

OPERATIONAL REPORT FOR MILTOWN COMPOSTING SYSTEM LTD. LICENCE REVIEW.

Prepared for:

MILTOWN COMPOSTING SYSTEMS LTD.,

MILTOWNMORE,

FETHARD,

CO. TIPPERARY



3260 - Miltown December 10th, 2017

ISSUE/REVISION INDEX

Revision				Pages	Remarks	
#	Prep.	Rev.	Date	Revised	Remarks	
PA	JR		10/11/2017		Issue Draft for Internal Review	
PB	JR		20/11/2017	All	Issue Draft for Client's Review	
PC	JR		10/12/2017		Issue Final Document	
Prepared by; Billy Shanahan, M.Sc. Reviewed by; John Rea, B.Sc., MIEnv			illy Shanahan, M.Sc. ohn Rea, B.Sc., MIEn	v.Sc. only	Billy Shanahan	
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> 3260- Miltown Composting December 2017

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1. Introduction

This Site Condition Report was completed as part of a review of Miltown's Environmental Protection Agency (EPA) Waste Licence (Ref. W0270-01). The site is located in the townland of Miltownmore, approximately 6 km to the east of Fethard and 10 km south west of Cashel. The site encompasses approximately 5.9 hectares. It is at an elevation of approximately 139m Ordnance Datum (OD) and slopes gently to the west from a high point in the east. It is occupied by a new waste reception building, a process building (i.e., Shed 1), a covered yard area, sheds 2 and 3 formaturation of material and paved open yards; weighbridge, office; canteen/changing room; storage shed; wetlands, a bio filter and agricultural sheds. The area to the north of the sheds is undeveloped and formerly used for animal grazing, the area to the southwest of the Sheds is a series of integrated constructed wetlands, further south of the wetlands, to the east and to the west are all agricultural lands. The site area can be seen in Figure 1.



Figure 1. Site Area

2. Operational Report

This section will outline the operations which occur at the Miltown site, the process, plant abatement and recovery and treatment systems.

2.1 Operation Process

The facility is an aerobic composting plant that accepts a broad range of compostable materials including source segregated household kitchen waste; catering wastes; non-hazardous industrial and municipal waste water sludges and organic fines generated in the treatment of mixed municipal solid waste (MSW). The treatment process, depending on the nature of the source material, can involve, blending with bulking agents, composting in separate enclosed bays, maturation in windrows and post treatment to remove impurities. Due to the modular lay-out, the composting tunnels/bays can be operated independently, which provides flexibility in treating the different organic waste streams. The finished product can, depending on quality, either be used for horticultural and agricultural purposes, or as landfill cover.

The waste feedstock material is received in the new reception shed that has an area of 587 m² and an amendment store of 92.60 m² located immediately to the west of Shed 1 (approximately 1,700m² area). Immediately to the east of Shed 1 is the covered yard area that has an area of 1,415m² and then maturation is carried out in sheds 2 and 3 to the east of the covered yard area, which combined occupy an approximate area of 2,840 m². The site office is a porta cabin located at the north-west corner of Shed 1 and a small canteen/changing room is located to the south west of Shed 1. A bunded area exists in the northern area of the reception building to store diesel and lubricating/hydraulic oil. The covered yard to the east of Shed 1 and the new reception building to the west of Shed 1 are paved with impermeable concrete. The biofilter is located on the southern side of Shed 1 and is accessed by an unpaved road running along the southern side of Sheds 1 and 3.

The materials are transferred from the reception area to the vessels using the telescopic loader. The material placed in each of the vessels is assigned an individual batch number to allow performance monitoring during the treatment stages and ensure the maintenance of accurate records. Five (5 No.) temperature probes are placed within the waste mass before sheeting is placed over the top of the vessel. There is a computerised process control system, located in the site office, which records the temperature in each vessel to ensure that optimum composting conditions are maintained. In addition to the constant temperature monitoring, oxygen levels are monitored using a hand held probe. The moisture level is assessed either visually or using a hand held moisture meter. In order to comply with the Animal By-Products Regulations a 'two barriers' system is operated in the MSW/kitchen/catering waste processing area. The objective is to ensure a maximum particle size of 40cm and achieve a sustained temperature of 60°C over two separate 48 hour periods (the MSW fines as delivered typically have a particle size less than 40cm). Large items are manually removed and reused back in the process as bulking agents for future compositions.

