Fire Risk Assessment Report

Crayford MRF, Century Wharf, Crayford Creek Rd, Dartford, DA1 4QG

KFS Report FRA_25451_01

N+P Crayford MRF Ltd

Partner for Progress

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Kiwa Fire Safety Compliance Ltd

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A					
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C					
D					
E					
F					

Amendment Record

DATE	PARAGRAPH	AMENDMENT

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1. Executive Summary

1.1 General

This report details the significant findings following the fire risk assessment of the N+P Crayford Material Recovery Facility (MRF), Century Wharf, Crayford Creek Rd, Crayford, Dartford, DA1 4QG.

A number of deficiencies were identified during the site inspection. Further action should be undertaken to address each deficiency. KFS are available for advice should further consultation be required.

The contents of this report and the recommendations stated throughout, are based on the observations made by the fire risk assessor at the time of the visit, taking account of all available information provided by the responsible person(s).

Where relevant information was not available for review, comments have been made in the report.

It is recommended that that the responsible persons make arrangements to ensure all significant findings within this report are actioned to assist in achieving regulatory compliance. The actions must be recorded and on completion, the fire risk assessment updated accordingly.

Departing responsible persons must share all relevant fire safety information with incoming responsible persons to ensure that all fire safety aspects of the premises are of paramount importance and remain uninterrupted.

1.2 Conclusion

The items contained in the action plan should be addressed as soon as practicable and the timetable for this should reflect the relative priority of the items.

In accordance with the Risk Analysis, the overall risk from fire in the premises is assessed as being MODERATE.

2. Background

2.1 Visit

A site visit was conducted on 10/12/2024 A non-destructive survey of the building was undertaken together with an inspection of relevant records.

During the visit, information was provided by Lirim Bicaku, Site Manager of N+P Crayford Limited.

This fire risk assessment was undertaken by Leigh Cotterill.

The following areas were inaccessible during the site assessment:

- Limited access was available to areas of the yard where bales and loose materials are stored to assess the condition of dividing fire resistance 'Legioblocks' separating waste stocks.
- Limited access was available to areas occupied by MRF equipment such as conveyors etc.
- No access was available to the switch room located adjacent to the main entrance to the plastic plant and mini MRF building

The area(s) listed above should be inspected and assessed at the earliest opportunity during maintenance periods and any significant risks identified mitigated by suitable means as soon as practicable.

2.2 Site Description

The site is accessed via a narrow lane leading under a railway bridge. The main car park for the site is in front of the office building and a portacabin office.

The main office building is two storey with one stair core. An emergency exit is provided via an external concrete stair at the other end of the building.

A single storey welfare facility contains food warming, rest areas and bag storage for staff on the site.

A single storey engineering building provides equipment and facilities for the maintenance of the site and repairing and maintenance of equipment.

The MRF contains picking cabins at mezzanine level for workers to manually pick elements of waste from the conveyors. These are accessed by walkways within the MRF.

External areas contain waste storage sheds with waste separated by type. Waste is separated by concrete push walls and concrete firebreaks.

External areas also contained baled and processed waste and a large yard area where plant operates.

2.3 Previous Fire Risk Assessment

The previous fire risk assessment was produced in 2021 by International Fire Consultants (IFC). Any recommendations that are ongoing or outstanding are encompassed as part of this report.

2.4 Relevant Legislation and Guidance Documents

This fire risk assessment satisfies the requirements of the Regulatory Reform (Fire Safety) Order 2005, as amended by the Fire Safety Act 2021.

Other legislation and guidance applicable to this fire risk assessment is listed below:

- Building Regulations 2010 (as amended) and associated Approved Documents,
- The Environmental Permitting (England and Wales) Regulations 2016 are the primary set of regulations that apply to waste sites. All regulated sites must produce a fire prevention plan.
- Section 5 of the Environment Act 1995 (EA 1995, Section 5) under which the Agency is required to exercise its pollution control powers for the purpose of preventing, minimising, remedying or mitigating the effects of pollution of the environment.

2.5 Type of Fire Risk Assessment

The scope of this fire risk assessment is in accordance with PAS 79-1:2020. The fire risk assessment required a non-destructive inspection of the accessible areas.

2.6 Applicability

This report is applicable only to the areas of the buildings/premises stated above, which include:

- Offices and welfare facilities,
- Training facility (now welfare),
- Kitchen facility and mess room,
- Mini-MRF & plastic plant building,
- Plastics input,
- Main MRF,
- Input hall,
- Product bunkers,
- External storage,
- Bale storage,
- Workshops,

- Store,
- Weighbridge office.

This fire risk assessment is prepared pursuant to the assessor's knowledge of the premises as disclosed to them by the occupier and following an inspection. The working of equipment not specifically checked by the assessor is outside their knowledge and control. The risk assessment only identifies those areas of risk apparent at the date of inspection in relation to the risks relating to fire.

This fire risk assessment is based on visual observation only, no verification of full compliance with relevant British Standards was carried out. No structural survey has been carried out as part of this fire risk assessment and fire compartmentation was based on visual inspection of only those areas made accessible to KFS.

This fire risk assessment is made without prejudice to any requirements made by Local Authority, Building Control or by the local Fire Authority.

This fire risk assessment should be reviewed following any structural changes to the building, any significant change to the nature of the occupancy or use of the building, following any occurrences of fire in the premises, and in any case by the recommended review date.

Responsibility for the on-going management of the premises and even, if necessary, the decision to allow the premises to be used for its present purpose, remains with the Responsible Person.

Liability for management procedures, for example evacuation management, maintenance of firefighting equipment, maintenance of alarms is not in any way adopted by the fire risk assessor because the ongoing management of the premises is not within the risk assessor's control.

2.7 Information on Which the Assessment Has Been Based

This fire risk assessment is based upon the following:

- a non-destructive physical survey of the premises,
- inspection of the relevant fire safety records and documents,
- additional information provided regarding building installation surveys previously carried out,
- discussion with key staff.

Documents provided by N+P, including:

- Site Emergency & Safety Plan,
- FPP (Fire Prevention Plan).

2.8 Table of Recommended Actions

Table 1 below lists the significant findings observed together with recommended actions.

Findings which are not deemed as significant, but which would make an improvement to some aspect of fire safety in the premises are noted as Best Practice and are shown in Table 2. Best Practice items are intended to be treated as recommendations for consideration and should not be construed as requirements; no priority rating is given to best practice items. The Responsible Person should consider the items and decide whether to implement them. Property protection and business continuity recommendations are listed as Best Practice.

The recommended actions in Table 1 should be completed as soon as practicable. However, the overall context of the risk should determine the actual completion of actions, e.g. low risk actions may take longer to complete than medium or high risk but may be easier to start first.

It is also possible that depending upon the scale, complexity and cost of remedial actions projected completion dates may not be strictly in order of risk-based priority as some low-risk actions may be simple to remedy and therefore be completed more quickly than other items. **Where high and medium risks cannot be dealt with within the recommended time frames, suitable justification should be provided including any risk reduction measures applied.**

A schedule of work including timescales should be devised by the Responsible Person using the priority ratings to inform the planning process. Responsibility for ensuring the completion of each action should also be allocated to an individual and a record of this kept.

Suggested completion for the identified significant risks could be:

- High within 1 month if reasonably practicable to do so. For capital works (such as the upgrade of an automatic fire detection system), a longer period may be required to reasonably rectify any deficiency. Where deficiencies can be easily rectified, such as the removal of wedges from fire doors, the action should be carried out with immediate effect. If a significant finding is observed that would constitute an immediate danger to life, then the Risk Assessor will inform the Responsible Person that an immediate action is required and potentially advise the Responsible Person to contact the governing authorities for assistance.
- Medium within 3 months if reasonably practicable to do so. Medium risks may not necessarily present any immediate danger to life or property and will normally involve time and assets to prepare and plan for the works to be conducted.
- Low within 6 months. Low risks may constitute improvements to existing control measures to enhance and improve the general fire safety management arrangements.

