

Bioresources - Tankered Trade Waste			
<b>Document Title</b>	SOP 03 TTW Non-Conformance		
<b>Document Owner Role</b>	Process Manager	<b>Version Number</b>	4.0
<b>Date of Last Review</b>	14/02/22	<b>Date of next Review</b>	14/02/24
Identified Risks			
<ul style="list-style-type: none"> <li>• HS&amp;W risks associated with unsuitable / volatile / hazardous waste streams.</li> <li>• Excessive solids could damage the pipework infrastructure</li> <li>• Activated Sludge Process lanes collapse: from Overloading of nutrients               <ul style="list-style-type: none"> <li>○ Inhibition of the microbial activity through the introduction of too many inhibitory compounds such as metals or cyanide or pH concentrations are too extreme</li> </ul> </li> <li>• Digestors inhibits Methane (CH<sub>4</sub>) generation due to:               <ul style="list-style-type: none"> <li>○ excessive volume of heavy metals such as Chromium (Cr III) and Cadmium (Cd)</li> <li>○ They can poison the active bacteria and inhibit the methanogenic bacteria</li> <li>○ This leads the presence of organic acids</li> </ul> </li> <li>• Combined Heat Power process impacted by:               <ul style="list-style-type: none"> <li>○ High concentrations of Hydrogen Sulphide (H<sub>2</sub>S) can damage engines</li> <li>○ High concentrations of Siloxanes (Si) pas through the biogas and result in silica deposits.</li> <li>○ These damage the engine valves, oil life etc leading to greater downtime and more equipment to be replaced</li> </ul> </li> <li>• Compliance risks:               <ul style="list-style-type: none"> <li>○ Loss of waste permits if waste not listed on them permitted or waste does not have the appropriate EWC.</li> <li>○ Final effluent discharge consents missed due to high solids or heavy metals or Phosphorus (P)</li> <li>○ BAS Compliance for Biosolids non-conforming if too high metal content</li> <li>○ Wider environmental damage from failures of the treatment processes due to unsuitable waste streams being accepted.</li> </ul> </li> </ul>			
<p><b>If this is a printed version please ensure that it is still within the current review period, if not 'DO NOT USE' and contact your line manager for a new version</b></p>			
<p><b>Remember – If you can't do the job safely, don't do it.</b>            'DO NOT CARRY OUT THE PROCEDURE' And seek advice from your line manager</p>			

Introduction
The non-conformance procedure outlines how a non-conformance is raised and potential reasons as to why a waste is deemed non-conforming.

<b>Key Roles and Responsibilities</b>	
Tankered Trade Waste Manager (TWM):	<ul style="list-style-type: none"> <li>○ Ensure that the approval process is be followed</li> <li>○ Ensure that the operating procedures are followed</li> <li>○ Ensure that the Tankered Trade Waste Technicians (TTWT) have undergone appropriate training</li> <li>○ Investigate HSW &amp; Environmental concerns from the TTWT</li> </ul>
Tankered Process Team (TPT)	<ul style="list-style-type: none"> <li>○ Reviewing and updating the non-conformance process as required</li> <li>○ Supporting TTWT with non-conformances through discussing concerns</li> </ul>
Tankered Trade Waste Technicians (TTWT)/Technical Competent Person (TCP):	<ul style="list-style-type: none"> <li>○ Updating CWID and Waste Transfer Notes/Consignment notes with details of non-conformances</li> <li>○ Raising Non-conformances on CWID and to the appropriate parties where waste does not comply within the acceptable parameters</li> <li>○ Capture all non-conformances</li> <li>○ Escalating concerns to TWM or TPT where H&amp;S, regulatory compliance or processes are at risk</li> </ul>
Commercial Team:	<ul style="list-style-type: none"> <li>○ Providing customers with an update if a slow discharge is required</li> <li>○ Notifying the customer of a rejection and the reasons why.</li> </ul>

<b>Required Training</b>	
Tankered Trade Waste Technicians (TTWT)/ Technical Competent Person (TCP):	<ul style="list-style-type: none"> <li>● In date EMS training</li> <li>● At least 6 months experience in the waste industry (if they are approving low risk wastes) HNC Chemistry, University Degree in a Scientific Area or similar experience</li> <li>● Experience undertaking sampling and lab testing</li> <li>● How to use CWID</li> </ul>
Tankered Process Team (TPT):	<p>The requirements for the TTWT in addition to:</p> <ul style="list-style-type: none"> <li>● Tankered Waste experience or 12 months experience in the waste industry</li> <li>● CIWM Hazardous Waste Classification course</li> <li>● Cranfield University Biological Processes/Activated Sludge Treatment course</li> <li>● University degree or similar level of experience and knowledge in a Scientific Area</li> </ul>
Tankered Trade Waste Manager (TWM):	<ul style="list-style-type: none"> <li>● In date EMS training</li> <li>● Experience of working in the Waste Industry</li> <li>● Understanding of Health, Safety, Wellbeing and Environmental Compliance</li> </ul>