Maintaining the temperature at 60°C for the two separate time periods is done by composting the same batch in two different bay vessels. In the first vessel, or Barrier 1, the process usually takes one week. When completed, the material is removed to a second Vessel-Barrier 2-where it is thoroughly mixed and again composted until the temperature requirements are met. To avoid cross contamination different loaders and buckets are used to move the materials into and out of the vessels.

When the material has completed the thermophilic stage it is removed from the Vessel Barrier 2 and transferred to the Sheds to the east where it is formed into windrows for maturation. The windrows are formed using the telescopic loader and are turned as required using either the specialized turner or the loader. Temperature, oxygen and moisture content are regularly monitored and the turning regime amended as required to ensure optimum conditions. The mesophilic stage can take up to 6 weeks. When complete the compost may, depending on the nature of the source material, be screened to remove oversized contaminants. These are stored on-site in Shed 3 pending consignment to off-site disposal/treatment facilities.

In order to increase visibility within Shed 1 and treat odorous air, an air extraction fan removes air from the building and channels it into the woodchip biofilter located to the south of the building. The biofilter consists of a large concrete box, in which a thick layer of coarse shredded wood chips is placed, with a manifold and a system of air ducts on the bottom to ensure an even distribution of air. The biofilter is visually monitored every working day by the operator on duty. The moisture content is the single most important parameter for the efficient microbial activity. For a typical natural biofilter

media (e.g. wood chips plus peat) the moisture content should be maintained in the range of 40 to 60 percent. Water is applied to the filter as required to ensure optimum efficiency. As required, part of the biofilter material (wood chips) are replaced by fresh material, in order to maintain the odour removal efficiency of the filter. Since bio-filtration is a microbiological process, a sudden mechanical breakdown or failure of a complete biofilter is unlikely to happen. However, in the unlikely event a failure of the biofilter, or during the regular replacement of biofilter media, no process air will be directed to the biofilter.

Six people are currently employed full time at the facility and three are employed part time comprising of managers and operatives. The current operational hours at the facility are 06:00 to 18:00 Monday to Saturday

2.2 Site Structure

The site management structure for Miltown Composting is outlined in Figure 2 below. The experience and training of the main facility management personnel is provided in the Technical Knowledge attachment included with Attachment 2 with the licence review application.

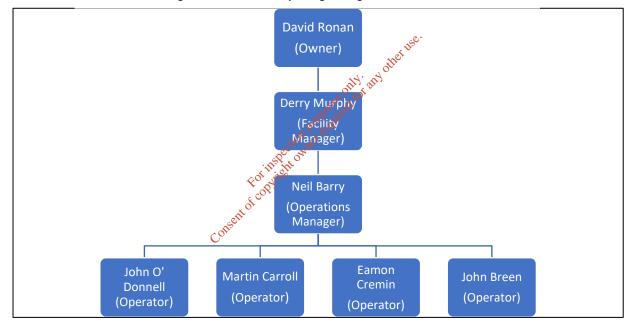


Figure 2: Milltown Composting Management Structure

2.3 Site Equipment

The equipment used within the facility for the processing and movement of material and product are provided below:

- Front end loaders are used for transferring biowaste into, and between, composting bays within Shed 1. They are also used for construction and turning of windrowed material following the composting process and the loading of matured materials for transfer offsite.
- 1 trommel Screen,
- Power Washer.

The site equipment provides 100% duty and 50% standby for compost processing up to 24,500 tonnes annually and could also be used for processing the proposed increased throughput. If there is a break down, additional plant may be hired for use on-site for short periods to augment standby capability and ensure continued site operations

2.4 Methods/Process

An outline of the existing process is provided in Attachment 1 and shows the flow of material through the facility.

2.4.1 Waste Reception

Waste reception, blending and in-vessel composting is carried out in the new reception shed (i.e., covered yard area to the west of Shed 1) and Shed No. 1, which occupies an area of approximately 1,700 square meters (m²). Maturation is carried out in Sheds 2 and 3 to the east, which combined occupy approximately 2,840 m². In the reception area the organic waste material may, depending on composition, be shredded to enhance the composting process and source segregated household and catering organic waste may be screened to remove contaminants (e.g. plastic). Wastewater treatment sludges or fine structured materials are mixed with a bulking agent (e.g. shredded green waste) to improve porosity to help with the composting process.