Table 1 – Significant findings

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
2017-1	The site has insufficient water supplies to be able to effectively fight a fire. This will affect the extent of the activities that the Local Authority Fire and Rescue Service can deliver when attending a fire and may present additional risk to firefighters. **2019 update** – it is understood that a capital project to install a new fixed water main has been started and is progressing through its approval stages. **2020 update** – The approval process is ongoing. **2021 update** – The installation of the site hydrant system has started. **2021 update** – The installation of the site hydrant system has been completed, however, the delay is advised to be with Thames Water connecting up the system to the network.	Liaise closely with the LAFRS and assist in the development of procedures for dealing with a fire on the site. Ensure any equipment or installations provided for the LAFRS are working fully. **2020 update** – Confirmation should be sought that the hydrant system within the site is in satisfactory working order and meets the flowrate and pressure expected. **2021 update** – Ensure the installation is completed as soon as practically possible. When the installation is complete, the system must be suitably maintained with appropriate records kept. **2024 update** – Ensure the installation is completed as soon as practically possible. When the installation is complete, the system must be suitably maintained with appropriate records kept.	High	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
2017-2	The picking line is sited at mezzanine level close to the ceiling. In the event of a fire staff may be in the expected heat and smoke layer, and their means of escape potentially impeded. **2019 update** – progress does not appear to have been made with this recommendation. Better management of obstructions on the means of escape will aid evacuation and can temporarily compensate for the active system recommendations made previously. **2020 update** – There were no obstructions to the means of escape routes on the mezzanine or ground floor areas. **2021 update** – It is understood that a capital expenditure project has been started and is progressing through its approval stages to provide additional fire suppression to key plant including the ballistic separators and trommels. **2024 update –** this has not yet been completed.	To ensure the means of escape from the mezzanine level remains viable in an escape situation, it is recommended to review the provision of high level automatically opening vents and automatic water-based fire suppression.	Medium	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
2021-4	Final exit doors fitted with more than one opening method. It was unclear if the mechanisms were working correctly as the door should open by operating the push bar only. **2024 update –** this has not yet been completed.	Repair the door mechanisms so that final exit doors with double lock mechanisms operate correctly by operating the push bar only. Alternatively, remove the additional twist to open locks from final exit doors to enable quick and easy egress from the buildings in an emergency. **2024 update –** this has not yet been completed.	Medium	 

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
01	The corrugated ceiling of the mezzanine within the picking area of the MRF is coated in spray foam insulation of an unknown type. It is advised that the fire risk of this was considered before installation, however, evidence of the product or specifications are unknown. Some spray foams are highly combustible and release large quantities of smoke. This would rapidly fill the picking cabins and enclosed areas and may make escape routes smoke logged making escape difficult and possibly conditions untenable.	Ensure that the type of spray foam is identified and the risk to occupants is assessed for the type of use to the ceiling as insulation.	High	 

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
02	Some electronic locks are provided to doors on means of escape within the office building. These are fitted with 'green box' manual overrides in the event of system malfunction, push to exit button malfunction or interface failure. The green boxes are not currently believed to be tested and maintained in accordance with BS7273-4:2015+A2:2023.	Ensure all green box manual overrides are user tested and serviced in accordance with BS7273-4:2015+A2:2023.	Medium	
03	Some portable items were tested in 2021 due 2022 and others carried a recent test label tested December 2023 due December 2024. Other items are new and have not yet been tested.	Ensure that all portable items are adequately tested and added to an inventory. All new items should be tested at the time of the next testing event and added to the inventory.	Medium	

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
				
04	Portable electrical fly killers are in use around the site with combustible items stored below them. There is case evidence of smouldering flies bouncing out of the units onto combustibles below.	Ensure that fly killer units are adequately monitored, regularly cleaned and the areas in the vicinity are free of combustibles.	Medium	

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
				
05	The testing of circuits appears to be up-to-date, however, no Electrical Installation Condition Report (EICR) was available for review and therefore it is unknown if the system is in a 'satisfactory' condition.	The fixed installation should be inspected and tested every 3 years as per British Standard BS 7671:2018/A1:2020 IET Wiring Regulations. The results of these tests should be recorded with remedial actions addressed within the time scales given.	Low	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
06	An electric vehicle charging point is provided on the car park. This is considered far enough away from the building (over 6 metres) to mean that the risk from fire is reduced to a tolerable level.	Ensure they are added to a maintenance programme, and that the equipment is maintained in line with the manufacturer's instructions.	Low	
07	The COSHH cupboard within the engineering workshop is not adequately signed. No signage is present in the area of the gas cylinder in the engineering workshop.	Ensure the COSHH cupboards across the site are appropriately signed to indicate that flammable liquids and gases are stored. It is also recommended that the entrance doors are appropriately signed for the benefit of the fire service and all other areas where flammable items are stored. Ensure that the area of the gas cylinder is appropriately signed in the engineering workshop.	Medium	

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
				
08	Exit fastenings are generally provided with appropriate signage giving their method of opening, however, 'Push Bar to Open' signage was not provided to the steel final exit doors within the engineering department.	Supply and fit 'Push Bar to Open' signage to doors within engineering and any other push bar doors where required.		

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
09	Some high dust levels were observed to elements of structure.	Ensure dust to elements of structure and are targeted during deep cleans.	Medium	
10	Some high dust levels were observed to emergency lighting fittings.	Ensure dust to emergency lighting are targeted during deep cleans. Emergency lighting should be inspected during user tests and also during escape route inspections.	Medium	

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
				
11	It is advised that primary lighting and emergency lighting is also to a good standard in external areas, however, this could not be verified.	Ensure emergency lighting is to a good standard to external areas and in line with BS5266.	Low	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
12	No records relating to the testing and maintenance of the emergency lighting system were seen.	Ensure monthly testing of the emergency lighting system is undertaken and recorded in accordance with BS5266. Ensure regular maintenance of the emergency lighting system is undertaken and recorded.	Medium	n/a
13	N+P should consider the evacuation of visitors who may be delayed during an evacuation and develop appropriate procedures.	The following measures should be considered: • General Emergency Evacuation Plans, • Liaison with visitors via e-mail and ask if they have any special considerations for their visit.	Low	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
14	Escape routes were obviously well managed and clean, and they are subject to regular recorded inspections and daily site logs were provided which detail 'pathways around and between waste storage areas are swept and clear' however, there is no mention of the office building, the engineering, welfare areas and the internal waste processing areas.	It is suggested that either a separate form is developed, or these are added to the daily logs.	Low	n/a
15	Exit fastenings and door closers were obviously being completed and they are subject to regular recorded inspections. Daily site logs were provided. however, there is no mention of the exit fastenings and final exits in the office building, the engineering, welfare areas and the internal waste processing areas.	It is suggested that either a separate form is developed, or these are added to the daily logs. Ensure that regular recorded inspections carried out by suitably trained staff.	Low	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
16	No dedicated fire policy was seen.	If not already available to outline the organisation's commitments, it is recommended that a suitable fire safety policy is developed and implemented as soon as possible.	Low	n/a
17	The Helios system daily check sheets were provided and reviewed; however, faults were noted on the Helios panel from the 5th to the 10th of December.	Ensure faults to the suppression system and control panel are returned to fault free conditions as soon as possible.	Low	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
18	Servicing records were not available for the Helios system or any other thermal imaging detection systems.	Ensure all servicing is completed in line with manufacturer requirements for the Helios system and all other thermal imaging and detection systems.	Medium	n/a
19	No records relating to the user inspections of the portable firefighting equipment were seen.	Ensure user inspections of the portable firefighting equipment is undertaken and recorded in line with BS5306.	Medium	n/a

