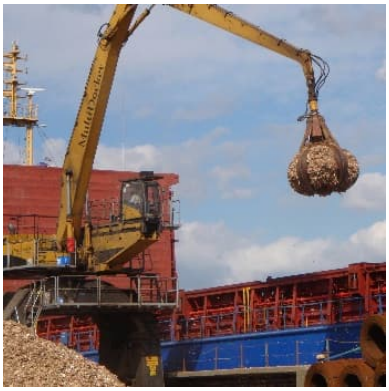

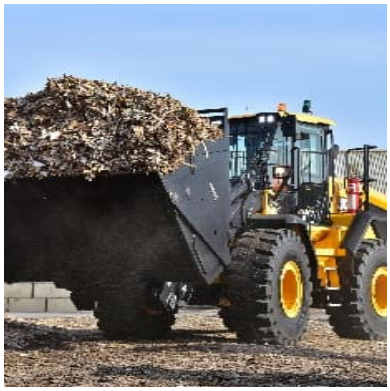

Fire Prevention Plan for Morgan Sindall Woodchip Storage Facility

23 March 2026 (Version 2)

Fire Prevention Plan for Morgan Sindall Woodchip Storage Facility

1. Introduction

This Fire Prevention Plan (**FPP**) document sets out how Countrystyle Recycling Limited (CRL) will operate Morgan Sindall Woodchip Storage Facility, Ridham Dock, Sittingbourne, Kent, ME9 8SR (**the Facility**) (see attached Location Plan as **Appendix A**) with the aim of minimising the risk of fire, as far as is practicable to do so, having regard to the guidance set out in the Environment Agency's guidance "*Fire Prevention Plans: environmental permits*" (published 29 July 2016 and last updated 11 January 2021) (**FPP Guidance**).

CRL recognises that the operations carried on at the Facility represent a high fire risk and that all staff and contractors need to be made aware of:

- the fire hazards that exist at the Facility;
- the people at risk if there is a fire;
- the actions that are to be taken to prevent fire; and
- what they must do if a fire occurs.

This document and any documents referred to throughout will be stored at the Facility so that they can be used for induction, on-going training, testing and other management purposes.

2. Using the FPP

2.1 Where the FPP is kept and how staff know to use it

A hard copy of this FPP will be kept within the site office, and a copy will also be stored electronically and be accessible to all staff.

All staff will be made aware of the contents of the FPP and the procedures that are in place in the event of a fire on site during their induction and through periodic refresher training.

CRL will conduct regular training sessions, and fire safety drills, as described in Section 2.2. below.

Contractors, visitors and drivers working on site will be made aware of the FPP contents as part of on-site working procedures, during their site inductions. This will ensure that all staff and contractors working onsite know what they must do:

2.2 Staff Training and Procedures

All staff will receive regular training in the use and selection of fire extinguishers, site evacuation, fire safety and all relevant emergency procedures.

This training will be refreshed annually, and in the event of a fire or any changes to the FPP to ensure the site operatives have up to date knowledge of procedural expectations.

All staff and contractors working on site will be made aware of the contents of the FPP and the procedures that are in place in the event of a fire on site during their induction. The staff training will be regularly refreshed, as a minimum on an annual basis, or in the event of non-compliance or change to the operations on site which affect fire risk and management.

The procedures for fires discovered on site will be provided on site notice boards. CRL will review and conduct a test of the FPP once a year, or in the event of any significant changes to site operations, to ensure that the contents are still relevant and that all staff members'

knowledge is current and up to date. Exercises include what staff need to do to prevent a fire occurring and what to do during a fire if one breaks out.

2.3 Testing the FPP

This FPP will be implemented across the site and all fire management equipment will be maintained in line with schedules set by CRL.

Emergency drills will be carried out, recorded and evaluated on a 6 monthly basis. If any issues are found during these fire drills, the FPP will be updated or amended accordingly, and site operatives will be retrained.

Regular checks are made of all escape routes and equipment.

The FPP will be kept under regular review and revised where necessary, for example if:

- There is a reason to suspect it no longer meets the objectives of the EA's FPP guidance;
- The site has a fire or identifies a near miss of a fire;
- On site activities/operations are changed;
- The environment surrounding the site changes; or
- The EA ask CRL to revise the FPP due to concern over the risk posed by on site
- operations.

If the FPP is revised, a copy will be sent to the EA for approval.

