

Michton Ltd T/as The Chocolate Factory
Facilities Management Plan – March 2017

1. This Facilities Management Plan (FMP) has been prepared for The Chocolate Factory in support of their application seeking consent for the retention of shipping containers for the purposes of drying wood and the external storage of wood.

2. In accordance with the above, the FMP has been prepared specifically in respect of the operations associated with the biomass burner on the site and the preparation process associated with it.

Storage and Handling of Biomass Fuel

3. The storage and handling of biomass fuel can present significant risks if not managed appropriately. The risk of fire will be mitigated by:

1. Appropriate design and layout of equipment;
2. The mode of equipment operation; and
3. Adherence to safety, health and environmental site procedures.

4. To minimise the risk of fire, an appropriate balance will be struck between these factors. Indeed, where appropriate prevention methods will be reviewed and discussed with Insurers and the Fire Service. The Insurers will inspect the plant prior to commissioning and approve the measures adopted.

5. Table 1 outlines the measures proposed to manage the risk of a fire occurring in biomass storage and handling equipment areas of the plant.

Management of Risk – Table 1

Type of Fire	Cause of Fire / Risk Factor	Prevention Method
Internal Heating of Pile Caused by microbial action	Storage duration (time)	The length of time biomass is stored in a stockpile is managed by frequent rotation of stock so that the ignition risk of any exothermic microbial reaction on localised biomass within the stockpile is mitigated. Total woodchip storage capacity will be 30 days' worth of biomass when the site is operating at full load. Storage space will allow operators to manage stockpile rotation and temperatures. Biomass storage and handling equipment is designed and operated on the principle of 'first-in, first-out' design will ensure that static piles of biomass are eliminated. Potentially these might occur at edges of storage containers where reclaim equipment does not reach or spillages of biomass at areas such as conveyor transfer points. H&S procedures include housekeeping to ensure biomass spillages are

		not allowed to build up over time. Monitoring techniques used to alert operators to increased stockpile temperature. Techniques, include CO2 monitoring and temperature measurement. Biomass stock levels reduced prior to planned plant outages to limit duration and amount of material stored for extended periods. Stockpile temperature monitored during extended unplanned plant outages – fuel stock rotated to allow air cooling where required.
	Biomass moisture content	Wood to be chipped on site in order to ensure quality. Wood chip to be stored and managed on site to ensure quality. And tested for moisture level.
	Presence of decayed material	The wood will be chipped on site as part of a rolling process. Accordingly, there will be no decayed material on site. As described above, the fuel will be rotated to avoid material decay unacceptably on site.
Surface Fire	Site operations	The companies Safety, Health & Environment Management System ensures that all fire risks are appropriately managed. In particular, operational procedures will ensure that external sources of ignition do not come into contact with the biomass stockpiles.
	Site equipment	Equipment design and layout will meet appropriate fire safety standards and will ensure external sources of ignition do not come into contact with the biomass stocks.
	Dry surface of stockpile	Virgin woodchip typically contains 40-60% weight of water. The surfaces of open stockpiles are unlikely to become dry enough to be ignited. The design and operation of the biomass systems will be based on a 'first-in-first-out' principle. This will ensure that ignition risk is mitigated through regular stock rotation.
	Arson	Security will ensure no unauthorised access to the site.
	Furnace front	Furnace and biomass feed system design to minimise risk of burn-back and allow rapid fail-safe fuel cut-off.
Spreading of fire		Fire safety procedures would require biomass transfer conveyors to be stopped in event of fire in the boiler house or fuel handling areas.

Emergency Procedure

6. In the event of an emergency on site, the following procedures are to be implemented:

1. Leave the building by the nearest exit.
2. Close any doors en-route without delaying your escape.
3. Do not stop or return to collect personal belongings.
4. Do not use any firefighting equipment unless you have been trained.
5. Do pass any information to the building responsible person at the assembly point.
6. You must remain at the assembly place.
7. Return to the building only when authorised to do so.

Monitoring

7. The following Key Performance Indicators will be used to monitor the effectiveness of the Facilities Management Plan: -

1. Number of fires recorded annually / number of fire related incidents.
2. Achieving set schedules and time frames (evacuation drills and building audits).
3. Measuring the number of Fire Service call outs against cause.
4. Number and nature of enforcement, alterations or prohibition notices from statutory authorities.
5. Quarterly / six monthly/ annual premises inspection and meetings to ensure actions and progress are made.
6. Annual audit of all fire systems by the managing director.