FINDING NUMBER	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION METHOD	PRIORITY	PHOTOS
20	No maintenance records were seen for the BS5839 fire alarm system.	Ensure regular servicing and maintenance of the fire alarm system is undertaken and recorded in line with BS5839.	Medium	n/a
21	Plans are available for the fire service; however, they do not appear to be fully comprehensive. Plans should be updated to be fully comprehensive to list all hazards on site (including asbestos) for firefighters.	Plans should detail all isolation points (including EV charging points). It is recommended these are provided upon arrival at the site and also held at the weighbridge. All hazards on site including marked-up plans of the site and risks to firefighting (such as asbestos) should also be considered.	Medium	n/a

Table 2 – Best practice findings

	FINDING DESCRIPTION	RECOMMENDED RISK REDUCTION MEASURE
n/a	n/a	n/a

3. Premises Information

3.1 Description of the premises

Table 3 – Description

Situation	A material recovery facility (MRF) located in Crayford, East London. The site is accessed from Crayford Creek Road. The site is towards the rear of an industrial site which is adjacent to railway lines, major arterial roads, waterways (River Cray) and populated areas.
Number of storeys	Mini and main material recovery facilities (MRFs) : Single storey with maintenance catwalks and picking stations, control room and baler at various mezzanine levels. Office building and welfare cabins: 2 storeys. Kitchen facility, mess room and workshops: single storey.
Height of the premises and depth of any basement	The largest MRF building is approximately 15m high. There are no areas on the site below ground level.
Approximate floorplate size (m^2)	The approximate size for the largest building is 3,500m^2.
Construction of the building (method and materials)	Main MRF and input hall, mini MRF and storage shed: steel portal building with block sub structure, sheet clad walls & roof, internal concrete "push walls" to the tipping hall. External areas have concrete push walls subdividing waste by type and quantity. Office and workshops: Brick built. All other buildings: Portacabin type.
Occupant details	Waste site operatives, office staff, daily delivery/collection drivers, occasional contractors and visitors.
Any neighbouring properties, and do they introduce risk?	The site has neighbouring occupied premises on three sides. It is not believed that additional risk is introduced by neighbouring properties.
Neighbouring property fire risk assessment made available?	Not available. These uses are totally separate from the N+P Crayford site.
Operating hours	The site is open 24hrs per day Monday to Sunday. There are two shift rotations in the plant: 07:00-19:00, 19:00-07:00. Office based support staff are generally 09:00-17:00. Security personnel are provided overnight.
Nature of business	Waste sorting, recycling and management.
General contents	Significant quantities of paper, cardboard, aluminium and plastic waste. Equipment and machinery used in the management of the waste.

Process risk/s	Management of the waste streams involving their delivery, receipt, movement, sorting, containment and storage.
Fire growth rate (BS9999:2017)	3 - fast

3.2 Occupancy

Table 4 – Occupancy

Number of occupants	Employees	During each shift there are approximately 75 employees on site. (N.B. This has reduced since the last FRA due to increased mechanisation of processes).
	Visitors	Occasional. Maximum 5 typically.
	Persons employed by others	Minimal - daily delivery drivers and contractors.
Occupancy characteristic (BS9999:2017)	Employees	A – awake and familiar with the building
	Visitors	B – awake and unfamiliar with the building
	Persons employed by others	B – awake and unfamiliar with the building
People with disabilities	Mobility, sight, hearing or other impairment	None advised at the time of the FRA.
Highest risk profile (BS9999:2017)	A3	

3.3 Management Responsibilities

The Responsible Person is N+P Crayford MRF Ltd.

The person(s) with day-to-day overall responsibility for fire safety matters in the premises, the local responsible person, is Lirim Bicaku (Plant Manager).

Others with specific responsibilities for fire safety matters are Tom Bastow, Compliance and Systems Manager.

A suitable number of fire wardens are appointed and cover each shift and area of the site. Due to the nature of the operations on site there are also two dedicated private fire appliances to utilise in the event that the autonomous suppression systems (water cannon) are not successful in extinguishing a fire. This is considered suitable.

The co-ordination of fire precautions was found to be suitable, regular checks and ppm systems are in place for the fire safety provisions.

Suitable and sufficient fire risk information is provided to relevant persons. This is suitable as staff have a comprehensive fire training programme along with specialist fire marshals and those with specialist firefighting duties.

A fire emergency plan was provided. The content appears to be fully comprehensive for the site operations.

Arrangements with the emergency services are unsuitable. The arrangements include:

- Familiarisation visits are carried out,
- Plans of the site and hazards are available (however, they are not fully comprehensive).

Plans should be updated to be fully comprehensive to list all hazards on site (including asbestos) for firefighters. Plans should also detail all isolation points (including EV charging points). It is recommended these are provided upon arrival at the site and also held at the weighbridge. See findings 06 and 21.

3.4 People at Risk

Relevant people at risk from a fire in these premises are:

1. Employees,

2. Delivery/collection drivers,

3. Contractors working at the premises,

4. Visitors.

3.5 Incident History

Fire history:

Table 5 – Details of incident history

INCIDENT	DATE	LEARNING POINT(S)
A number of minor lithium battery fires have occurred in the last calendar year. All have been dealt with by staff, no emergency service was required	Various 2024	None provided by site.

4. Fire Prevention

4.1 Ignition Sources

The ignition sources present in the premises are detailed in the table below. A description of each ignition source is made, together with commentary and assessment of the ignition source and the perceived risk to relevant persons. Commentary is also provided on any test, inspection, and maintenance (TIM) of the ignition source where this is relevant.

Table 6 – Ignition sources and relevant TIM

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Portable electrical	There are electrical appliances in use around the site. Where seen, electrical appliances appeared to be in good condition, however, the date of test appeared to vary. Some portable items were tested in 2021 due 2022 and others carried a recent test label tested December 2023 due December 2024. Portable electrical fly killers are in use around the site with combustible items stored below them. There is case evidence of smouldering flies bouncing out of the units onto combustibles below.	Unsuitable. Ensure that all portable items are adequately tested and added to an inventory. All new items should be tested at the time of the next testing event and added to the inventory. Ensure that fly killer units are adequately monitored, regularly cleaned and the areas in the vicinity are free of combustibles.	03, 04
Electrical installation	The testing of circuits appears to be up-to-date, however, no Electrical Installation Condition Report (EICR) was available for review and therefore it is unknown if the system is in a 'satisfactory' condition.	Unsuitable. The fixed installation should be inspected and tested every 3 years as per British Standard BS 7671:2018/A1:2020 IET Wiring Regulations. The results of these tests should be recorded with remedial actions addressed within the time scales given.	05

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
		Any C1 and C2 issues highlighted within the EICR should be resolved so that the system can be brought up to a satisfactory condition. Clear records should be kept to show that this work has been undertaken.	
Electric vehicles and charging points	An electric vehicle charging point is provided on the car park. This is considered far enough away from the building (over 6 metres) to mean that the risk from fire is reduced to a tolerable level.	Unsuitable. Ensure they are added to a maintenance programme, and that the equipment is maintained in line with the manufacturer's instructions.	06
Electric mobility scooters, electric bikes and scooters	Shopmobility scooters, electric bikes, and electric scooters are banned from the site, and this is enforced by regular housekeeping checks.	Suitable, no further action.	n/a
Electrical renewable and green energy sources	There were no renewable energy sources noted on site at the time of assessment.	Suitable, no further action.	n/a
Lightning installation	It was confirmed that no lightning protection systems are installed to any of the buildings. Previous discussions on previous FRA visits have concluded that the building is low lying and lightning protection is not required.	Suitable, no further action.	n/a