2.4.2 Thermophilic Stage

The materials are transferred from the reception area to the vessels using the telescopic loaders. The material placed in each of the vessels is assigned an individual batch number to allow performance monitoring during the treatment stages and ensure the maintenance of accurate records. Five temperature probes are placed within the waste body before sheeting is placed over the top of the vessel. There is a computerized process control system, located in the site office, which records the temperature in each vessel to ensure that optimum composting conditions are maintained. In addition to the constant temperature monitoring, oxygen levels are monitored using a hand-held probe, the vessels consist of a forced air system and oxygen levels are maintained through on going positive air input to the vessels. The moisture level is assessed either visually or using a hand-held moisture meter. In order to comply with the Animal By-Products Regulations a 'two barriers' system is operated in the MSW/kitchen/catering waste processing area. The objective is to ensure a maximum particle size of 40cm and to achieve a sustained temperature of 60°C over two separate 48-hour periods. The MSW fines typically have a particle size less than 40cm and do not require additional processing. Large items are manually removed before the materials are composted. Maintaining the temperature at 60°C for the required two separate time periods is achieved by composting the same compost batch in two different vessels. In the first vessel, or Barrier 1, the process usually takes one week and when completed, the material is transferred to a second vessel (Barrier 2) where it is thoroughly mixed and again composted until the temperature requirements are met. To avoid cross contamination different loaders and buckets are used to move the materials into and out of the composting vessels.

2.4.3 Mesophilic Stage

When the material has completed the thermophilic stage, it is removed from the second vessel and transferred to Sheds to the east where it is formed into windrows. Depending on the source of the waste materials it may be blended with wood chip to improve porosity. The windrows are formed using the telescopic loader and are turned as required using the loader. Temperature, oxygen and moisture content are regularly monitored and the moisture and turning regime revised as required to ensure optimum conditions. The mesophilic stage can take up to 6 weeks to complete and the finished compost may, depending on the nature of the source material, need to be screened to remove contaminants. These contaminants are stored on-site, in in the covered yard are to the east of Shed 1, pending consignment to off-site disposal/treatment facilities.

The waste acceptance procedures and emergency response procedures to be followed in the event of an unforeseen incident at the facility are included as part of the site Environmental Management System. The standard operating procedures for Waste Acceptance, Non-conformance material and corrective actions, emergency response and accident prevention are included in Attachment 2.

2.4.4 Proposed Changes

Miltown propose to increase the throughput of material at the composting facility to approximately 160 tonnes per day (not exceeding 50,000 tonnes per annum) and to apply to the Environmental Protection Agency for an Industrial Emissions Licence continue to regulate the facility. The future licenced area will be the same as the current waste licence (Ref. W0270-01) for the site. The reception area for organic material will continue to be in the new reception building, where delivery trucks will back in and deposit their loads to the new reception area. The reasoning for enclosing the reception area was to provide additional controls over potential impacts to surface water quality from the yard surface. The new roof construction allows for diversion of rainwater from the yard surface and reduce potential interaction between residual waste material and surface water in that area. Any leachate or minor surface water discharge in that area is controlled and managed through a dedicated recirculation drainage system. It is also proposed that clean surface water not collected in the rainwater harvesting system (i.e., roof and external yard surface water) would be directed to the existing ICW system on site prior to discharge which would be an additional treatment for surface water than currently takes place at the facility.

The range of waste materials currently accepted at the composting facility will not change. The site will continue to only accept biological waste material for treatment and it is envisaged that future operation of the facility will serve to accept increased volumes of these organic materials from waste collectors. The bio wastes (e.g., food waste and screened organic fines material) will continue to be delivered to site in enclosed trailers for aerobic composting and stabilisation. The increased compost processing throughput at the facility wilkallow the facility deal with a greater volume of bio-waste and increase the facility's capability to service the Southern Regions waste needs.

2.5 Abatement

This section will outline the abatement systems which are currently in place at the site and which will be introduced if the increased tonnage and the ICW are included as part of the licence.

2.5.1 Air

The main perceived nuisance associated with the development may be odour. The aspiration system for the facility was augmented to provide aspiration to the extended enclosed reception area and new process bay located inside the reception building by extending the ductwork into the new structure.

