

Overview

This Standard is about managing the treatment of hazardous materials on a waste resource treatment facility. With the regenerative approach of the circular economy, waste is increasingly being seen as a resource which is made up of materials with future uses. This Standard could apply to physical, chemical, thermal or biological treatments.

It requires the implementation and management of procedures for controlling treatment and related operations. This includes inspection of materials entering the process, arranging the transfer and storage of outputs and the reprocessing or disposal of any materials that fail to meet quality standards. It also involves keeping comprehensive records of treatment, control parameters and staff training. In addition, it includes understanding the hazards associated with the materials being treated, the effect they can have on people and the environment and how to minimize and control their effects. All procedures must be implemented in compliance with the legislative requirements for the site operations.

This Standard is for managers or supervisors of treatment facilities which handle hazardous materials.

Performance criteria

You must be able to:

1. implement systems and procedures for treatment operations in accordance with legislative and organisational requirements
2. ensure materials entering treatment processes are inspected in line with systems and procedures
3. arrange for the supply of appropriate and sufficient materials, equipment and information to carry out treatment operations
4. carry out risk assessments to identify actual and potential hazards and minimize risks to the health, safety and wellbeing of people and to the environment at appropriate times
5. maintain safe systems of work and put appropriate controls in place to eliminate or reduce risk to people and the environment
6. comply with legislative and organisational requirements for reporting risks to health, safety and the environment
7. implement systems and procedures for the transfer or storage of outputs from treatment operations in line with safety, legislative and organisational requirements
8. implement and maintain recording and information systems specifically for treatment processes in accordance with legislative and organisational requirements
9. ensure that all procedures and processes for treatment operations are adhered to by all people involved at all times
10. establish, implement and oversee work programmes for treatment operations that meet legislative and organisational requirements
11. implement operating procedures that comply with health, safety and environmental protection requirements
12. make sure operational instructions are complete and accurate and communicated to site personnel at appropriate times
13. ensure there are a sufficient number of trained personnel available to carry out treatment operations, implementing training programmes when required
14. monitor staff activity against quality standards, legislation and procedures during treatment operations
15. monitor treatment operations to ensure they meet requirements
16. maintain records of materials processed, outputs, emissions, control parameters and staff training for treatment operations in accordance with legislative and organisational requirements
17. report compliance monitoring data in accordance with legislative and organisational requirements

18. rectify any issues that may affect treatment operations in line with organisational procedures
19. arrange for the reprocessing or disposal of any materials that fail to meet required quality standards in line with legislation and organisational requirements
20. seek advice from appropriate specialists to resolve situations which are outside your responsibility

Knowledge and understanding

You need to know and understand:

1. legislative requirements, regulations, controls, codes of practice and guidance applicable to the materials, treatment method and outputs
2. planning permission, permit and licensing requirements and environmental management system (EMS) for the site
3. required data for the control of hazardous substances
4. risk assessments for all hazardous substances received, handled and used on site
5. legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of materials from site
6. methods, principles, products and their end users, and quality protocols relating to the treatment method being used
7. the material types that can and cannot be treated and why
8. the hazards associated with the hazardous materials being treated and the effect they can have on people and the environment
9. requirements and methods to minimise and control the hazardous associated with the materials being treated
10. the impact that different material types can have on the treatment process being used
11. emissions, products and residual materials associated with the treatment method being used and how these can be controlled and managed
12. the technical and environmental benefits of the treatment process being used
13. the limitations of, problems associated with and factors that may limit uptake of the treatment method being used and how they can be controlled and managed
14. why it is important to ensure compliance with an environmental permit for treatment facilities and how to do so
15. the supply and use of resources required for the treatment method being used
16. procedures and documentation required by legislation for treatment to specific standards
17. organisational procedures for managing work activities and personnel on site

18. operating procedures and techniques for all machinery, plant and equipment used on the site for handling and processing materials
19. quality inspection, identification and handling procedures for the types of materials received, treated and recovered on site
20. organisational procedures for dealing with unauthorised materials
21. onsite procedures for storing materials, outputs and residues from treatment operations
22. organisational procedures for dealing with residues, out of specification, recovered materials and any other rejects from treatment processes
23. how to identify hazards associated with treatment facilities in relation to health and safety and the environment
24. control measures to reduce or eliminate risks to safety, health, wellbeing and the environment on site
25. how to identify issues with materials including those which:
 - are difficult to handle
 - may contain disguised materials
 - may have unacceptable components
 - are unauthorised
 - are likely to present unexpected health problems
26. legislation and organisational procedures for addressing risks to people and the environment
27. organisational procedures for dealing with spillages and emissions
28. types of personal protective equipment (PPE) required and how they must be used, maintained and stored
29. legal and organisational requirements for recording and reporting risks to health, safety and the environment
30. issues that affect treatment operations including staff shortages, equipment deficiencies, spillages or external factors
31. the technical skills and training required for treatment operations and how to ensure that relevant staff have them
32. how to communicate work instructions orally and in writing
33. why it is important to ensure that staff understand instructions and procedures and how to ensure this is achieved

EUSWM07

Manage the treatment of hazardous materials on a waste resource treatment facility



Developed by Energy & Utility Skills

Version Number 2

Date Approved March 2019

Indicative Review Date March 2022

Validity Current

Status Original

Originating Organisation Energy & Utility Skills

Original URN WM04

Relevant Occupations Public Service and Other Associate Professionals; Public Services

Suite Waste Resource Operations Management

Keywords manage, site, operations, treatment, waste, utility, utilities, environmental protection