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Naked flames	Naked flames are not permitted on site. Hot work activity cannot be undertaken without an appropriate permit. A procedure is in place which includes a fire watch.	Suitable, no further action.	n/a
Arson	The site has substantial boundary fencing to its perimeter and benefits from 24 hours a day shift pattern and weekend and night shift security presence. Additionally, the site is covered by CCTV. No history of fire setting was reported or appeared evident in the building vicinity.	Suitable, no further action.	n/a
Smoking	Smoking is controlled with the provision of dedicated smoking areas. The smoking areas are kept clean and bins are provided to dispose of cigarettes and other smokers' materials. There was no indication of illicit smoking.	Suitable, no further action.	n/a
Any processes that could cause ignition	Waste trapped in moving pieces of machinery, i.e. mobile plant hot exhausts, conveyors and machinery etc. has the potential to ignite. Mobile plant appeared to be adequately maintained and free from loose waste. Periodic thermographic testing of main equipment is carried out to ensure abnormal heating is not	Suitable, no further action.	n/a

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	occurring to electrical equipment, conveyors and bearings. There is a designated area for welding in the engineering section. No welding was seen on the day of the assessment but there is a suitable hot works permit procedure and permit system. Examples of which were shown at the time of the assessment. These procedures encompass a fire watch as part of the process.		
Heating appliances and systems	There are no environmental space heating systems used on the site. Fixed electrical wall heaters are provided in the office buildings and canteen. Infra-red heaters at high level are present within the engineering workshop.	Suitable, no further action.	n/a
Spontaneous combustion	Self-heating and contaminants within waste can cause spontaneous combustion. There is no direct control over the quality of incoming loads and therefore self-heating and contaminants within waste cannot be disregarded leading to the potential for self-heating. However, incoming and stored waste are periodically checked for evidence of heating using thermal imaging cameras. Additionally, the Helios fire suppression system detects temperature irregularities within the incoming waste areas. In addition, the waste is rapidly processed and is not allowed to stand upon delivery. See also 'Flammable and Explosive Dusts' section.	Suitable, no further action.	n/a

4.2 Fuel Sources

The fuel sources present in the premises are detailed in the table below. A description of each fuel source is made, together with commentary and assessment of the fuel source and the perceived risk to relevant persons. Commentary is also provided on any test, inspection, and maintenance (TIM) of the fuel source where this is relevant.

Table 7 – Fuel sources and TIM

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Paper and cardboard	Paper and cardboard are stored on the site. Recent site modifications to enhance the Environment Agency (EA), Fire Prevention Plan (FPP) have introduced new storage bays which are provided with suitable fire rated concrete walls. Additionally combustible materials are separated by the storage of non-combustible materials.	Suitable, no further action.	n/a
Waste materials	The site deals with approximately 1000 tonnes of waste per day, processes it and readies it for despatch following processing. The waste is from Local Authorities and is accepted as part of established contracts from local transfer stations. Strict waste acceptance procedures implemented on site ensure only permitted wastes are accepted. Unauthorised wastes are quarantined, and incompatible wastes are separated. All wastes arriving onsite are checked in accordance with the waste acceptance procedure to ensure no materials of unknown composition are accepted at the site.	Unsuitable. Ensure dust to elements of structure and emergency lighting are targeted during deep cleans. Emergency lighting should be inspected during user tests and also during escape route inspections.	09, 10

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	Aerosols and batteries are separated from waste stream prior to the baling process via manual picking in picking cabins. They are stored within the dedicated quarantine area externally. Clearing of fallen waste was an ongoing issue where waste within the process areas spills over conveyors and builds up into large piles in inaccessible areas and voids, however, the site appeared to be relatively clean and tidy at the time of the 2024 visit. Cleans are advised to be undertaken at the start of each shift and full deep cleans at weekends. Some high dust levels were observed to elements of structure and emergency lighting.		
Wood	There was a limited amount of wood present in line with what would be expected in a building of this type and within defined waste streams.	Suitable, no further action.	n/a
Solid fuels e.g., biomass	No solid fuels are stored or used within the premises.	Suitable, no further action.	n/a
Plastics	Plastics are present within waste streams in high quantities. Recent site modifications to enhance the Environment Agency (EA), Fire Prevention Plan (FPP) have introduced new storage bays and are provided with suitable concrete walls as fire breaks. Additionally combustible materials are separated by the storage of non-combustible materials.	Suitable, no further action.	n/a

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	Baled waste is not kept for an excessive amount of time. Processed waste and baled waste are despatched at the same rate as waste is received to ensure adequate space for processing and to ensure that permitted quantities are not exceeded.		
General product stock	Quantities of products are stored within the site such as rollers and other mainly inert items. They appeared to be managed appropriately.	Suitable, no further action.	n/a
Housekeeping	It is acknowledged that waste sites are prone to waste being scattered from conveyors and from plant and loading shovels, however, the yard areas, areas adjacent to conveyors and the ancillary areas were all well managed and kept tidy. Cleaning stations are around the site and dedicated cleaning staff are provided. No waste was noted to be stuck to mobile plant wheels / plant.	Suitable, no further action.	n/a
Furniture and furnishings	Furniture and furnishings within the building appeared to be of recent purchase, in good condition, and appeared compliant with the current guidance.	Suitable, no further action.	n/a
Flammable liquids	Limited flammable liquids were seen. The quantities were controlled and stored appropriately. COSHH items and items within the engineering department, however, the cupboard was not adequately signed.	Unsuitable. Ensure the COSHH cupboards across the site are appropriately signed to indicate that flammable liquids and gases are stored. It is also recommended that the entrance doors are appropriately signed for the benefit of the fire	07

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	Diesel is stored in double-skinned self-bunded containers (10,000 litres total) to the rear of the compressor room and on the access road / forecourt. A DSEAR assessment has been carried out and the recommendations have been implemented.	service and all other areas where flammable items are stored.	
Flammable gases and natural gas	Cylinder storage cages are provided. They are appropriately signed and locked. They are separated by whether the cylinders are empty or full. The cages have been moved away from the waste storage area and are now in a suitable well-ventilated location away from fuel sources and areas in use by staff. The number of cylinders was proportionate to the storage arrangements. A DSEAR assessment has been carried out and the recommendations have been implemented. No acetylene or oxygen (oxidant) is stored for welding, this has been replaced by argon/carbon dioxide based welding gas. No signage is present in the area of the gas cylinder in the engineering workshop.	Unsuitable. Ensure that the area of the gas cylinder is appropriately signed in the engineering workshop. It is also recommended that the entrance doors are appropriately signed for the benefit of the fire service and all other areas where flammable items are stored.	07
Flammable and explosive dusts	A consequence of processing waste is that potentially flammable/explosive dusts and atmospheres are prevalent. A robust cleaning regime has been introduced and the plant was generally clean. Some dust was present from operations, however, dust levels present are not considered to present a risk.	Suitable, no further action.	n/a

SOURCE	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	Periodic deep cleaning is carried out. The level of control was considered to maintain a suitably low risk. A DSEAR assessment has been carried out and the recommendations have been implemented.		

4.3 Fire Prevention Management

Key aspects of fire prevention implementation and management are detailed in the table below.