The new reception building has been added to the existing air extraction system and exhausted through the existing biofilter. In order to meet the requirements of the current 'Draft BAT Conclusions specific to indoor composting for Vessel or enclosed building design - Air extraction should be designed and maintained to move and handle the volume of air to provide a clear working environment. The atmosphere inside the new reception building is exhausted at 2.5 Air Changes per hour, this will require the increased air volume (total calculated at 44,270 m³ – see Table 1) to be treated in the biofilter with a residence time of 40 seconds. Based on the increased air volume to be treated and the proposed residence time it has required the total media depth of the biofilter to be 950mm, see Table 1.

Table 1 Biofilter Increased Volume Required to Treat Increased Air Volume from Additional Areas

	Length (m)	Width (m)	Depth (m)	Volume (m³)	Residence Time (secs)
Current Biofilter Volume	13	40	0.8	416	
Shed 1 Volume				12,935.32	
New Reception Shed Volume				4,773	
Total Volume of Sheds				17,708.32	
Total Volume at 2.5 air changes per Hour Loading Rate <100m³/hr/m³ of Filter Media				44,270	
Increased Biofilter Volume (m³)	13	40	0.95	494	
Air Volume Throughput at Biofilter (m³/sec)				12.29722	
Residence Time in Biofilter Media (seconds)					40.17

The increased air volume requiring treatment resulted in a requirement to increase the treatment media (wood chip) volume within the Biofilter which was achieved by placing 150mm of additional media on top of the existing filter and extending the height of the perimeter walls by 150mm to contain the additional media. To maintain the proposed aspiration rate in the new reception area an additional loading of approximately 30% additional air volume will be required to pass through the biofilter, the odour loading from the reception building is significantly less than the odour loading from the air extracted from Shed 1 where air is forced through the composting material in the processing bays and exhausted through the extraction ductwork.

The ducting system is currently arranged with two 29 900 mm ducts from the fan at the biofilter to the centre of the roof of shed 1 with one duct directed towards the east of the shed with nine (9) inlet grills, the other duct is directed west and has a (6) inlet grills. The air control within the new reception building is through an extension to the west side ducting into the new reception area and fitting 2 additional extraction grills on the extended section. The ducting system is balanced by inlet grills on each of the air inlets. It is proposed to utilize the existing air fan to extract the full air load capacity. The motor on the existing fan is fitted with variable speed controller which controls the air volume extracted from the building.

2.5.2 Surface Water

As part of the site control measures, changes to the existing surface water drainage and contaminated water management system were completed to effectively prevent environmental impacts. A new surface water drainage connection has been installed that connects the new ramped waste reception area to the new leachate circulation system. The drainage system will ensure that all surface runoff from the new waste reception area floor is directed to the leachate collection system. The floor runoff is diverted to the new pump sump tank where it is then pumped through the pump filtration system to be re-circulated back to the process bays in Shed 1. In the event that a significant volume of liquid is discharged at the reception area floor then the runoff collected in the new leachate collection pump sump tank can be diverted to the 47.54 m³ containment tank located at the southwest corner of Shed 1 and then added to the process bays when required. The new contaminated runoff collection and drainage system ensures that any runoff from inside the new reception building is directed to the closed leachate management system for re-circulation in the composting process and will not be released to the environment.

The surface water drainage system for the turntable where trucks reverse into the waste reception area will have a diversion system in place to divert the surface water flow from that area to the leachate collection and circulation system if required in the event of an emergency spillage or release at the turntable area. During normal operations surface water from that area will drain to a grated silt trap gulley which will then be directed via a 150mm PVC pipework beneath the new reception area to the existing silt trap and oil interceptor to the south of the new reception building. Once the surface water passes through the interceptor it will pass through the diversion gulley and through the existing 150mm piping across the internal site roadway to the south and then in a southwest direction to the surface water drainage ditch. A diversion pipeline with a lockable valve has been installed at the access to the new reception area so that in the event of a spillage at the turntable area, site personnel will be able to divert potentially contaminated surface water to the leachate collection system by changing the installed lockable valve from the storm water line to the leachate line. All potentially impacted surface water runoff at the reception area will be collected and recirculated back into the process. No water from the reception area will be allowed to migrate from the building.

