of the remedial actions.

#### **8.0 Disposal of Containerised Waste**

Any waste acceptance samples taken (including composite samples where appropriate) or samples from bulked waste will be retained for a minimum of 2 days following removal of the waste from site.

No bulking should take place until a full compatibility assessment has been performed in accordance with the procedure for bulking of waste in transfer stations (SOP 05). This includes transfer from drums into bulk storage or into a treatment tank.

#### **9.0 Bulk Storage vessels etc**

Reference within S5.06 to the requirements for bulk storage, bunding around storage vessels, pipe work etc is beyond the scope of this procedure which pertains only to storage of containers in transfer stations.