Table 8 – Key aspects of fire prevention

PREVENTION METHOD	OBSERVATION
Effective prevention policy in place	The N+P document titled Reference: N+P-OPS-FPP-PRO-001 Version 1.0 Dated 17/10/2023 is a highly detailed document detailing the fire prevention plan for the site in line with the Environment Agency (EA) guidance for England. The fire policy / prevention policy appears to fall under the document NPG-HSE-001 which is a Health, Safety and Wellbeing Policy. However, no dedicated fire policy was seen. If not already available to outline the organisation's commitments, it is recommended that a suitable fire safety policy is developed and implemented as soon as possible (see finding 16).
Principles of prevention effectively applied	The procedures provided in the site Fire Safety documents and the fire emergency plan appear to be fully implemented. It was clear from discussions on site that fire safety is paramount in the work delivered by the employees in the premises.
Adequate training, instruction and information given to relevant people	Training in fire prevention is provided to all site operatives at induction and then periodically thereafter, samples of training records were shown to demonstrate that this is up to date and fully comprehensive. Fire wardens receive further training in fire evacuation, a comprehensive list was shown for all fire wardens. It is advised that sufficient fire wardens are provided on each shift and to cover periods of illness and annual leave etc. Further staff are trained in firefighting and practical extinguisher training and firefighting using the two fire tenders on site in case the automatic firefighting water cannon and the Helios system are not successful. Guidance is provided in terms of what types of fires to tackle or to leave for the Fire and Rescue Service.

5. Fire Safety Protection Measures

5.1 Active and Passive Systems – Suitability and Operability

The table below provides commentary, where relevant, on the provision of the active and passive systems within the premises, i.e. whether the systems provide a suitable degree of protection when considering the risk. It also provides commentary on the operability of the systems, i.e. whether the system is tested, inspected, and maintained correctly.

Table 9 – Active and passive fire safety systems

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Fire detection and warning provision	Automatic fire alarm and detection systems are installed throughout the buildings. The precise classification could not be confirmed. Point fire detection is provided in buildings across the site. In addition, flame detection has been installed and video detection linked to the Helios system. Manual call points are positioned adjacent to fire exit routes and throughout the site including at picking cabin exits in the upper levels of the process buildings. The fire alarm panels located around the site are now linked to the main panel in the weighbridge office. Thermal imaging CCTV cameras are also provided and are linked to suppression canon serving the external storage bunkers. A fault was present on the panel early in the 2024 visit, however, this was rapidly fixed and the device replaced.	Suitable, no further action.	20

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	A zone chart is located adjacent to the main fire alarm panel. The Helios system utilises early detection thermal imaging cameras, which constantly scan the area for temperature irregularities in real time. The system is designed to provide full coverage of RSG1/Input Hall and RSG2 including the comingled stockpiles. The Helios system went through a vigorous commissioning period. This involved the system learning the sites normal operating temperatures and setting bespoke warning temperatures. The initial alert trigger is set at 150°C, the control panel will indicate that there is a heat spot. A secondary alarm system where the Helios system is primed for use is triggered at 300°C. The site is operational 24/7, therefore suitably trained site operatives will investigate the hotspot immediately and determine the best course of action. If for any reason the initial alarm is ignored, and/or if there is instantaneous ignition such as a cylinder or battery ignites immediately with a temperature higher than 400° C at 10cm size, the suppression system will automatically initiate following a 30 second warning via visual and audible alarms. There are also two joysticks that allow the fire and rescue service to remotely control the water cannons.		

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Fire detection and warning operability	Weekly tests are carried out and recorded on the online portal and a chart located in the main offices highlights manual call point locations that have been tested. No maintenance records were seen for the BS5839 fire alarm system.	Unsuitable. Ensure regular servicing and maintenance of the fire alarm system is undertaken and recorded in line with BS5839.	
Portable firefighting equipment – provision	Portable fire extinguishers are provided throughout the site relevant to the fire load. Additionally, two fire tenders are available on site. These are maintained and training in their operation has been provided to staff. It was advised that all mobile plant is fitted with fire extinguishers and automatic extinguisher systems.	Suitable, no further action.	19
Portable firefighting equipment – operability	The date of the most recent maintenance was 10/2024 by Trafalgar Fire Prevention. No records relating to the user inspections of the portable firefighting equipment were seen.	Unsuitable. Ensure user inspections of the portable firefighting equipment is undertaken and recorded in line with BS5306.	
Fire mains and hydrants – provision	The site has no hydrant and insufficient water supplies to enable effective firefighting. However, the installation of the site hydrant system has started. It is advised that the hydrant main is installed on site, however, the hold-up is with Thames Water to connect the system.	Unsuitable. The project to install the hydrants and ring main should be completed as soon as possible	2017-1

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Fire mains and hydrants – operability	n/a	n/a	
Firefighting lifts – provision	No firefighting lift is provided, and one is not required.	Suitable, no further action.	n/a
Firefighting lifts – operability	n/a	n/a	
Automatic fire suppression system – provision	A fixed water/foam monitor system provided by Helios is provided. The suppression system detects temperature irregularities with infrared thermal imaging cameras that scan the incoming waste storage and input pre-sort areas. The valve sets, pumps and control panels are located behind the storage area in a bespoke storage container. At the time of the assessment the suppression system control panel indicated fault warnings. It was discussed that new equipment is required to rectify the fault and is work in progress. The water is provided from a water storage tank outside the container. At the time of inspection, the tank digital water level gauge showed 97% full. There are no further automatic fire suppression systems across the	Generally suitable. To ensure the means of escape from the mezzanine level remains viable in an escape situation, it is recommended to review the provision of high level automatically opening vents and automatic water-based fire suppression. Ensure faults to the suppression system and control panel are returned to fault free conditions as soon as possible.	2017-2, 17, 18

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	remainder of the site including the mini MRF, main MRF and key plant.		
Automatic fire suppression system – operability	The Helios system daily check sheets were provided and reviewed, however, faults were noted on the Helios panel from the 5th to the 10th of December. Servicing records were not available for the Helios system or any other thermal imaging detection systems.	Unsuitable. Ensure the faults to the Helios system are rectified and that the system is serviced in line with manufacturer guidance.	
Smoke control system – provision	There are no automatically opening vents (AOV) provided to any of the waste process or storage buildings. Not required in the office or workshop buildings.	Unsuitable. Consideration should be given to the installation of automatic opening devices (AOV) in specific areas of the mini and main MRF areas. This will help to control any smoke and provide additional levels of safety to occupants and benefit to firefighting activities. This in turn will assist in the extinguishment of fire by the Fire and Rescue Service and subsequent business recovery operations.	2017-2
Smoke control system – operability	n/a	n/a	
Fire curtains – provision	No fire curtain systems are provided and are not required.	Suitable, no further action.	n/a
Fire curtains – operability	n/a	n/a	

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Fire dampers – provision	No fire dampers were noted within the premises during this non-invasive assessment.	Suitable, no further action.	n/a
Fire dampers – operability	n/a	n/a	
Emergency lighting – provision	The emergency lighting systems appear to comprise of BS 5266 compliant fittings and are provided throughout the premises. This includes areas where additional lighting would be required in an emergency. It is advised that primary lighting and emergency lighting is also to a good standard in external areas, however, this could not be verified.	Unsuitable. Ensure emergency lighting is to a good standard to external areas and in line with BS5266.	10, 11, 12
Emergency lighting – operability	No records relating to the testing and maintenance of the emergency lighting system were seen. Some high dust levels were observed to emergency lighting.	Unsuitable. Ensure monthly testing of the emergency lighting system is undertaken and recorded in accordance with BS5266. Ensure regular maintenance of the emergency lighting system is undertaken and recorded. Emergency lighting should be inspected during user tests and also during escape route inspections.	
Way finding systems – provision	These are not required in these premises.	Suitable, no further action.	n/a

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Way finding systems – operability	n/a	n/a	
Fire safety signs – provision	Fire safety information is provided including the evacuation policy and 'no smoking' signs.	Suitable, no further action.	n/a
Fire safety signs – operability	These are advised to be checked during housekeeping checks.	Suitable, no further action.	
Fire resisting construction – provision	Fire resisting construction is generally not required in the site, except for areas that contain special fire hazards. Walls used for waste segregation on site are constructed from 80cm thick concrete Legioblocks (approximate fire resistance of over 4 hours).	Suitable, no further action.	n/a
Fire resisting construction – operability	Fire resisting construction should be regularly surveyed to ensure that it remains effective. It is considered suitable that this issue is picked up during the fire risk assessment process. Where not ordinarily seen, such as the compartmentation between bunkers and bays, these should be inspected during routine maintenance periods and any penetrations fire stopped.	Suitable, no further action.	