All non-impacted surface water will be diverted to the oil/water interceptor and released from there to the Integrated Constructed Wetlands (ICW) onsite, pending EPA approval. The ICW ponds will provide additional treatment for surface water from the site to ensure minimal emissions from the facility.

2.5.3 Groundwater

The mitigation measures employed for the protection of groundwater will also serve to protect soils

and geology in the area. The protection measures are closely related to the controls to protect surface water quality, and include;

A new containment tank (47.54 m3) to be installed as part of the leachate / process water recirculation system at the southwest corner of Shed of the storage and recirculation of potentially contaminated surface water runoff from the ramped waste intake area to ensure that any runoff is directed in a controlled magner to the on-site contaminated water/leachate recirculation system.

As part of the revised leachate collection system, collected impacted water will be directed initially to a new pump/sump tank located south of the amendment storage area, from where it will be pumped to the recirculation tank for recirculation into the process.

The provision of an impermeable surface for the new turn table area for vehicles delivering organic waste to the facility. This also includes the appropriate management of potentially contaminated surface water runoff from this area, which will be directed to the dedicated contaminant/recirculation system.

To manage any possible spillage risk on the turntable area Miltown will employ their Waste Acceptance Procedure, the Cleaning and Hygiene Procedure and the site Emergency Response Procedure. The SOPs will ensure that the turntable area is inspected after every delivery for spillage and if in the event of a minor spillage that a spill kit including a suitable absorbent material will be at hand in order to undertake a clean-up if required, meeting license condition.

Construction of a 0.7m high kerb around the footprint of the new reception building would allow the use of this area for the retention of any runoff and ensure that any possible spillage is directed into the leachate collection system and not to soils surrounding the process building.

The installation of a new roof and impermeable concrete floor at the waste reception area reduces the potential for run off of impacted surface water to open ground, where is could potentially migrate to soils and the underlying aquifer. All potentially impacted surface water runoff at the new reception building are collected and recirculated back into the process. No water from the reception area will be allowed to migrate from the building to surrounding soils.

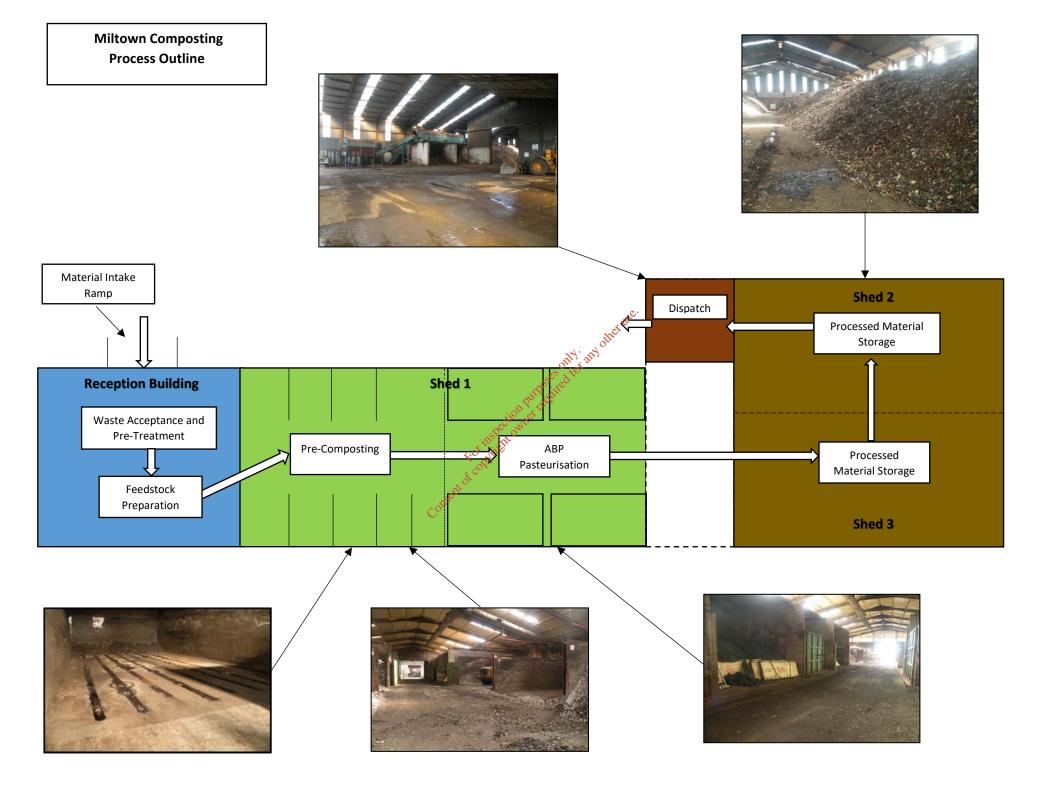
Although it is not anticipated that there will be any impacts from the facility operations on the underlying site soils, geology or hydrogeology, the implementation of the control measures on site will help ensure that potential for the migration of contaminants from the facility into the underlying soils and groundwater are negligible.

