

NHS Lothian Internal Audit Report 2022/23 Waste Management

Assurance Rating: Moderate Assurance

Date: 8 February 2023

Final Report

Contents

The contacts in connection with this report are:

Peter Clark
Director
T: 0141 223 0785
E: peter.c.clark@uk.gt.com

Jamie Fraser
Internal Audit Assistant Manager
T: 0141 223 0886
E: jamie.a.fraser@uk.gt.com

Russell Richmond-McIntosh
Principal Auditor
T: 0131 465 7757
E: Russell.mcintosh@nhslothian.scot.nhs.uk

1 Executive Summary

2 Management Action Plan

3 Appendices

Timetable

- Date closing meeting held: 2 February 2023
- Date draft report issued: 1 February 2023
- Date management comments received: 7 February 2023
- Date Final report issued: 8 February 2023
- Date presented to Audit and Risk Committee: 20 February 2023

This report has been prepared solely for internal use as part of NHS Lothian's internal audit service. No part of this report should be made available, quoted or copied to any external party without Internal Audit's prior consent.

Executive Summary

Introduction

Healthcare waste is waste produced during the provision of human or animal healthcare, or related research activities. It includes both clinical and offensive waste.

In Scotland, the storage or treatment of healthcare waste is regulated by the Scottish Environment Protection Agency (SEPA) under different regimes. These regimes are the Pollution Prevention and Control (Scotland) Regulations 2012 and the Environmental Protection Act 1990. Producers and transporters of healthcare waste are expected to follow sections on classification and segregation and waste pre-acceptance.

Waste must be correctly classified and segregated, and a Pre-Acceptance Audit (PAA) must be completed by the waste producer and provided to healthcare waste contractors (Tradebe for NHS Scotland). Failure by a Health Board to provide a current and accurate PAA and/or failure for the contractor to demonstrate they have possession of, and have reviewed, a current PAA will lead to the contractor being in breach of their Waste Management Licence or Permit. Such breaches put the entire NHS Scotland contract at risk. Failure to provide accurate information or providing false information will lead to waste being rejected by the contractor, as a waste contractor can refuse to accept waste from a site without a current PAA. The audit data must be obtained and assessed before delivery of the first batch of waste from each location and then at the following minimum frequencies:

- every 12 months for each medical practice that produces five tonnes or more of clinical waste in any calendar year
- every two years for each veterinary practice, dental practice, and laboratory that produces less than five tonnes of clinical waste in any calendar year,
- every five years for other healthcare producers of clinical waste.

The purpose of pre-acceptance is to:

- Ensure that waste is classified correctly
- Ensure that waste is correctly packaged and labelled
- Ensure that waste is correctly segregated, based on its hazard
- Ensure waste is transported in accordance with legal requirements
- Ensure that the site receiving waste is permitted to take waste
- Ensure that the site receiving waste has the resources to accept waste (e.g., sites receiving anatomical waste are likely to require refrigerators)
- Prevent harm to human health and the environment
- Provide a comprehensive audit trail for waste.

Scope

The objective of the audit was to assess compliance with requirements to complete pre-acceptance audits on all clinical waste and review the design and operating effectiveness of the controls in place to mitigate against the following potential risk areas:

- Clinical waste pre-acceptance audit policies and/or procedures are not in place or are not aligned with Scottish Environmental Protection Agency (SEPA) guidance. As a result, staff are unaware of their responsibilities and do not know what steps are required of them in relation to pre-acceptance audits.
- The Board has no appointed Waste Management Officer(s). Waste management activity is not coordinated and collated, with performance not regularly reported to management.
- Pre-acceptance audit processes and requirements for all clinical waste are not followed resulting in non-compliance and potential legal/reputational risks for the organisation.
- Site pre-acceptance audits are not being carried out with appropriate frequency, and do not include all required information. The Board is unable to provide assurance that clinical waste is stored on site to prevent injury of harm to staff, patients or visitors.

Approach

Our audit approach was as follows:

- Obtain understanding of the key areas outlined in scope above, through discussions with key personnel, review of management information and walkthrough test, where appropriate.
- Identify the key risks relevant within Waste Management pre-acceptance audits
- Evaluate the design of the controls in place to address the key risks.
- Test the operating effectiveness of the controls in place.