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
External wall systems	Plastic plant, mini MRF and main MRF buildings are steel portal type with single sheet clad walls & roof. Similarly, the incoming halls and storage shed have the addition of internal concrete "push walls". The exterior walls of the welfare and canteen are of portacabin type construction, and the main office and workshops are brick built. No external wall systems have been retrofitted.	Suitable, no further action.	
Cavity barriers in internal spaces – provision	The presence of cavity barriers could not be determined during this non-intrusive survey of the building.	Suitable, no further action.	n/a
Fire doors – provision	Fire resisting doors are provided in the office building protecting the means of escape stair and corridors in the office building. Generally, fire doors appeared in good order, self-closing where required and provided with correct signage.	Suitable, no further action.	n/a
Fire doors – operability	Doors are checked regularly by staff and repairs are generated as a result to address any issues.	Suitable, no further action.	n/a
Other legislative requirements	Environmental and waste legislation applies but not affecting life safety.	Suitable. No further action.	n/a

5.2 Means of Escape – General

The table below provides commentary, where relevant, on the provision of the general means of escape provisions within the premises, i.e. whether the provision provides a suitable means of escape when considering the risk. It also provides commentary on the operability of the provision, i.e. whether it is tested, inspected, and maintained correctly.

Table 10 – Means of escape characteristics

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Fire safety instructions displayed and provided	Fire action notices are provided throughout the building.	Suitable, no further action.	n/a
Premises information box (PIB) – provision	A premises information box is not provided or required.	Suitable, no further action.	n/a
Premises information box (PIB) – operability	n/a	n/a	
Number of exit routes	The location and number of final exits from the perimeter of all buildings are evenly distributed. Where mezzanine floors are provided, the stairs terminate reasonably close to a final exit.	Suitable, no further action.	n/a
Travel distances	Travel distances are within permitted limits allowed where there are alternative and single direction travel routes.	Suitable, no further action.	n/a

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Exit route capacity	Travel distances are derived from Building Regulations Part B table 2. Purpose group – Industrial: High hazard - 25m where there are two directions of travel and 12m where there is only one direction. Normal hazard - 45m where there are two directions of travel and 25m where there is only one direction. The maintenance areas within the upper levels of the main process hall where limited numbers of occupants will be present have travel distances that exceed the high hazard guidelines. However, these extended travel distances are considered to be suitable as personnel access is limited, the provision of the fire detection systems and the building height where smoke will form at high level resulting in the smoke layer taking longer to descend thus allowing more time to evacuate. The provision of portable firefighting extinguishers will also benefit occupants tackling small fires and evacuating the building. Purpose group – Office: 45m where there are two directions of travel and 18m where there is only one direction. Travel distances in the welfare and office buildings are within permitted limits.	Suitable, no further action.	
Escape stairs – internal	Escape stairs are provided within the office buildings, from the picking rooms on the mezzanine floors, and from high level waste processing areas.	Suitable, no further action.	n/a

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Escape stairs – external	Escape stairs externally (including steps) were noted to be in good condition.	Suitable, no further action.	n/a
Refuge areas	No refuge areas are provided and none are required.	Suitable, no further action.	n/a
Communication systems – provision	No refuge areas / communication systems are provided and none are required.	n/a	n/a
Communication systems – operability	n/a	n/a	
Evacuation lifts – provision	No evacuation lift is provided and one is not required.	Suitable, no further action.	n/a
Evacuation lifts – operability	n/a	n/a	
Protected routes	No specific protected routes are provided or required within the Plastic Plant, Main MRF or workshops. The means of escape from the main office building are protected by self-closing fire doors.	Suitable, no further action.	n/a
External escape routes	External routes are flat and unobstructed.	Suitable, no further action.	n/a
Escape routes via adjoining premises	There are no escape routes via adjoining premises.	Suitable, no further action.	n/a
Exit fastenings	Generally, exit fastenings were appropriate and fitted with either simple lever, push pad or push bar type	Unsuitable.	2021-4, 02

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
	devices. However final exit doors of the workshop and weighbridge office are provided with push bar to open devices and additional twist to open security locks. It was unclear if the mechanisms were working correctly as the door should open by operating the push bar only. **2024 update –** this has not yet been completed. Some electronic locks are provided to doors on means of escape within the office building. These are fitted with 'green box' manual overrides in the event of system malfunction, push to exit button malfunction or interface failure. The green boxes are not currently believed to be tested and maintained in accordance with BS7273-4:2015+A2:2023.	Final exit doors must be easily openable with single action devices to enable quick and easy travel through and egress from buildings in an emergency. Final exit doors must only have one locking mechanism to operate. **2024 update –** this has not yet been completed. Ensure all green box manual overrides are user tested and serviced in accordance with BS7273-4:2015+A2:2023.	
Escape route signage - provision	Fire exit signage is provided throughout the premises clearly indicating the means of escape. Generally, directional fire exit signage is provided throughout the site and all buildings clearly indicating the means of escape. Additional escape signage has been fitted since the last FRA. Escape routes are also familiar to occupants and all visitors are accompanied.	Suitable, no further action.	n/a
Escape route signage - operability	Signage is checked during housekeeping checks.	Suitable, no further action.	
Obstructions to escape routes	The escape routes were kept clear with no issues noted at the time of assessment.	Suitable, no further action.	n/a

ITEM	DESCRIPTION	COMMENTS/ ASSESSMENTS	RELATED FINDING
Instruction signs for fastenings	Exit fastenings are generally provided with appropriate signage giving their method of opening, however, 'Push Bar to Open' signage was not provided to the steel final exit doors within the engineering department.	Unsuitable. Supply and fit 'Push Bar to Open' signage to doors within engineering and any other push bar doors where required.	08
Assembly point	The fire assembly points are located in the office car park and in the northwest corner of the site. Both are sited where persons will not be at risk from oncoming fire appliances.	Suitable, no further action.	n/a
Other legislative requirements	The corrugated ceiling of the mezzanine within the picking area of the MRF is coated in spray foam insulation of an unknown type. It is advised that the fire risk of this was considered before installation, however, evidence of the product or specifications are unknown. Some spray foams are highly combustible and release large quantities of smoke. This would rapidly fill the picking cabins and enclosed areas and may make escape routes smoke logged making escape difficult and possibly conditions untenable.	Unsuitable. Ensure that the type of spray foam is identified and the risk to occupants is assessed for the type of use to the ceiling as insulation.	01

5.3 Means of Escape – People Whose Evacuation May Be Delayed

The premises does not currently have any people with reduced mobility located within them. If this situation changes a Personal Emergency Evacuation Plan (PEEP) should be developed and the emergency procedures updated to reflect this.

There were no vulnerable members of staff identified at the time of assessment. In the event of a member of the public being present who is considered to be vulnerable, adequate arrangements are required to be implemented to assist the person in the event of an emergency evacuation.

N+P should consider the evacuation of visitors who may be delayed during an evacuation and develop appropriate procedures. The following measures should be considered:

- General Emergency Evacuation Plans;
- Liaison with visitors via e-mail and ask if they have any special considerations for their visit (see recommendation 13).