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ATTACHMENT 1

Process Flow Diagram

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ATTACHMENT 2

Standard Operating Procedures

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MILTOWN COMPOSTING LTD

Title: Waste Acceptance and Characterisation Procedure

Code: SOP MC01 Revision: 7 Revised By: DM Date: 09/03/2016

Site Location: Milltownmore, Fethard, Co.

Tipperary

WASTE ACCEPTANCE AND CHARACTERISATION PROCEDURE

1. Objectives

Ensure waste processed on site is suitable for composting and characterised correctly
 Waste unsuitable for composting is identified, isolated, and controlled

2. Responsibility

- Facility Manager
- Weighbridge Operators

3. Procedure

- 3.1 Before new waste is proposed to enter the site, pre-clearance is sought from the customer which must include; description and origin of the waste, analysis (if requested). The Environmental/Technical manager will determine the EWC code for the waste and its ABP status. An internal Waste Classification form is filled out to classify the waste.
- 3.2 Any additional information (e.g. analysis) is retained along with the classification form for reference purposes.
- 3.3 Once preclearance is given, waste is allowed enter the site and is weighed in at the weighbridge.
- 3.4 All receptacles (trailers/tankers etc.) entering the site must be covered and sealed. Trucks are directed to the waste acceptance area. An operator then signals to the driver when it is clear to tip waste. The load is visually inspected to ensure that it is consistent with the details provided in the waste classification form and assuming is consistent, is cleared to process
- 3.5 If the waste is not cleared to process because of suspected non-conformity with the waste classification form the plant manager is informed immediately. Following an immediate assessment of the suspected non-conforming load the plant manager will either pass the load for processing or direct the load to be reloaded and removed from the site.

 All plant and machinery that came in contact with the waste will be thoroughly cleaned.
- 3.6 Where a load is confirmed to be non-conforming, the non conformance and corrective action record sheet (RS MC07) is filled in and all details and actions taken recorded in same.
- 3.7 Once acceptance is complete the weighbridge operator directs the driver to the weighbridge. The truck is weighed out and a detailed receipt is given to the driver.

4. Reference Documents

- Waste License: W0270-01
- DAFM, APPROVAL AND OPERATION OF COMPOSTING PLANTS TRANSFORMING ANIMAL BY-PRODUCTS AND DERIVED PRODUCTS IN IRELAND issued the 8th May 2014
- Waste ABP Classification and Acceptance Form
- Process Flow Diagram

MILTOWN COMPOSTING LTD

Title: Non conformance and corrective

action Code: SOP MC07 Revision: 7 Revised by: DM Date: 22/03/2016

Site Location: Miltownmore, Littleton, Co.

Tipperary

NON CONFORMANCE AND CORRECTIVE ACTION

1. Objectives

- To ensure all non conformances with licence conditions, DAFF requirements, Miltown Composting procedures etc are recorded.

- -To ensure all non conformances are investigated thoroughly and the 'root cause(s)' determined
- -To ensure appropriate actions are carried out to prevent the reoccurrence of non conformances.

2. Responsibility

- Plant Manager
- Deputy Manager

3. Procedure

3.1 Detection

Non conformances will be detected from the following sources;

- Environmental and Product Monitoring results
- Process control procedures
- Audit Findings
- Complaints (Although not necessarily a not compliance any complaint will be recorded and examined using this procedure.