3. The Operation

3.1 The amount and type of waste received and how it is managed

The Facility will accept wood waste under its Environmental Permit.

The Facility will accept up to 30,000 tonnes per annum (**tpa**) of woodchip, which equates to approximately 577 tonnes per week, received relatively evenly during each week. The table below summarises the processes undertaken at the Facility.

Table 1: Processes undertaken at the Facility

Process	Commentary
Delivery of chipped waste wood	• Incoming vehicles report to onsite weighbridge • Duty of care documentation checked against incoming waste and, if deemed acceptable, permission is given to tip the wood waste once weighed in • Instructions provided to vehicles on where the waste should be tipped. There will be 4 windrow style stockpiles. Each stockpile will be 120m long and 10 metres wide. Each stockpile will contain 2,395.73 m^3 of processed woodchip. • Vehicles tip directly into the stockpiles. Stockpiles will be formed by pushing up the tipped materials with loading shovels into the profile of the windrow style stockpiles. • Exit of delivery vehicles via weighbridge
Storage of chipped waste wood	• Chipped waste wood product is stored in windrow style stockpiles in one of the four defined stockpiles. • Waste wood stored at the Facility for a maximum of 6 months.

4. Managing Waste Piles

4.1 The maximum time and amount of storage on site

The amount of waste stored and the time the waste is stored for at the Facility will not exceed the figures set out in the below table.

Waste type	Maximum amount stored on site at any one time	Maximum time stored on site
Chipped waste wood	3500 tonnes	6 months

4.2 How and where waste will be stored on site

The location of woodchip storage is shown on Drawing 02 Site Layout Plan, which is provided as Appendix B of this FPP.

The Site comprises:

- Woodchip storage area - located in the northern half of the Site and with surfacing comprising of hard standing (made up of a compacted hard standing and areas of concrete). Woodchip will be stored in four separate windrow-style stockpiles.

To allow maximum operator flexibility, there are two designated quarantine areas at the Facility, located in the southeast and the northwest of the permitted area. Water tanks are located in the southwest corner of the permit boundary.

4.3 Woodchip Storage

All woodchip is stored one of the four window-style stockpiles shown in **Appendix B**. The stockpiles will be located on impermeable surfacing. These stockpiles are created by pushing up the tipped materials with loading shovels into the profile of the windrow style stockpiles. There will be 4 windrow style stockpiles. Each stockpile will be 120m long and 10 metres wide. Each stockpile will contain 2,395.73 m^3 of processed woodchip.

The positioning and set-up of the windrows will allow plant access to the sides of all piles and as such the windrows can be broken up, turned, moved and monitored effectively. The Site will use thermal sensing strings located every 20m within the stockpile (i.e. 6 strings per windrow) which provides real-time temperature monitoring. Therefore, the stockpiles can be viewed as smaller segments.

4.5 The maximum size and volume of any pile

The windrows for wood storage are 120m long, 10m wide and 3m high at the apex. The maximum volume of a single stockpile is 2,395.73m^3.

The size of each wood waste stockpile/windrow is as shown in the table below.

Stockpile	Length (m)	Width (m)	Height (m)	Volume (m^3)
1	120	10	3 (at Apex)	2395.73
2	120	10	3 (at Apex)	2395.73
3	120	10	3 (at Apex)	2395.73
4	120	10	3 (at Apex)	2395.73

No wood stockpile will be larger than 790.60 tonnes (2395.73m^3)**.** See para 6.2 below for an explanation of the measures to be taken by CRL to reduce the risk of fire (including from self-heating) and the consequences of a fire originating in or from stockpiles.

4.6 Minimum separation (fire break) distance between waste windrows/bunkers

All wood stockpiles are separated from one another by at least a 6m fire break. There is also a 6m separation distance between the stockpiles and the Facility boundary.

5. Site Plans and Maps

See attached the following plans/maps applicable to the Facility:

Appendix A – Site Location Plan (Drawing 01)
Appendix B – Site Layout Plan (Drawing 02)
Appendix C – Local Receptor Plan (Drawing 03)
Appendix D – Natural and Cultural Heritage (Drawing 04).

6. Managing Common Causes of Fire

This section lists common causes of fire and the measures that are taken to reduce this risk.