It is Management's responsibility to develop and maintain sound systems of risk management, internal control and governance and for the prevention and detection of irregularities and fraud. Internal audit should not be seen as a substitute for Management's responsibilities for the design and operation of these systems.

A complete list of staff involved in the audit and documents reviewed can be seen at Appendix 1.

Acknowledgments

We would like to thank all staff consulted during this review for their assistance and cooperation

Limitations in Scope

Please note that our conclusion is limited by scope. It is limited to the risks outlined above. Other risks that exist in this process are out with the scope of this review and therefore our conclusion has not considered these risks. Where sample testing has been undertaken, our findings and conclusions are limited to the items selected for testing.

This report does not constitute an assurance engagement as set out under ISAE 3000.

Executive Summary

Summary of Findings

We have concluded that the controls in place in respect of Waste Management pre-acceptance audits provides a **MODERATE** level of assurance. The table below provides a summary of the findings. The ratings assigned are based on the agreed internal audit rating scale (**Appendix 2**).

Detailed findings, recommendations and agreed management actions are found in Section 2 of this report.

| Moderate Assurance | | | |
|--------------------|--------|-----|----------|
| HIGH | MEDIUM | LOW | ADVISORY |
| - | 4 | - | - |

| Ref | Issue | H | M | L | A |
|--------------|--|---|---|---|---|
| 2.4 | Risk area as per scope: Pre-acceptance audit processes and requirements for all clinical waste are not followed resulting in non-compliance and potential legal/reputational risks for the organisation | - | 1 | - | - |
| | Actions arising from pre-acceptance audits are not routinely reported to management and their completion confirmed | | | | |
| TOTAL | | - | 4 | - | - |

| Ref | Issue | H | M | L | A |
|-----|--|---|---|---|---|
| 2.1 | Risk area as per scope: Clinical waste pre-acceptance audit policies and/or procedures are not in place or are not aligned with Scottish Environmental Protection Agency (SEPA) guidance. As a result, staff are unaware of their responsibilities and do not know what steps are required of them in relation to pre-acceptance audits | - | 1 | - | - |
| | The Board's Waste Management Policy and accompanying guidance does not include specific advice and instruction on the completion of pre-acceptance audits | | | | |
| 2.2 | Risk area as per scope: The Board has no appointed Waste Management Officer(s). Waste management activity is not coordinated and collated, with performance not regularly reported to management. | - | 1 | - | - |
| | Reporting on the completion of pre-acceptance audits is without sufficient detail and not made to all relevant groups/Committees | | | | |
| 2.3 | Risk area as per scope: Pre-acceptance audit processes and requirements for all clinical waste are not followed resulting in non-compliance and potential legal/reputational risks for the organisation | - | 1 | - | - |
| | Pre-acceptance audit documentation was unavailable for review and accompanying schedules incomplete | | | | |

Main Findings

Pre-acceptance audits are being completed according to agreed schedules and declarations on their completion routinely made to the Board's waste management contractor. Staff are familiar with the audit methodology and training requirements are being raised with the Board's Waste Management Group as necessary. NHS Lothian has an appointed Waste Management Officer in place with responsibility for overseeing the completion of the pre-acceptance audits.

However, we have identified improvement opportunities relating to the content of the Boards Waste Management Policy and associated guidance, the recording and reporting of audit progress, and the reporting and monitoring of corrective actions arising from audits.

These findings are discussed in full within our Management Action Plan below.

Follow Up

Approximately two weeks following issue of the final Internal Audit report, a member of the Audit Team will issue an 'evidence requirements' document for those reports where management actions have been agreed.

This document forms part of the follow up process and records what information should be provided to close off the management action.

The follow-up process is aligned with the meetings of the Board's Audit & Risk Committee. Audit Sponsors will be contacted on a quarterly basis with a request to provide the necessary evidence for those management actions that are likely to fall due before the next meeting of the Audit and Risk Committee.