- **3.2 Corrective Action** The Plant Manager is informed of the non-conformance. All staff are made aware of all procedures and critical controls relating to their area of work.
- The Plant Manager will investigate the circumstances surrounding the non-compliance (a staff member involved in the area of work may be designated to carry out this investigation and report back to the Plant Manager). The purpose of the investigation is to determine the root cause(s) of the non conformance.
- The Plant Manager will fill out the non conformance and corrective action record sheet. Here the Plant Manager will detail the causes of the non conformance and detail the corrective actions to be taken.
- The Plant Manger will determine whether or not the non-conformance must be brought to the attention of any licensing authority (for example DAFF will need be informed in the event that the compost samples fail microbiological testing).

4. Reference Documents

- Waste License: W0270-01
- Process Flow Diagram
- Conditions for approval and operation of composting plants transforming animal by- products and derived products in Ireland – issued 8th of May 2014

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MILTOWN COMPOSTING LTD Title: Accident Prevention Procedure

Code: APP

Issue Date: 8th July 2016

Issued by: DM Revision: 0 Revised by: Date:

Site Location: Miltownmore, Fethard, Co.

Tipperary

Accident Prevention Procedure (APP)

APP Requirement

9.2 The licensee shall ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.

1. Objectives

The APP shall identify all hazards and risks on site and ensure the necessary measures are taken to prevent accidents with a possible adverse impact on the environment and to limit their consequences when accidents do occur.

2. Responsibility

- Plant Manager
- Site Operators

3. Procedure - identify all hazards and risks

- 1. Fire Waste storage
- 2. Fire Plant
- 3. Fire Electrical
- 4. Spillage Leachate and Contaminated Water Management

3.1 Fire - Waste Storage

- Inspect composting and curing piles to ensure adequate moisture record in Daily Inspection log
- Ensure adequate separation of compost, oversized, erratic and woodchip piles record in weekly inspection log
- Inspect Static Piles/Windrow's to ensure compost, oversized and erratic piles are not compacted see SOP MC04 and ABP SOP #5 (Never drive on the maturing compost when turning the piles to prevent compaction), see also the Safety Statement, 3. Fire Hazards Check erratic's weekly ensuring material is not compacted, remove the longest stored material first, Never drive on erratic's and turn at least monthly. Record in weekly inspection log.

MILTOWN COMPOSTING LTD Title: Accident Prevention Procedure

Code: APP

Issue Date: 8th July 2016

Issued by: DM Revision: 0 Revised by: Date:

Site Location: Miltownmore, Fethard, Co.

Tipperary

3.2 Fire - Plant

Ensure safe storage of combustible and flammable materials as per Weekly inspection
 Log

- Ensure the Prevention of mobile sources of ignition in areas with combustible and flammable materials see Safety Statement 5. Electrical equipment / tools
- Ensure Loaders, tractor and compressor are cleaned and maintained as per Cleaning and Maintenance Log.
- Ensure all fan's/blowers are working properly and free of debris as per Weekly Inspection Log
- Ensure the screener is inspected daily and cleaned as necessary as per Cleaning and Maintenance Log
- Ensure Fire extinguishers are in place and operational per Weekly Inspection Log and Fire Safety Register

3.3 Fire – Electrical

 Ensure Co2 fire extinguisher is in place and operational as per Weekly Inspection Log and Fire Safety Register

3.4 Spillage – Leachate and Contaminated Water Management

- Ensure All pumps sumps, storage tanks from which spillage of environmentally significant materials might occur are fitted with high liquid level alarms and checked weekly - see Weekly Inspection Log
- Ensure the underside and wheels of vehicles delivering waste or other materials into the reception area shall be washed and disinfected upon departure from the building - See SOP MC03 Cleaning and Hygiene Procedure and signed off by the driver – see Raw Material Intake Log:
- Ensure the Integrity of contaminated water over-ground pipes see Weekly Inspection
 Log
- Ensure the Integrity of Bunds for the Screener motor and hydraulic hoses—see Weekly Inspection Log
- Ensure an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility – see Weekly Inspection Log
- Ensure Only Skilled operatives operate pumps, Tractors and Slurry tankers, Never leave operating machinery unattended - See Safety Statement and Cleaning and Maintenance Log

MILTOWN COMPOSTING LTD Title: Accident Prevention Procedure

Code: APP

Issue Date: 8th July 2016

Issued by: DM Revision: 0 Revised by: Date:

Site Location: Miltownmore, Fethard, Co.