Cause of Fire	Fire prevention techniques
Electrical Faults	• Electrical faults not expected to be an ignition source at the Facility due to the external storage of all wastes. • All electrical equipment and electrical installations at the Facility will be fully certified by a suitably qualified person.
Heating (industrial Heaters)	• All waste stored externally. • Industrial heaters will not used at the Facility.
Deposited Hot Loads	• The Facility will predominantly only accept waste wood from the neighbouring CRL "*Ridham Dock Wood Facility".* Wastes will not be sent to the Facility if they are hot. • Waste acceptance procedures are in place to ensure hot loads are not accepted at the Facility. • No burning, reactive/ reacting or visibly hot (producing steam or heat) loads will be accepted into the Facility. • However, if any burning, reactive/reacting or visibly hot wastes are accepted at the Facility one of the quarantine areas will be used to isolate the waste and water will be applied to the load if deemed suitable. • Each load will be subject to a visual inspection at the weighbridge prior to entering the Facility. • Instruction will be given to suppliers to ensure that no hot loads are accepted into the Facility. In the unlikely event that a hot load or reactive wastes are brought into the Facility, it will be immediately placed into the dedicated quarantine area at the Facility and removed from the Facility to a suitably licenced Facility as soon as possible.
Smoking/Ignition Sources	• CRL has a no smoking policy. • There are no naked flames or other similar ignition sources used in the processes at the Facility and none will be permitted.
Cooking	• No cooking facilities within 10m of stored material.
Arson	• Fully fenced dock area within which the Facility is located • Automated gated access to the Facility, with access permitted via use of a key fob system. • 24-hour security undertake regular foot and vehicle patrols across the dock

	• 24 hour/7 days per week operational personnel present. • External CCTV capable of being remotely monitored
Plant and Equipment (Hot Exhausts, Leaks and Spillages)	• There is no proposed fuel or oil storage at the Facility. • Permit to work system regime is operated to include hot works is in place as part of the PPM regime (which includes the provision of a fire watch to be carried out during and post such work for the periods specified in the permit to work system regime) • Daily checks on all plant and equipment is carried out at the end and beginning of each shift change. • Dual Agent fire suppression system fitted to all plant and machinery, incorporating battery isolator and machine engine shutdown functions and a contract is in place with the fire suppression supplier for the twice-yearly scheduled servicing of each unit installed on any mobile or static item of plant • Mobile plant not in operation is stored at least 10m away from any stockpile. Plant that will be used onsite will be 2 X JCB Loading Shovels. • Dual Agent fire suppression system will be fitted to all plant and machinery, incorporating battery isolator and machine engine shutdown functions and a contract is in place with the fire suppression supplier for the twice-yearly scheduled servicing of each unit installed on any mobile or static item of plant • Use of handheld IR gun to check temperature of hot spots within all plant and machinery including exhausts during shift change clean-down procedure
Storage and housekeeping	• Stock management of waste wood as outlined in Section 4.5 above (**The maximum time and amount of storage on site**) • No oils or chemicals stored at the Facility. • Daily, weekly and monthly cleaning regime for all plant, equipment and surfaces carried out in line with the Dust Management Plan prepared for the Facility. • Daily review of real time temperature readings on monitors located in the office using the **PREVENTiT** monitoring system supplied to CRL by Freeland Scientific
Building Work and Outside Contractors	• All outside contractors inducted before being allowed on site • Risk assessments and method statements required for all work to be undertaken • Where required under risk assessments, equipment is shut down and isolated before works carried out on and around the Facility • Permit to work system regime to include hot works is in place (which includes the provision of a fire watch to be carried out during and post such work for the periods specified in the permit to work system regime)
Self-combustion	• Management of stockpile rotation and offtake procedures. Offtake of material will be in accordance with CRL's Waste Wood Input and Offtake Forecast, which is produced annually and updated weekly. This plan has the effect of minimising the storage time onsite. All stockpiles will be cleared in the date order in which they are stockpiled. • Use of buried temperature strings and manual temperature probes to monitor core temperature of stockpiles. The temperature strings will be in place at every 20m within the stockpiles. • Handheld IR gun used to monitor surface temperature • Turning of stockpiles to release heat build-up if required
Batteries	• Not accepted at the Facility.

Hot and dry weather	• Management of stockpile rotation and offtake procedures. • Use of buried temperature strings and manual temperature probes to monitor core temperature of stockpiles. These strings will be in place at every 20m within the stockpile. • Turning of stockpiles to release heat build-up if required

7. Preventing Self-Combustion

7.1 Temperature Management

Waste wood is stored externally which can aid in the release in heat and prevent self-combustion. The temperature of the wood waste stockpiles is monitored routinely and in the event of any abnormal variation in temperature the material is turned to allow it to cool and removed from the Facility as soon as practical. Water is not added as this can accelerate the heating process.