Risk area as per scope: Clinical waste pre-acceptance audit policies and/or procedures are not in place or are not aligned with Scottish Environmental Protection Agency (SEPA) guidance. As a result, staff are unaware of their responsibilities and do not know what steps are required of them in relation to pre-acceptance audits

MEDIUM

Finding 2.1 – The Board’s Waste Management Policy and accompanying guidance does not include specific advice and instruction on the completion of pre-acceptance audits

Control

NHS Lothian Waste Management Policy (the Policy) is in place and available for staff to refer to. The purpose of this policy is to ensure that waste belonging to, or generated by NHS Lothian, is suitably segregated for the range of safe disposal technologies, and comply at all times with current statutory requirements, industry recognised guidance and standards, as well as Scottish Government Health Directorate issued responsibilities and obligations. (SEHD HDL (2002) 43 and NHS Scotland Waste Management Action Plan 2016 to 2020. It is also intended that this policy reinforces the requirement for waste management processes and procedures used within NHS Lothian to be environmentally sustainable.

The Policy is available for staff through the Waste Management section of the Facilities intranet site. Staff are also able to access through the site the following guidance:

- Clinical Waste Segregation Poster
- Domestic Waste Poster
- Safe disposal of PPE

Observation

The NHS Lothian Waste Management Policy contains the following text under 'Audits and Risk Assessment;':

NHS Lothian will, with the assistance of other relevant organisations, carry out audits and risk assessments of all its waste management activities including general compliance with recognised and applicable standards, general condition of equipment, segregation and storage arrangements, and arrangements for communication and training. Information gained from this exercise will be used in the preparation of an on-going plan for service improvements. The audits and risk assessments will be reviewed annually.

However, the Policy does not specify the requirement that pre-acceptance audits must be completed by NHS Lothian using the agreed audit methodology and evidence of this provided annually to its healthcare waste contractor (Tradebe). Furthermore, the pre-acceptance audit guidance provided by Tradebe is also not available through the intranet for staff to refer to.

Risk

Without ensuring that all relevant staff are being advised to the importance of completing pre-acceptance audits across all healthcare sites, there is a risk that the contractor may be in breach of their Waste Management Licence or Permit.

Recommendation

Management should update the Waste Management Policy to include further detail on the requirement and completion of pre-acceptance audits.

Thereafter the Facilities intranet pages should be updated to include guidance in instruction on the completion of the audits, providing for information the instruction and templates provided by Tradebe to support staff on the completion of the audits.

Management Response

It is understood that the actions of NHS Lothian staff in segregating waste into the correct streams have the potential to negatively impact on our contractor’s capability to process our waste appropriately and therefore it will directly benefit the organisation to clarify this within our policy, our guidance documents and our Learnpro Waste Management training module.

Finding 2.1 - Continued

Management Action

Staff will carry out a short technical review of the Waste Management Policy, relevant training documents and the e-learning module to reflect the link from proper segregation to safe and compliant disposal and the avoidance of the risk of service failure.

Responsibility

Head of Soft FM
Head of Risk, Quality and Assurance
Waste Management Officer
Facilities Policy Approval Group
Policy Advisory Group

Target Date

Policy change – 31 March 2023
Training update – 30 June 2023

Risk area as per scope: The Board has no appointed Waste Management Officer(s). Waste management activity is not coordinated and collated, with performance not regularly reported to management.

MEDIUM

Finding 2.2 – Reporting on the completion of pre-acceptance audits is without sufficient detail and not made to all relevant groups/Committees

Control

The Board has an appointed Waste Management Officer who has contributed to the development of the Waste Management Policy and is responsible for:

- The provision of waste management reports to the Chief Executive, Management Teams, Sustainable Development Management Group and Board Infection Control Committee;
- Reviewing the implementation and effectiveness of the policy NHS Lothian wide;
- Presentation and interpretation of waste data;
- Ensuring that waste management processes following the requirements of SEHD-HDL (2002) 43, SHTN3 NHS Scotland waste management guidance, CEL 2 (2008) Waste Management in NHS Scotland Action Plan;
- Ensuring the availability of relevant and current training material.
- The provision of guidance on waste management arrangements, licensing, regulations etc

The Head of Risk, Quality & Assurance has also recently appointed a dedicated Assurance Manager for Waste into their team, alongside a Compliance (Risk & Safety) Manager who will work alongside the Waste Management Officer, the Assurance Manager and Site Management Teams in the area of risk assessment, site inspections and adverse events.

