



environmental  
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# CUSTOMER WASTE SEGREGATION AUDITS PROCEDURE

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	<b>Version:</b> XX

# 1. Purpose

- 1.1 To define the procedure for conducting segregation audits of waste received from customers.

# 2. Scope

- 2.1 This procedure applies to healthcare waste segregation audits undertaken at UK ESA Member facilities.

# 3. Definitions

- 3.1 **Customer Waste Segregation Audit** – an audit conducted by opening waste bags to inspect the contents. The purpose of inspecting the contents is to determine whether the waste items present are appropriate for the waste type denoted by the bag colour code, container tag and consignment note, and therefore to identify the presence of any non-conforming wastes.
- 3.2 **HT Waste** - infectious healthcare waste suitable for treatment (EWC 18 01 03, orange packaging).
- 3.3 **HL Waste** - offensive healthcare waste (EWC 18 01 04, tiger stripe packaging).
- 3.4 **HI Waste** – infectious healthcare waste requiring incineration (EWC 18 01 03, yellow packaging). Includes infectious wastes with medicinal content / chemical content / other content requiring incineration.
- 3.5 **HP Waste** – non-hazardous medicinal waste requiring incineration (EWC 18 01 09, blue colour code).
- 3.6 **HY Waste** – hazardous medicinal waste requiring incineration (EWC 18 01 08, purple colour code).
- 3.7 **Minor Non-conformity** – the presence of a non-conforming waste in a bag that will result in a waste being over-treated, and/or that represents a failure to implement best practice guidance. Generally only reported as an advisory issue for the waste producer to be aware of.
- 3.8 **Major Non-conformity** – the presence of a non-conforming waste in a bag that will result in a waste being under-treated, and/or that represents a failure to implement legal requirements, and/or that presents a serious safety hazard. Action must be taken to correct major non-conformities.

## 4. Responsibilities

- 4.1 **Commercial Team** – is responsible for managing and communicating on the audit process with the customer (identifying customers for audit, audit scheduling, attendance at the audit, follow up on audit corrective actions and repeat of the audit process). Agrees the audit schedule with the Operations and Waste Audits teams.
- 4.2 **Operations Team** – is responsible for facilitating the audit process at Company facilities (ensuring that the correct waste is available, that safe space to conduct the audit is available, that arrangements are in place to transfer waste to incineration in the event of audit failure). Agrees the audit schedule with the Commercial and Waste Audits teams.
- 4.3 **EHS Waste Auditors** – is responsible for controlling the audit schedule and for conducting audits in accordance with this procedure. Is responsible for scoring audits, preparing audit reports and sending audit reports with findings and required actions to the customer. Agrees the audit schedule with the Commercial and Operations teams.
- 4.4 **EHS Waste Audits Administrator** – is responsible for maintaining and updating the audit schedule, and for arranging and co-ordinating audit working group conference calls.

## 5. Audit Process

### Customer Selection and Audit Planning / Management

- 5.1 Each calendar quarter (i.e. Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec) a shortlist of customers will be selected for audit.
- 5.2 Customers will be selected for audit on the basis of any of the following:
  - Adverse findings in a waste pre-acceptance audit
  - Late submission of or inadequate standard of waste pre-acceptance audit
  - Adverse findings in a previous waste segregation audit
  - Incident arising from incorrect segregation of the customer's waste (i.e. non-conforming waste received at a Stericycle or third party facility).
  - Selection of a random customer sample.
- 5.3 Operations and Commercial Managers may propose any customer for audit for any of the reasons listed under 5.2. Customers proposed for audit should be sent to the Waste Audits Administrator to add to the proposed audit list.
- 5.4 The Waste Audits team (Auditors and Administrator) will develop a target customer list and provisional audit schedule for the next three month period. The customer list and audit schedule will include the following information:

- Customer & Site name
  - Customer-Site ID
  - Account Manager name
  - Waste types to be audited
  - Reason for adding to audit list
  - Typical volume of waste types to be audited
  - Current & potential disposal location for the waste types to be audited
  - Location for the audit to be conducted
- 5.5 The provisional schedule will be shared with the Commercial and Operations teams at least two weeks before the start of the quarter.
- 5.6 The audit schedule will be revised as required based on the availability of resources needed to support the process from the Commercial and Operations teams. A final schedule will be defined before the start of the quarter. Sign-off on the schedule must be confirmed by the following people:
- Commercial Team – Senior Director Commercial
  - Operations Team – Director Operations
  - EHS Waste Audits Team – Senior Waste Auditor
- 5.7 The commercial team member (usually the account manager) will review the contracts for any customers on the audit schedule to verify that the contracted disposal arrangements for relevant waste streams are standard. Standard arrangements means:
- Offensive waste minimum requirement landfill, no other specific means stated.
  - Infectious waste suitable for treatment, alternative treatment or incineration.
  - Pharmaceutical waste (haz and non-haz), incineration, specific type not specified.
- 5.8 In the event that non-standard contract arrangements are in place, these will be communicated to the waste audits team to determine whether any changes to the audit process or scoring are required as a consequence.
- 5.9 After the audit schedule has been finalised the Commercial team will communicate the schedule to any affected customers using the agreed template letter (form **F4-603-01** Notification of Waste Segregation Audit).
- 5.10 On request, customers will be given the opportunity (with at least one weeks' notice) to attend the ESA Member facility to observe the audit subject to agreement on date, time and location.

ESA Member reserves the right to proceed with the audit without the customer present in the event that a mutually convenient date, time and location cannot be agreed.

- 5.11 A group conference call will be scheduled and co-ordinated by the Waste Audits Administrator and held at regular intervals (at least every two weeks) to include all stakeholders in the Commercial, Operations and waste audits teams. The purpose of the call is to:
- review and agree target customer lists and audit schedules;
  - review any customer specific contractual arrangements and agree any associated adjustments to the audit process that may be necessary;
  - review progress with the current audit schedule and any changes that may become necessary;
  - review failed audits and confirm decisions to change waste tagging and disposal routes;
  - review repeat audits that have passed and/or verified pre-acceptance audits provided by customers and confirm decisions to change waste tagging and disposal routes;
  - discuss and agree any other matters arising to ensure smooth running of the audit programme and clear and transparent communication with customers.

## Conducting the Audit

- 5.12 At least 5 working days in advance of the audit, the Waste Audits team will confirm audit details (customer, target waste type, number of 770ltr carts required for the audit) to the local Operations team at the site where the audit will be conducted.
- 5.13 The local operations team will ensure that a designated safe area is set aside for the audit, and that required quantities of waste are prepared.
- 5.14 The commercial team will ensure that if any customer representatives will attend the audit, their details (name, position, employer, phone number) will be provided in advance of the audit day to the local operations team and that a commercial team representative will be available to chaperone the customer representative.
- 5.15 Only the following waste types, packaged in bags, may be selected for audit:
- HL waste – offensive healthcare waste (EWC 18 01 04, tiger stripe packaging)
  - HT waste – infectious healthcare waste suitable for treatment (EWC 18 01 03, orange packaging)

- 5.16 The quantity of waste to be audited will be agreed in advance depending on the audit duration. To ensure that a representative sample of waste is audited, the guidance in the following table must be followed (based on the statistical sampling method SQRT n+1).

770ltr carts of the audit waste type received in the consignment	Sample equal number of bags from this number of 770ltr carts
3 – 6	3
7 – 12	4
13 – 20	5
21 – 30	6
31 – 42	7

- 5.17 To commence the audit, the waste audits team representative conducting the audit will set up the safe working area in accordance with the risk assessment and safe system of work for the process, and will wear the appropriate PPE.
- 5.18 Any other persons present to observe the audit (customer, commercial team etc) must also wear PPE required for operational areas of the facility.
- 5.19 For each cart selected to audit, the tag number and details will be recorded and a photo of the tag taken.
- 5.20 For each bag selected to audit, the bag will be split and the contents examined. If the bag is tied with a cable tie or similar including a reference number, this number will be recorded.
- 5.21 A photo will be taken of any contents determined to be non-conforming, alongside a written note of what was identified that was non-conforming in accordance with the criteria set out in table 1.
- 5.22 Each bag inspected will be repackaged before returning to the cart for treatment / disposal. In the event that any major non-conformities were identified in the bag, it will be placed in a cart tagged for incineration only.

## Audit Evaluation Criteria, Scoring and Reporting

- 5.23 Table 1 on the following page provides a reference to what level of non-conformity is recorded for each type of non-conforming items or materials that may be present in the waste for each waste stream to be audited (when standard contractual arrangements for disposal are in place).