The following design infrastructure and procedures are in place at the Facility and have a significant impact on reducing the risk of a fire occurring:

- Enhanced security measures in place to ensure compliance with Port Security Regulations 2009.
- Separation distances of at least 6m between stockpiles.
- Effective stock rotation.
- Monitoring of weather conditions to be able to track rainfall during stockpiling to manage increased risk of organic activity and self-heating of processed material.
- Effective stockpiling to achieve the profiling set out in **Appendix B**.
- Temperature monitoring strings allowing downloadable core temperature data to be gathered in the stockpile and/or 3m wireless temperature probes (allowing real time temperature monitoring) are to be laid or inserted across each stockpile.
- Temperature monitoring strings will be inserted into all wood stockpiles. As the stockpile is being built, 6 x temperature monitoring strings are laid at a depth of 2m from the top of the stockpile along its entire length and spaced evenly across its width.
- These strings are disposable and replaced each time a stockpile is made.
- Full liaison and integration of FPP with Kent Fire and Rescue Service (KFRS).
- Enhanced fire-fighting training for all staff and command and control training for Managers and Supervisors.
- Two quarantine areas.
- Two x Water Tanks with fire hose and water pump for rapid deployment.
- Fire hydrants.

7.2 Monitoring Temperature Output and Consequential Actions

Applying the learnings from the BRE Global Client Report – Review of EA's FPP dated 26th August 2016 (P104794-1000 Issue:1) (**BRE Report**) and having regard to the "**Notes to explain self-combustion in Schedule B of the BRE Report"**, CRL store waste woodchip to a particle size range of 8-100mm which closest fits Sample 4 (10-75mm) as tested in the BRE Report. Accordingly, the relevant critical temperatures and time to ignition for the stockpiles sizes used by CRL as set out above (The maximum size and volume of any pile) are calculated as:

- 103˚C (critical temperature);
- 96 days (time to ignition).

Having regard to the findings of the BRE Report relating to critical temperatures, time to ignition and the stockpile sizes operated by CRL and to ensure adequate time to monitor and react to changes in temperature within stockpiles, the following temperature triggers and consequential escalation actions will be applied:

Temperature	Consequential Actions
= or >50˚C	• CRL puts additional monitoring in place as follows: o add additional wireless temperature probes to affected area identified by the temperature strings to gather additional information as to the location of any localised heating of the stored material; o review batch composition data (comprising moisture, fines and chemical composition of each batch) to look for potential triggers to localised heating in the affected batch; o identify next practical offtake for such material subject to this temperature remaining for up to 96 days; o put in place an hourly out of operational hours fire watch/monitoring regime; o increased daily checks as follows: ▪ visual inspection of the stockpile for signs of emissions from affected area; ▪ twice daily reviews of the temperature data and record trends; ▪ use of IR Gun to check for surface hot spots.
= or >70˚C or temperature is between 51°C and 69°C for more than 96 days	▪ Inform the EA and KFRS automatically via email using the **PREVENTiT** monitoring system supplied to CRL by Freeland Scientific. To prevent excessive or anomalous warning being sent an email will only be issued once a trigger has been exceeded continuously for 24 hours; ▪ Onsite meeting with KFRS and/or the EA; ▪ On agreement with KFRS and the EA, commence removal of unaffected part of the stockpile (identified through temperature monitoring) to the designated quarantine area; ▪ Further period of daily monitoring of temperature to gauge any reduction or stabilisation of temperature; ▪ Once hotspot reached, rain guns applied to provide mist spray to enhance cooling. ▪ Remove of unaffected material via next practical off take route.

7.3 Reducing Self-Heating Risk

To keep the woodchip stockpile temperatures below the critical trigger temperature referred to above CRL:

- only uses dust control water when required to mitigate the creation of dust;
- does not aerate the stockpiles by turning; and
- implements continuous temperature monitoring techniques (e.g. use of temperature strings, probes and thermal imaging camera).