The Head of Risk Quality & Assurance reports through the following groups:

- The Pan Lothian Infection Control Committee (PLICC), and
- The Estates & Facilities overarching Health & Safety Committee and the NHS Lothian H&S Committee for any items by exception e.g. adverse events

Pre-acceptance audits are also an standing agenda item at meetings of the Waste Management Group, which is chaired by the Waste Management Officer and attended by facilities site and area managers, alongside representative from Pharmacy, and Logistics & Fleet Management.

Observation

It has been noted that no reporting around the completion of actions arising from the pre-acceptance audits is made to both the PLICC and Estates & Facilities Health and Safety Committee. Additionally, while there are verbal updates on the progress of pre-acceptance audits by the site/area managers to the Waste Management Group, no information is routinely presented on the number of audits completed/outstanding.

Risk

Without adequate reporting on the number of completed pre-acceptance audits, there is a risk that the Waste Management officer and other senior staff are unable to determine the progress in completing the audits in line with waste contractor requirements.

Recommendation

It is recommended that the reporting of pre-acceptance audits is considered by the Waste Management Group and wider NHS Lothian governance groups. Ideally management should be regularly appraised of the number of audits completed and outstanding.

Finding 2.2 – Continued

Management Response

The opportunity for improvement in our governance processes and consequent reduction in organisational risk in this regard is understood and accepted. It is also considered that the enhanced reporting will offer a further opportunity to cascade this information to the 13 Health and Safety Committees across the organisation and thereby improve the assurance levels across the Board.

Management Action

The Facilities Area Manager reports to the local Health & Safety Committees will be adjusted to include a section on Waste Management and in particular audit outcomes and local actions to be undertaken when these arise. An executive summary of this will also be included in the Facilities reports to the Lothian Health and Safety Committee and Pan Lothian Infection Control Committee.

Responsibility

Area Managers Soft FM
Head of Soft FM
Head of Risk, Quality and Assurance
Waste Management Officer

Target Date

31 May 2023

Risk area as per scope: Site pre-acceptance audits are not being carried out with appropriate frequency, and do not include all required information. The Board is unable to provide assurance that clinical waste is stored on site to prevent injury of harm to staff, patients or visitors.

MEDIUM

Finding 2.3 – Pre-acceptance audit documentation was unavailable for review and accompanying schedules incomplete

Control

Facilities staff within each site/area are required to follow an agreed schedule for the completion of pre-acceptance audits. These are designed to ensure that the contractor is satisfied through the annual returns by NHS Lothian that all relevant sites and locations have been subject to pre-acceptance audits and at the appropriate frequency according to individual risk/volume of clinical waste.

Observation

Pre-acceptance audit schedules for 2021/22 were obtained from the following areas and reviewed to confirm that audits had been completed for all locations identified as high risk in the schedules and therefore subject to annual audits:

- Royal Infirmary of Edinburgh
- Western General Hospital
- St. John's hospital
- Royal Hospital for Children and Young People/Department of Clinical Neurosciences
- Astley Ainsley Hospital
- Royal Edinburgh Hospital
- East & Midlothian Community
- Lauriston Building/Princess Alexandra Eye Pavilion/Chalmers Centre

We were unable to locate evidence of the reported completion of four locations during 2021/22, from a population of 81 high risk locations, those are:

- Royal Infirmary of Edinburgh - Theatres
- St John's Hospital - Pharmacy
- Royal Edinburgh Hospital - Pharmacy
- East and Midlothian Community - Cockenzie Health Centre Treatment Room

Additionally, the schedules reviewed are incomplete for four of the eight sites selected. Specific dates for each completed audit had not been entered in all instances, these are:

- Royal Infirmary of Edinburgh
- Royal Hospital for Children and Young People/Department of Clinical Neurosciences
- Royal Edinburgh Hospital
- East and Midlothian Community

Risk

Without the regular audit of the areas determined as high risk according to the volume and type of clinical waste, and the evidence of such there is a risk that management cannot be assured that clinical waste is not being segregated, stored and disposed of in line with the Contractor's requirements.