Non-conforming Item / Substance	HL Offensive Waste	HT Infectious waste suitable for treatment
<b>Medicines / medicinally contaminated items (non-hazardous medicines).</b> <i>Including all pills, powders, creams, ointments, gels, aerosols and liquid preparations. Including packaging and IV bags/lines with residual content. Excluding empty blister packs and non-pharmaceutically active products (glucose, saline, nutrition).</i>	Major – requires incineration	Major – requires incineration
<b>Medicines / medicinally contaminated items (cytotoxic / cytostatic medicines)</b> <i>Including all pills, powders, creams, ointments, gels, aerosols and liquid preparations. Including packaging and IV bags/lines with residual content, with the exception of empty blister packs.</i>	Major – requires high temperature incineration	Major - requires high temperature incineration
<b>Sharps</b> <i>Including any type of sharp instrument with an exposed or potentially exposed sharp/cutting/puncturing edge.</i>	Major – serious safety hazard	Major – serious safety hazard
<b>Anatomical waste</b> <i>Including recognisable anatomical waste, excluding blood/residual blood products.</i>	Major – requires incineration	Major – requires incineration
<b>Chemicals</b> <i>Including all liquid chemical products and packaging containing residual quantities.</i>	Major – requires specialist treatment or incineration	Major – requires specialist treatment or incineration
<b>Bulky wastes / large individual items</b> <i>Including all items that cannot be shredded (large metal items, large medical devices etc)</i>	Major – serious safety hazard	Major – serious safety hazard
<b>Free Liquids</b> <i>Including IV bags, drains, canisters etc that have not been discharged to sewer or gelled / solidified. Excluding small (few millilitres) residual amounts.</i>	Major – prohibited from landfill	Minor – advisory only
<b>Gypsum</b> <i>Including all plaster casts and moulds. Excluding fibreglass casts.</i>	Major – prohibited from general landfill	Minor – advisory only
<b>Patient identifiable information</b>	Minor – advisory only*	Minor – advisory only
<b>Glass</b>	Minor – advisory only*	Minor – advisory only
<b>Municipal type waste / recyclates</b>	Minor – advisory only	Minor – advisory only
<b>Blister packs</b>	Minor – advisory only	Minor – advisory only
<b>Residual blood products</b>	Minor – advisory only	Minor – advisory only

**Table 1: Audit Evaluation Criteria**

\* Note: PII and glass items may require separate review to ensure compliance with data protection/H&S regulatory requirements.

- 5.24 After completion of the audit the results will be reviewed to determine an overall score for the audit. The audit will be scored by calculating the number of bags containing major non-conformances as a % of the total number of bags inspected.
- 5.25 If the % of bags containing major non-conformances exceeds 10% the audit is classed as failed. Table 2 below provides worked examples of audit scores and outcomes.

Audit	Total Bags	Compliant	Major NC	Pass / Fail
1	100	77 / 77%		Fail
3	75	65 / 87%	10 / 13%	Fail
4	120	111 / 92.5%	9 / 7.5%	Pass

**Table 2: audit scoring example**

- 5.26 Any minor non-conformities identified will be reported for advice and guidance but do not contribute to the scoring system for the audit.
- 5.27 A report of the audit is written to include the following aspects:
- Waste producing site details
  - Audit details (date, time, location, waste types and quantities)
  - list of each bag inspected by cart / tag number, including where applicable the bag tag number, and whether the contents were compliant or non-compliant.
  - Where the contents included non-conforming items, a photo showing the non-conforming items and a written description of the non-conforming items and classification as major or minor.
  - A total score and result for the audit in accordance with the criteria in 5.26 and table 2 above.
- 5.28 After completion of the audit report, the waste audits team will complete the audit completion sign-off sheet to verify that the audit findings have been correctly interpreted, reviewed and validated.

## Action to be taken – audit passed

- 5.29 Audit reports should be completed for issue within 2 weeks of completion where the audit has passed. On completion of the report, a copy will be issued to the customer by the Waste Auditor, copied to the commercial team member.
- 5.30 If the audit has passed, the commercial team member may make recommendations regarding areas for improvement to the customer, but no other action or formal follow-up is required.



## Action to be taken – audit failed

5.31 The ESA Member commercial, operations and waste audits team will review the audit findings to determine what action may be necessary to ensure that the waste can be suitably treated until the action plan has been implemented. This will review will take place during the next scheduled group conference call if it is less than 1 week from the date the audit was completed, or on an additionally scheduled call when necessary to ensure prompt review and action is taken.

5.32 The review will include the following:

- Consideration of audit findings and failure rate. Findings from audits with a marginal failure rate (10-15%) should be double checked.
- Decision on whether the waste must be diverted to disposal via incineration. In most circumstances this will be appropriate as incineration is the most comprehensive treatment method for rendering safe most wastes, so minimises the risk of non-compliant disposal.
- Decision on what is the most appropriate waste type and tag the customer should use based on the best match for the type of non-conformances identified. In most cases this means the non-conforming waste will be re-classified as HI, HP or HY.
- Confirmation of charging arrangements applicable to any re-classified waste. In most cases this will mean the contracted rates for incineration only-waste will be applied.