8. Detecting and Suppressing Fires

8.1 Detecting Fires

The following detection systems and procedures will be installed in order to detect fires at an early stage so that its impact can be reduced:

- all mobile and static plant operating in the Facility are fitted with Dual Agent Fire Suppression systems allowing for detection, dual agent fire-fighting capability and engine cut-off and battery isolation to avoid further ignition;

- all staff operating at the Facility have undergone enhanced fire-fighting training including fire detection methods and practical use of all firefighting equipment located at the Facility (fire hoses, rain-guns, fire extinguishers – see Appendix B for the Site Layout Plan showing the location of hydrants, water tanks, fire hoses and water pumps at the Facility);
- a fire watch is carried out twice daily throughout the Facility as part of the daily inspections completed at shift handovers. Site operatives are provided training in identifying the signs of a fire or potential signs. A training package is provided to all new site operatives by suitably qualified persons and overseen by a COTC holder with 2-yearly refresher. The training covers multiple topics, including fire identification and use of the IR gun and temperature probes. The fire watch is completed by either:
    - the Site Manager; or
    - a Supervisor; or
    - a trained and nominated member of the Wood Recycling team.
- temperature monitoring of all woodchip stockpiles into which have been inserted temperature monitoring strings or 3m temperature probes to provide real-time analysis of all stockpiles so that early warning of temperature changes and the increased risk of self-combustion can be monitored and early action taken. This system is monitored 24 hours in the Manager/Supervisors office and is monitored externally by CRL's contracted temperature systems provider (PREVENTiT).
- comprehensive CCTV coverage exists across all parts of the Facility which is monitored 24 hours in the Manager's office and via external dial-in to the CCTV system.

8.2 Signage

Fire prevention messages and training is reinforced by the use of appropriate signage across the Facility.

8.3 Site Security

Security measures in place comply with the Port Security Regulations 2009. The Facility benefits from:

- 2m, barbed wire topped chain link and palisade fence around the entire docks;
- Automated gated access to the Facility, with access permitted via use of a key fob system.
- Out-of-hours roving patrols;
- CCTV coverage of entire operation including remote viewing.

8.4 Weather Station

The site office at the neighbouring CRL Ridham Dock Wood Facility (permit ref: EPR/HB3337AG) is fitted with a digital weather station to provide advance warning of changes in the weather that could impact fire management on site, on any given day. This weather station will monitor and record the following:

- wind speed;
- wind direction;
- temperature; and
- rainfall.

8.5 Tackling and Containing Fire

The key actions to be followed in the event of a fire at the Facility are:

- Raise the alarm and contact KFRS;
- Commence firefighting using fire hoses at the Facility;
- Connect fire pumps to water supplies to allow for the operation of high-volume fire hoses;
- Start removing wood from identified risk stockpile areas to the designated quarantine area in order to minimise the spread of any fire;
- Put in place fire water management procedure.

These actions will help prevent the spread of fire through the affected stockpile and neighbouring stockpiles.

8.6 Proximity to Sensitive Receptors

The location of the Facility is shown on the Environmental Permit Boundary plan (Drawing 01) provided as Appendix A of this FPP. Sensitive receptors within 1km of the Site are shown on the Local Receptor Plan (Drawing 03), provided as **Appendix C** and Natural and Cultural Heritage (Drawing 04) provided as **Appendix D**. The sensitive receptors to the Facility are considered in the Environmental Risk Assessment (ERA) prepared as part of the EP application for the Facility.

The nearest local residential communities to the Facility are over 1km away. The closest local community is Iwade village located approximately 1.5km west of the Facility, the nearest in the prevailing wind direction is Minster at 4.5km, both are significantly outside the 0.5km area referred to in the FPP. There are local businesses operating on the Ridham Sea Terminals complex and adjoining areas that are within 1km of the Facility.

8.7 Access for Emergency Services

The Facility is accessed on its eastern boundary via Lockyer Road which will be the access point for fire services to the Facility. The security gate at the entrance to the docks is manned 24 hours a day. All wood storage stockpiles are accessible via minimum 10m access routes as shown on the Site Layout Plan at **Appendix B.** This plan also identifies the existence of:

- water storage tanks (strategically located at two positions at the Facility) capable of holding up to 450m^3 litres of water each which are automatically refilled from mains supply; and
- a fire hydrant located just off the north boundary of the Facility the fire suppression control point and to the rear of the RST main offices, each offering easy access to the emergency services and capable of supplying water for firefighting purposes at a rate of 1,000 Litres per minute. These hydrants are visually checked monthly by CRL's compliance team. Inspections, flow meter and pressure tests are carried out on these hydrants annually.