Recommendation

Management should confirm through review of audit documentation that all high risk areas were subject to pre-acceptance audit inspection during 2021/22. Thereafter, staff should be advised to make sure that the pre-acceptance audit schedules are regularly updated and made available for review by the Waste Management Officer/Waste Management Group.

Finding 2.3 - Continued

Management Response

We recognise the importance of ensuring all of these audits are completed and tracked. We will establish an audit planner and ensure that all inspections are tracked and that the Risk, Quality and Assurance team provides oversight of this.

Management Action

Develop and implement waste audit planner for high risk areas in all locations as well as tracking and oversight processes to provide assurance of completion.

Responsibility

Area Managers Soft FM
Head of Soft FM
Head of Risk, Quality and Assurance
Waste Management Officer

Target Date

30 April 2023

Risk area as per scope: Site pre-acceptance audits are not being carried out with appropriate frequency, and do not include all required information. The Board is unable to provide assurance that clinical waste is stored on site to prevent injury of harm to staff, patients or visitors

MEDIUM

Finding 2.4 – Actions arising from pre-acceptance audits are not routinely reported to management and their completion confirmed

Control

All pre-acceptance audits are carried out using a template provided by the Contractor (Tradebe). Staff carrying out the audits are required to assess the control, management and oversight of clinical waste under six headings:

Audit reports follow a template provided by Tradebe, this requires staff to record:

- Waste Segregation
- Policy and Practices
- Ward/Department Storage
- Central Waste Area
- Training and Competence, Staff Questioning
- Administration

The templates also allow staff to record the following

- Hospital/Location
- Date of Inspection
- Time of Inspection
- Specialism Inspected
- Site/Ward Representative

As per the audit template, all audits are:

- To be discussed at the Board's Waste Management Group Meeting – (date added), and
- Record further recommendations from the Board's Waste Management Group meeting

The template has also been designed to ensure that actions arising from pre-acceptance audits are taken forward into an agreed action plan with action owners and timescales recorded.

Observation

Testing on a sample of 39 pre-acceptance audits completed during 2021/22 from a population of 264 noted that the date reported to the Waste Management Group Meeting has not been recorded. Also, where corrective actions have been identified following a pre-acceptance audit, confirmation of their completion is inconsistent across the sites. Testing noted of a total of 32 actions across the 39 audits; however, only 6, relating to St John's Hospital had been confirmed as completed in the audit documentation.

Risk

Without appropriate reporting on the corrective actions noted, there is a risk that the Waste Management officer and other senior staff are unable to where specific issues are being identified that may require senior staff involvement to resolve and prevent reoccurrence. Furthermore, without update on the completion of corrective actions, management within facilities cannot be assured that the corrective actions identified from the audits are being addressed, closed off and the risks associated with each mitigated.

Recommendation

Staff should be advised to confirm the completion of corrective actions and update the audit documentation accordingly.

It is also recommended that management consider the relevance of reporting the individual outcome of each audit to the Waste Management Group, as per the audit template. Any decision to not adhere to this requirement should be documented. However, at the very least, it is advised that management introduce management reporting that summarises the number and type of actions identified from the pre-acceptance audits, alongside those outstanding/incomplete.

Finding 2.4 - Continued

Management Response

As the finding acknowledges, it will be unrealistic to expect that the Lothian Waste Management Committee reviews every individual department waste management audit. As an alternative, the Waste Management Officer will provide a management report to the committee detailing the audits carried out during the period, significant findings/trends noted and actions being completed from the previous period.

In order for this to be a closed loop system, it is important to note that responsibility for the completion of actions will, in the main, fall to the department producing the waste. Facilities therefore recommend that all departments with audit actions report/close these out through their own quarterly Health and Safety review process and local committee.

When this is added to the action in finding 2.2. this will further improve the process and the assurance.

Management Action

Waste Management Officer to provide composite audit report to the Lothian Waste Management Committee.

Facilities to engage with the Head of Health & Safety to agree the audit close-out and reporting processes for waste producing departments.