5.4 Means of Escape – Lone Workers

There is potential for lone working at the site, where an individual may visit an area that is not normally occupied. However, the risk to the individual is considered low. Regular contact is made, CCTV is in operation and a risk assessment for lone working is in place and updated as necessary.

5.5 Means of Escape Arrangements – Young Persons Employed in the Premises

Currently, there are no young persons employed on the site. If young persons are employed in the future a procedure should be developed to ensure they remain safe if a fire occurs.

5.6 Evacuation Strategy

The fire evacuation strategy for the premises is to simultaneously evacuate. There is an effective evacuation strategy in place which includes the procedures to be followed if a fire is discovered, what to do if the alarm sounds, how to contact the fire and rescue service and the assembly point location. The evacuation strategy is considered suitable for the type of site.

5.7 Measures Provided for Firefighters

Currently, the measures provided for fire fighters, when attending a fire incident, are considered unsuitable.

For example, the nearest public hydrant is located approximately 0.5 miles from the site down an access lane.

However, a hydrant and ring main is currently being installed (see recommendation 2017-1).

Additionally, a 'grab bag' should be developed stating all hazards on site including marked-up plans of the site and risks to firefighting (including asbestos) and all shut off locations and EV charging points (see finding 21).

The measures provided for firefighters, when attending a fire incident include:
1. Adequate perimeter access and entry points into the building,
2. Premises information containing site plans, site keyholder contact details and information on process hazards.

5.8 Policies, Procedures, Documents and Records

The relevant fire safety documents and records are detailed in the table below. Where any inadequacy is noted, reference is given to the applicable Recommendation number.

Table 11 – Recorded information

DOCUMENT / RECORD	COMMENTS/ ASSESSMENTS	RELATED RECOMMENDATION
Fire safety policy	Unsuitable. This appears to fall under the document NPG-HSE-001 which is a Health, Safety and Wellbeing Policy. No dedicated fire policy was seen. If not already available to outline the organisation's commitments, it is recommended that a suitable fire safety policy is developed and implemented as soon as possible.	16
Fire safety management plan/documented arrangements	Suitable. No further action. This is incorporated within the N+P document titled Unit Emergency Plan (UEP) Reference: N+P-SHEQ-SUP-PR-030, Version 1.0, Dated 25/11/2022. Also NP-HSEQ-CRF-SEP-204, Version 1.1, Dated 29/08/2024 deals with fire safety management within the administrative building.	n/a
Fire risk assessment recorded	Suitable. No further action. Fire risk assessments are recorded in a central location and include the name of the individual and the company producing the assessment.	n/a
Responsible person contact information up to date	Suitable. No further action. This is held with the 24 hour staff on site.	n/a
Competent persons employed and	Suitable. No further action.	n/a

DOCUMENT / RECORD	COMMENTS/ ASSESSMENTS	RELATED RECOMMENDATION
recorded, in relation to fire	Fire risk assessments are recorded in a central location and include the name of the individual and the company producing the assessment. The persons carrying out the work have demonstrated their competency by inclusion on the Institution of Fire Engineers Risk Assessors Register.	
Multi-occupancy buildings – cooperation and coordination with other responsible persons	Suitable. No further action. There are no other responsible persons.	n/a
Fire strategy	Suitable. No further action. No fire strategy was available for this property. However, the buildings are relatively simple, the areas of the site are mainly outdoors and it is considered that the absence of any strategy does not place any relevant person at any significant risk.	n/a
Fire alarm cause and effect matrix	Suitable. No further action. No cause and effect matrix was viewed at the time of assessment. Given the simplicity of the building and the number of fire safety measures interfaced with the fire alarm system, the absence of a cause and effect matrix is not considered to put any relevant person at increased risk.	n/a
Emergency action plan	Suitable. No further action. Fire action notices across the site detail the procedure to follow in the event of fire and evacuation of the premises. Full training is given to all employees on induction. Additionally, the Fire Emergency Plan (Reference NP-HSEQ-CRA-FRP-001 Version 1.0 Dated 09/05/2024) details responsibilities and procedures in detail for the site.	n/a
Evacuation drill records	Suitable. No further action.	n/a

DOCUMENT / RECORD	COMMENTS/ ASSESSMENTS	RELATED RECOMMENDATION
	Regular evacuation drills are undertaken and recorded. Records of these drills are kept along with a summary of the drill along with any lessons learnt. The last drill was recorded as 13/09/2024. All false alarms and downtime are logged in the interests of lessons learnt and efficiency of the plant.	
Data sheets for flammable materials	Suitable. No further action. Hazardous materials are stored and are restricted to cleaning materials which are suitable stored in COSHH cabinets. The relevant data sheets were kept on file and viewed.	n/a
Fire safety fault / issue reporting records	Suitable. No further action. Any faults with the general fire safety arrangements are reported via the management and dealt with appropriately.	n/a
Testing and maintenance schedule	Suitable. No further action. There was clear evidence that a testing and maintenance schedule is in place for the premises.	n/a
Hot work permit system and permits	Suitable. No further action. The hot works permits system has been viewed (including samples of completed forms) and a fire watch procedure is in place for any hot works carried out. This is considered suitable.	n/a
PEEPs generic and specific	Unsuitable. There are no staff with disabilities employed at present. If this changes in the future a PEEP review will be required. However, it is recommended that a GEEP (Generic Emergency Evacuation Plan) is developed for visitors who might have any impairments. It is also recommended that visitors are asked if they have any additional needs / impairments / disabilities upon appointments being made to ensure that no relevant persons are put at risk when visiting the site.	13

DOCUMENT / RECORD	COMMENTS/ ASSESSMENTS	RELATED RECOMMENDATION
Fire Service inspection records/notices	Suitable. No further action. The local Fire and Rescue Service have carried out familiarisation visits to the premises. However, no information regarding the inspections or concerns by the fire and rescue service were disclosed. No formal inspections or notices were disclosed.	n/a
Escape route check records	Unsuitable. Escape routes were obviously well managed and clean and they are subject to regular recorded inspections and daily site logs were provided which detail 'pathways around and between waste storage areas are swept and clear' however, there is no mention of the office building, the engineering, welfare areas and the internal waste processing areas. It is suggested that either a separate form is developed, or these are added to the daily logs.	14
Exit fastenings and door closer checks and maintenance records	Unsuitable. Exit fastenings and door closers were obviously being completed and they are subject to regular recorded inspections. Daily site logs were provided. however, there is no mention of the exit fastenings and final exits in the office building, the engineering, welfare areas and the internal waste processing areas. It is suggested that either a separate form is developed, or these are added to the daily logs. Ensure that regular recorded inspections carried out by suitably trained staff.	15
Other legislative requirements	n/a	n/a

6. Risk Analysis

This section is intended to place the fire risk in context. The judgements contained within it are subjective and based upon the observations made at the time of the assessment. An explanation of the terms used in this risk estimation is given below.

6.1 Ignition Probability

Considering the fire safety arrangements observed at the time of the assessment it is considered that the probability of ignition is MEDIUM.

6.2 Consequences of Fire

Considering the premises, the ignition sources and fuel present, the type and number of occupants and the fire safety procedures observed at the time of the assessment, the consequences for relevant persons in the event of fire are expected to be MODERATE.

6.3 Level of Risk

The consequent risk to life from fire in these premises is MODERATE.

6.4 Calculation of Risk

The level of fire risk has been estimated using the following process:

Probability of Ignition

This has been judged considering the general conditions present in the premises at the time of assessment and the three possible levels are:

Low: Unusually low likelihood of fire as a result of negligible potential sources of ignition.