9. Managing Fire Water

9.1 Fire Water Management Procedure

For the purposes of this FPP, the largest stockpile at the Facility will be 2395.73m^3. All stockpiles/storage bunkers are constructed at least 6m away from one another.

Due to the advanced fire detection measures in place at the Facility, it is considered that the stockpiles can be viewed as separate piles within the wider stockpile. This is primarily due to the temperature detection strings which divide the stockpiles and the presence of staff at the Facility 24/7. Therefore, for the purposes of these calculations a stockpile (segment) of 20m*10*3m will be used which equates to 600m^3.

Based upon the FPP guidance firewater calculations, it is estimated that approximately 720,360 litres[1] of water would be required to put out a single segment of a stockpile on the Facility.

There will be 900,000 litres (900m^3) of water available on Site in two 450m^3 water tanks. Furthermore, a fire hydrant is in proximity to the Facility which can be used to provide water.

Fire water will be contained at the Facility by implementing the following methods:

- For the woodchip storage area, the surface will be impermeable purpose built with a sealed drainage system collecting in two tanks for off-site disposal. The edges will be kerbed preventing any run-off from leaving the boundary area.

[1] *600m^3 x 6.67 x 180 = 720,360litres*

To help manage the fire water further CRL will also make use of its fleet of vacuum tankers as required, which are based at its Ridham Dock Site approximately 1 mile south of the Facility. These would provide the ability to remove fire water from the Facility as it's produced to be either stored at the Ridham Dock Site in effluent storage tank(s) or transported for treatment at an appropriate treatment facility.
The water collection tanks are a combined total of 1,200m3, and are capable of holding the calculated amount of fire water required.

If localised bunding is required to contain or direct water within the impermeable area, temporary bunds can be constructed from soil/clay available on the wider docks site.

9.2 Controlled Burn

Any decision to implement a controlled burn of any stockpile at the Facility will ultimately be made by the KFRS in consultation with the Environment Agency.

9.3 Quarantine Area

The quarantine area is required to be 50% of the largest stockpile as defined in the FPP Guidance. The largest stockpile is considered to be 600m³ due to the temperature detection strings to be used, and therefore the quarantine area needs to be 300 m³. All stockpiles are constructed with at least a 6m separation between one another. There are two quarantine areas which are 630m^3 (12m x 17.5m x 3m) each. Therefore, there is 1260m^3 worth of quarantine area at the Facility. The locations of the quarantine areas are shown on Drawing 02 Site Layout Plan in Appendix B.

In the event of a fire, CRL may move the stockpile on fire from the open end to the quarantine area using the Facility's firefighting equipment to prevent spread. The process would be carried out under the command and control of KRFS. Based on CRL's experience it is possible to remove a partially or fully burning stockpile to quarantine within 48 hours.

10. Contingency Plan

10.1 Contingency Plan for Inputs and Offtake

In the event of a fire, the relevant part(s) of the Facility would be shut until it was extinguished or contained to such a point that is was safe to allow access to all or the unaffected parts of the Facility. At point of closure CRL would divert vehicles waiting to unload:

- waste wood to CRL's Ridham Dock Main Facility (for short term transfer):

The implementation of planned firefighting controls and the use of the quarantine areas mean that stockpiles can be accessed for the continued removal of processed woodchip material to meet contracted offtake commitments, subject always to the levels and direction of smoke on the site. CRL's commercial team manages the availability of processed wood through its extensive network of alternative suppliers and can source material in the short term to meet customer offtake demands pending being able to regain access to affected bunkers for storage purposes.

This would ensure continuous services but avoid putting further people or equipment at risk.
CRL is a member of two business community networks that cover all business within 1km of the Facility. In the event of an incident all members would be informed by email through these networks including details of what actions are being taken. The networks are Kemsley Field Business Park and Ridham Sea Terminals Neighbours Group.

After a fire is extinguished, the following actions would be taken to clear and decontaminate the Facility:

- Burnt waste to be removed from affected area for appropriate offsite;

- Damaged plant and or equipment removed and replaced, with appropriate disposal of unsalvageable items; and
- All burnt or soot-covered surfaces would be jet washed, and water dealt with in line with firewater management plan.

Steps to be taken before the Facility can become operational again will be dependent on the extent of any fire and will be agreed in consultation with our insurers on a case-by-case basis. The Environment Agency will be notified of all remediation action required on site.