Tipperary

4. Any accidents/incidents that do occur on site should be fully investigated. The investigation should include the following:

o Documentation of what occurred

o The root cause of the event

- o A summary of the response actions taken
- o A summary of the impact on the environment
- o Identification of lessons regarding prevention of reoccurrence and in terms of response to future events.
- o The APP should be reviewed after any accident/incident to ensure it is still fit for purpose

5. In the event that an emergency situation or accident is also a notifiable incident

Refer to the Incident Notification Procedure

And the **EMERGENCY RESPONSE PROCEDURE**

Reference Documents

- Waste licence W0270-01
- EPA 2016 Guidance to Licensees on the Preparation of Accident Prevention Procedures and Emergency Response Procedures
- EPA Guidance to Licensees/COA holders on the Notification, Management and Communication of Environmental Incidents
- Safety Statement 2016-2018
- Weekly inspection Log
- Cleaning and Maintenance Log.
- Daily Inspection log
- Fire Safety Register
- SOP MC04: Leachate Handling Procedure
- SOP MC03 Cleaning and Hygiene Procedure
- SOP #5: Quarantine, Maturation & Screening
- Raw Material Intake Log

EMERGENCY RESPONSE PROCDURE

MILTOWN COMPOSTING SYSTEMS MILLTOWNMORE, FETHARD, CO. TIPPERARY EPA LICENCE NO W0270-01 Phone 052-613 0815 / 087 4125625 / 086 7707372

In the event of any emergency situation developing on site which may create an environmental risk, make contact with the following;

DERRY MURPHY (Facility Manager)	087 4125625
NEIL BARRY (Deputy Facility Manager)	086 7707372

In the event of an incident at the facility with the potential to impact surface water discharges, direct runoff to the leachate tanks, if full redirect the runoff to the contaminated water tanks, if further storage is needed, Call Tom Shanahan of Spotless Drains, Chris Molloy of Molloy Waste and Martin Lehane of Lehane Environmental who will provide vacuum tankers as a temporary storage measure in order to contain all runoff, until such time as the collected runoff can be transported to the nearest waste water treatment plant.

If vacuum tanker equipment is required contact

TOM SHANAHAN (Spotless Drains)	Phone 0	86 2550144
Chris Molloy (Molloy Waste)	Phone	087 9794237
MARTIN LEHANE (Lehane Environmental) Phone	021 4351020

In the event of a breakdown of the air abatement system which could cause emissions to air contact Redwood Systems at

Monique O Brien	086 0460774
Fergus O Brien	086 2460006
Liam O Brien	01 4596756

MEDICAL ASSISTANCE; Dr CARMEL CONDON;	052 613 1631
FIRE BRIGADE;	999 or 112
GARDA SIOCHANA;	052 613 1202

EMERGENCY RESPONSE PROCDURE

If Excavating machinery are required, make contact with

DAVE SMITH Phone; 086-300 6953

If Loaders are required to move feedstock, overs or compost contact

NEIL BARRY Phone; 086-7707372

If Structural damage has occurred to any building on site, contact

MICHAEL McENIRY Phone; 086-250 0332

As per condition 11.6 of licence and SOP MC11 Incident Notification Procedure

1.NOTIFY THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

By phone and through EPA portal EDENIRELAND (Report Incident)

Kilkenny; Phone; 056 779 6700 Phone Lo Call; 1890 335599

2. NOTIFY TIPPERARY COUNTY COUNCIL

During Office Hours ; Phone 0761065000 Fax 067 33134

Outside office hours ? Phone 1890 923948

3. NOTIFY THE DEPT. OF AGRICULTURE, FOOD & MARINE

Phone: 062 34900 Fax: 062 31406

4. NOTIFY INLAND FISHERIES IRELAND, CLONMEL

Phone; 052 6180055 frank.odonoghue@fisheriesireland.ie

5. NOTIFY THE HEALTH AND SAFETY AUTHORITY

Phone ; 1890 289 389 Fax ; 01 6147125

IN THE EVENT OF ACTIONS UNDERTAKEN TO RESOLVE ANY OF THE ABOVE, YOU ARE TO RECORD SUCH ACTION UNDER THE HEADING "EMERGENCY ACTION REPORTS" IN THE DAILY REGISTER KEPT IN THE FACILITY OFFICE.

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