

Table 1 Biomass Boiler Accident and Risk Prevention Measures

Accident/Environmental Risk	Prevention Measures
Fire in biomass storage area	• Biomass stored in secure, enclosed fuel store, protected from contact with direct sunlight • Control of wood moisture content • Fire hydrants are present on site as well as fire fighting equipment • Smoke detectors to be installed
In the event of a fire, firewater entering surface water drainage system and causing land/water contamination	• Yard inlets to surface water drainage system blocked off • If firewater enters drainage system, outlet to ditch blocked off • If necessary, contact Environment Agency
Failure of biomass boiler fuel feed system	• Safety devices to prevent burn-back in event of fuel feed failure
Collision from vehicles on site	• Warning signs on site
Boiler failure	• Visual inspections • Regular cleaning out of boilers • Boilers serviced on a regular basis
Emissions of dust from storage and transfer of biomass	• Biomass is transferred from lorries to storage area via enclosed/blown system. • In the event of spillage, these are immediately cleaned • Biomass is transferred from storage area to boilers via sealed auger system. Fuel is fed continuously to the boilers
Abnormal operation	• Alarms are used to alert the site operator to issues, such as system malfunction etc. The alarm sends an alert to the farm manager and boiler manufacturer

Accident/Environmental Risk	Prevention Measures
Security	• Biomass boilers and storage areas are locked to prevent unauthorised access
Fuel specification	• Moisture content of biomass fuel is not checked daily. However, the fuel is delivered to specification to site and stored within a sealed storage area
Ash	• Ash is continuously removed from the boiler, collected in a sealed bin