Responsibility

Head of Soft FM
Head of Risk, Quality and Assurance
Waste Management Officer

Target Date

30 September 2023 (for full implementation)

Appendix 1 – Staff Involved and Documents Reviewed

Staff Involved

- Site Services Managers – Soft FM
- Site Facilities Managers
- Regional Assistant Fleet Manager
- Area Managers – Soft FM
- Transport Manager
- Assistant Logistics Managers
- Head of Risk, Quality & Assurance - Estates and Facilities

Documents Reviewed

- NHS Lothian Waste Management Policy
- NHSScotland waste management guidance Part B: Waste management policy template
- Tradebe Pre-acceptance Audit Customer declaration and guidance
- NHS Lothian pre-acceptance audit schedules
- Completed pre-acceptance audits
- Licenses and certification to transport and transfer waste
- Waste Management Group agenda and minutes covering 2022
- 2021/22 Customer Declarations made to Tradebe

Appendix 2 – Our IA Report assurance levels

The table below shows the levels of assurance we provide and guidelines for how these are arrived at. We always exercise professional judgement in determining assignment assurance levels, reflective of the circumstances of each individual assignment.

| Rating | Definition | When Internal Audit will award this level |
|------------------------------|--|---|
| Significant assurance | <p>The Board can take reasonable assurance that the system(s) of control achieves or will achieve the control objective.</p> <p>There may be an insignificant amount of residual risk or none at all.</p> | <p>There is little evidence of system failure and the system appears to be robust and sustainable. The controls adequately mitigate the risk, or weaknesses are only minor (for instance a low number of findings which are all rated as 'low' or no findings)</p> |
| Moderate Assurance | <p>The Board can take reasonable assurance that controls upon which the organisation relies to achieve the control objective are in the main suitably designed and effectively applied.</p> <p>There remains a moderate amount of residual risk.</p> | <p>In most respects the "purpose" is being achieved. There are some areas where further action is required, and the residual risk is greater than "insignificant".</p> <p>The controls are largely effective and in most respects achieve their purpose with a limited number of findings which require management action (for instance a mix of 'medium' findings and 'low' findings)</p> |
| Limited Assurance | <p>The Board can take some assurance from the systems of control in place to achieve the control objective, but there remains a significant amount of residual risk which requires action to be taken.</p> | <p>This may be used when:</p> <ul style="list-style-type: none"> There are known material weaknesses in key control areas. It is known that there will have to be changes that are relevant to the control objective (e.g. due to a change in the law) and the impact has not been assessed and planned for. <p>The controls are deficient in some aspects and require management action (for instance one 'high' finding and a number of other lower rated findings)</p> |
| No assurance | <p>The Board cannot take any assurance from the audit findings. There remains a significant amount of residual risk.</p> | <p>The controls are not adequately designed and / or operating effectively and immediate management action is required as there remains a significant amount of residual risk (for instance one Critical finding or a number of High findings)</p> |

Appendix 2 - Continued

The table below describes how we grade our audit recommendations based on risks

| Rating | Description | Possible features |
|-----------------|--|--|
| High | Findings that are fundamental to the management of risk in the business area, representing a weakness in the design or application of activities or control that requires the immediate attention of management | <ul style="list-style-type: none"> ▪ Key activity or control not designed or operating effectively ▪ Potential for fraud identified ▪ Non-compliance with key procedures / standards ▪ Non-compliance with regulation |
| Medium | Findings that are important to the management of risk in the business area, representing a moderate weakness in the design or application of activities or control that requires the immediate attention of management | <ul style="list-style-type: none"> ▪ Important activity or control not designed or operating effectively ▪ Impact is contained within the department and compensating controls would detect errors ▪ Possibility for fraud exists ▪ Control failures identified but not in key controls ▪ Non-compliance with procedures / standards (but not resulting in key control failure) |
| Low | Findings that identify non-compliance with established procedures, or which identify changes that could improve the efficiency and/or effectiveness of the activity or control but which are not vital to the management of risk in the business area. | <ul style="list-style-type: none"> ▪ Minor control design or operational weakness ▪ Minor non-compliance with procedures / standards |
| Advisory | Items requiring no action but which may be of interest to management or which represent best practice advice | <ul style="list-style-type: none"> ▪ Information for management ▪ Control operating but not necessarily in accordance with best practice |