<b>Documentation &amp; Resources</b>
<ul style="list-style-type: none"> <li>● Standard Operating Procedures (SOP)</li> <li>● CWID (Commercial Waste Information Database)</li> <li>● Waste Transfer Note (WTN)/Consignment Note (if Hazardous)</li> </ul>

## Procedure:

All the TTW loads are approved against certain requirements, for more information please see the Waste Stream Approvals document (SOP 02). Non-conformance can arise from a range of issues, but the four major categories are:

1. Missing information on Duty of Care paperwork
2. Contaminated loads
3. Difference against approval analysis
4. Other

All non-conformances must be reported on CWID. Further information on these points can be found in the Waste Acceptance Standard and the appendices below.

### Missing information on Duty of Care paperwork:

The key information required is:

- Description of the waste stream
- Correct EWC code for the waste stream
- Signed declaration to confirm that the Waste Hierarchy has been applied.
- Name of the person, company and address of the transferor (person transferring the waste to someone else)
- Name of the person, company and address of the transferee (person accepting the waste from someone else)
- SIC code for the transferor
- Status of the persons involved in the transfer (e.g., producer, importer)
- Address of transfer or collection point
- Address of disposal point
- Date and time of transfer (optional)

These can usually be rectified by the driver contacting their booking office to obtain the missing information if the information cannot be obtained, the load may need to be rejected. Rejected loads in this case need to be recorded as 'non-conforming – paperwork missing / incomplete' on CWID.

### Contaminated load:

This might have been from the last load not being taken to a sewage treatment works or suitable for anaerobic digestion:

- Extra detail is required about the last load when it was not taken to a digester, sewage work, or field site, and no wash out certificate is provided.
- Further detail needed about the last load in this case includes the EWC, so that it can be compared against the sites EWC code permits, to check if the traces of the last load can be accepted. Mention of sales team contacting customer
- If it is the case that the last load was not suitable for the site, then due to its contamination of the current load, the load must be rejected. Speak to the TW Process Team or TW manager AND the TW Commercial Team before rejecting. In the case where

the TW process team or the TW manager is not available obtain a second opinion from another technician before contacting the TW Commercial Team.

- Rejected loads in this case need to be recorded as 'non-conforming – contaminated load' on CWID.
- A member of the sales team (TW Commercial) must be informed so they can contact the customer

#### **Difference against approval analysis:**

The approved analysis is documented on CWID. Waste has a 50% difference against approval analysis – If this will cause no process issues, and is still within the site limits, then this load can be accepted to unload

- This will need to be recorded as a 'non-conformance – accepted' on CWID.
- This does not need to be escalated, but if you are unsure, contact other TW Technicians to discuss your issues.

#### **Significant difference against approval analysis:**

Due to the variety of wastes received a tangible difference is any aspect, appearance, smell, analysis that make the waste different from the approved analysis. Where a difference is identified, this **MUST** be escalated.

Technician **MUST** call in order of preference and obtain a second opinion:

1. TW Process Team, but if not available
2. TW Manager, but if not available
3. Another Experienced Technician

As part of the discussion, if there is a non-conformance there is a decision on which option to choose:

- **Rejection** - before implementation inform the Commercial Team
  - Waste Transfer Note details should be filled out and described on CWID
  - With Hazardous wastes, the reason for rejection should be filled out on the consignment note in the appropriate section
  - It is the customers or carrier's responsibility to ensure the agency is informed when a non-conforming rejection occurs.
- **Slow Discharge** – inform the Commercial Team if the delay is deemed significant (>1hr)

All non-conformance decisions will then be recorded in the non-conformance section of CWID (with the authoriser named), and the appropriate non-conformance category should be selected.

#### **Other non-conformances:**

- Unsafe container/vehicle
- Excessive plastic contaminants (%)
- Non-specified material
- Other reasons not specified

#### **References:**

- SOP 01 TTW Waste Pre-acceptance
- SOP 02 TTW Waste Acceptance
- Technical Guidance WM3: Waste Classification – Guidance on the Classification and assessment of Waste

- BREF for Waste Treatment 2018
- Site Permits

Version Control			
Version	Date	Details	Published By
1.0	07/04/2020	Initial non-conformance procedure updated	E. Ruswa
2.0	07/04/2021	Merged into a big document.	E.Ruswa
3.0	21/10/2021	Non-conformance procedure reviewed inline with current practices.	O.Boertje
4.0	14/02/2022	Updated references to include BREF	O.Boertje