5.33 After completion of the internal review and within one week of completion of the audit, the following information about the failed audit will be communicated to the customer by the commercial team member, copied to the waste auditor:

- Overview of audit findings and % major non-conformance rate
- Change in disposal route for non-conforming waste streams
- Change in tagging requirement for non-conforming waste streams
- Request for a formal action plan from the customer when issuing the audit report. The action plan must include actions designed to correct the non-conformities identified during the audit and to prevent a recurrence. The actions must be assigned to specific owners and must have clearly defined timescales for completion.
- Options available to validate return to compliance (as set out in steps 5.36 to 5.43 below).

5.34 After completion of the review, if a decision to change a customer's tagging and disposal route is agreed, this must be communicated by the Waste Audits Administrator via email to the relevant operations team members (Facility/Plant & Service Managers, copied to the Regional Processing Manager, Director of Operations and relevant commercial team member) to notify them of the change. The notification must include:

- Affected customer (including customer-site IDs)
- Affected waste types (HT and/or HL)
- New tagging and disposal requirement for affected waste types
- Date the failed audit was communicated to the customer.

## Action to be taken – return to compliance

- 5.35 The arrangements defined and agreed in 5.33-5.34 will remain in place until such time as the customer can demonstrate completion of the action plan in either of the following ways:
- a) By completion of a new waste pre-acceptance audit to self-certify compliance. The audit report must be provided to ESA Member and signed off as valid at Director level within the Trust / waste producing organisation (i.e. Director of Estates or equivalent).
  - b) By ESA Member completing a repeat waste segregation audit which is passed (<10% of bags containing non-conforming waste).

5.36 If the customer completes option a) through provision of a pre-acceptance audit demonstrating compliance, signed off at a suitably senior level, the waste type in question can be returned to normal disposal arrangements (tagging and disposal/recovery route) subject to review and agreement by the following people:

- Commercial Team – Senior Director Commercial
- Operations Team – Director Operations

The return to normal disposal arrangements (tagging and disposal/recovery route) will take effect as soon as is practicable (a short transition period will be necessary to make any required change to collection, transport and disposal arrangements). The date at which the change takes effect will be communicated to the customer by their ESA Member Account Manager.

- 5.37 When option a) has been completed by the customer, ESA Member may take the decision to conduct a repeat waste segregation audit to validate the findings of the pre-acceptance audit.
- 5.38 If the customer does not complete option a) then ESA Member will follow option b) by conducting a repeat audit.
- 5.39 The time between the original failed audit and a repeat audit to assess the effectiveness of the action plan will be determined on a case-by-case basis but will normally be around 2-3 months and will not be less than 1 month given the need to develop the plan, implement the actions and embed the improvements.
- 5.40 Repeat audits for validating option a) or for option b) will be conducted using the same method as all other waste segregation audits, following the process set out in steps 5.12 to 5.29 of this procedure.
- 5.41 If the repeat audit under option b) is passed, the waste type in question can be returned to normal disposal arrangements (tagging and disposal/recovery route) as soon as is practicable (a short transition period will be necessary to make any required change to collection, transport and disposal arrangements). The date at which the change takes effect will be communicated to the customer by their ESA Member Account Manager.
- 5.42 If the repeat audit is failed, the process of corrective action and re-audit must be repeated, following the process set out in steps 5.38 to 5.41 of this procedure.

## 6. Training & Competency Assessment

- 6.1 Relevant team members in the Commercial, Operations and EHS waste audits team receive a briefing in the content of this procedure and must provide verification to confirm their understanding.
- 6.2 Relevant team members in the EHS waste audits team receive a briefing in the content of the risk assessment and safe system of work for undertaking waste segregation audits and must provide verification to confirm their understanding.

## 7. Enforcement

- 7.1 ESA Member will perform reviews from time to time to ensure compliance with this Work Instruction. ESA Member may, at its discretion, discipline those who fail to comply with this Work Instructions's requirements, up to and including termination of employment and possible legal action. ESA Member regards compliance with this Work Instruction to be a significant duty of all ESA Member personnel.

## 8. Related Policies & Procedures

- 8.1 xxxx Commercial Processes
- 8.2 xxxx Waste Pre-acceptance and Technical Assessment

## 9. Requests for Additional Information, Interpretation & Document Ownership

<b>Document Owner:</b>	xx	Xx
<b>Document Author:</b>	xx	xx

- 9.1 For all enquiries related to this document or change requests contact **xxx**