Medium: Normal fire hazards (e.g. potential ignition sources) for this type of occupancy, with fire hazards generally subject to appropriate controls (other than minor shortcomings).

High: Lack of adequate control measures applied to one or more significant fire hazards, such as to result in significant increase in the likelihood of fire.

Consequence for Life Safety

This has been judged by considering the nature of the building and the occupants as well as the fire protection and procedural arrangements observed at the time of assessment. The three possible levels are;

Slight Harm: A fire is unlikely to result in death or serious injury of any occupant (other than an occupant asleep in a bedroom where a fire starts).

Moderate Harm: A fire could result in injury to one or more occupants, but unlikely to involve multiple fatalities.

Extreme Harm: Significant potential for serious injury or death of one or more occupants.

Overall Risk Level

The overall risk is estimated using the relationships in the table below.

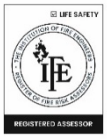
Figure 1 – Risk rating

CONSEQUENCE → IGNITION PROBABILITY ↓	SLIGHT HARM	MODERATE HARM	EXTREME HARM
LOW	Trivial risk	Tolerable risk	Moderate risk
MEDIUM	Tolerable risk	Moderate risk	Substantial risk
HIGH	Moderate risk	Substantial risk	Intolerable risk

Figure 2 – Suggested timescales for delivery of recommendation

RISK LEVEL	RECOMMENDATION AND SUGGESTED TIMESCALE
TRIVIAL	No action is required, and no detailed records need be kept.
TOLERABLE	No major additional controls required. However, there might be a need for improvements that involve minor or limited cost.
MODERATE	It is essential that efforts are made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures.
SUBSTANTIAL	Considerable resources might have to be allocated to reduce the risk. If the building is unoccupied, it should not be occupied until the risk has been reduced. If the building is occupied, urgent action should be taken
INTOLERABLE	Building (or relevant area) should not be occupied until the risk is reduced.

Prepared by:



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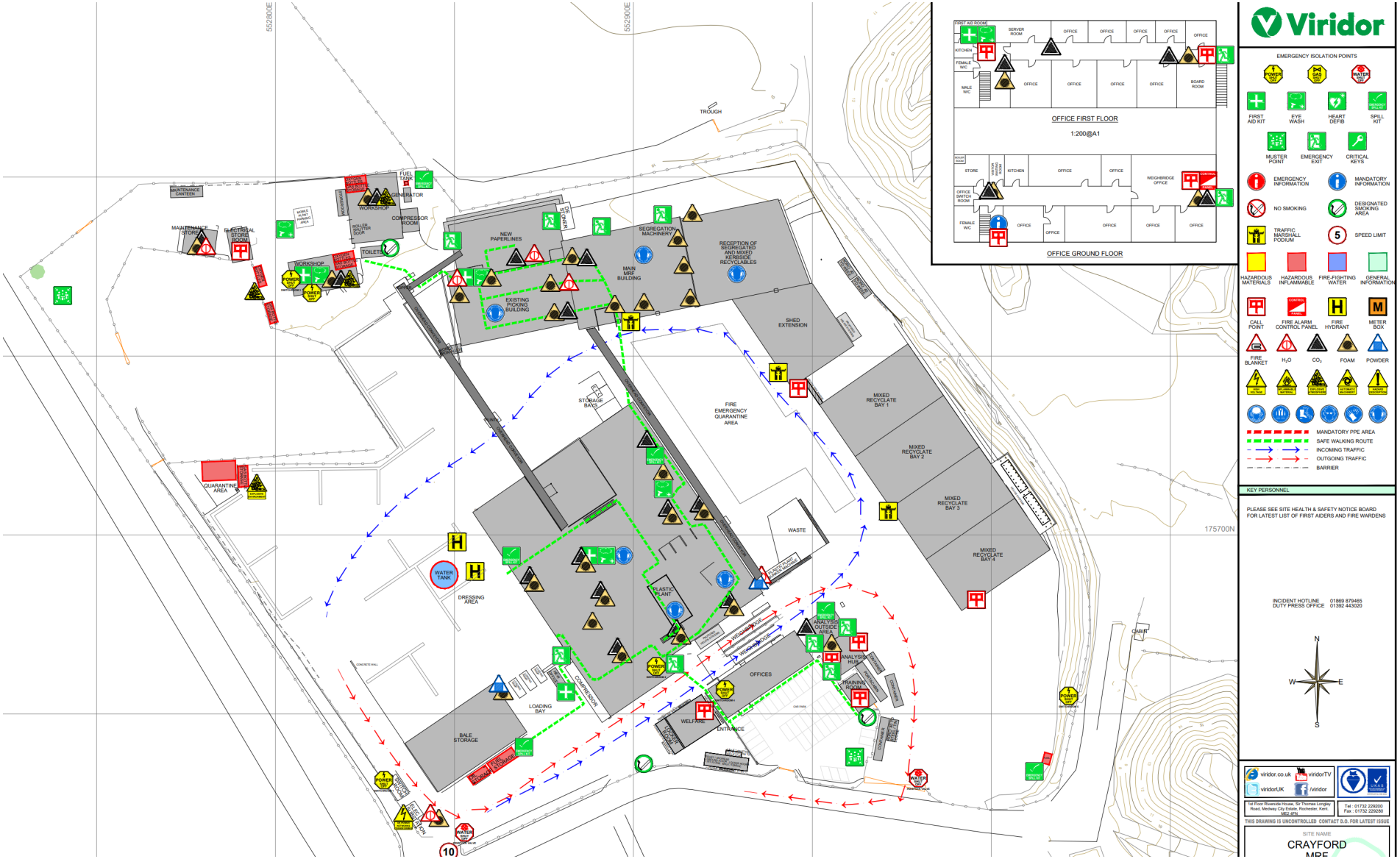
Appendix A Plans of the Premises



Appendix B BAFE SP205 Certificate of Conformity

Certificate Number	LS	0257479

Life Safety Fire Risk Assessment
Gold Approved Scheme
CERTIFICATE OF CONFORMITY

This certificate is issued by the Approved Company named in Part 1 of the Schedule in respect of the fire risk assessment provided for the person(s) or organisation named in Part 2 of the Schedule at the premises and / or part of the premises identified in Part 3 of the schedule.

SCHEDULE		
Part 1	**NSI Life Safety Fire Risk Assessment Gold Approved Organisation**	
	International Fire Consultants Ltd (Princes Risborough)	
	BAFE Registration Number	
	NSI 00898	
Part 2	**Name of Client**	
	N+P Crayford MRF Limited	
Part 3	**Address of premises for which the fire risk assessment was carried out**	
	Century Wharf, Crayford Creek Rd, Crayford, Dartford, DA1 4QG	
	Part or parts of the premises to which the fire risk assessment applies	
	All accessible areas	
Part 4	**Brief description of the scope and purpose of the fire risk assessment**	
	Non-intrusive FRA of the premises.	
Part 5	**Effective date of the fire risk assessment**	10/12/2024
Part 6	**Recommended date for review of the fire risk assessment**	December 2025

We, being currently a NSI Approved BS EN ISO 9001 organisation in respect of fire risk assessment identified in the above schedule, certify that the fire risk assessment referred to in the above schedule complies with the Specification identified in the above schedule under the control of our Quality Management System (identified on our NSI approval certificate) and with all other requirements as currently laid down within BAFE SP205 Scheme in respect of such fire risk assessment.

Signed (for and on behalf of the issuing Approved organisation)	
Job Title	Senior Fire Risk Engineer
Date	18/12/2024

1 This certificate is used subject to NSI Regulations and Rules of the NSI LIFE SAFETY FIRE RISK ASSESSMENT GOLD Approval Scheme.

2 NSI reserves the right to conduct an audit by an authorised representative of NSI during normal business hours, with the permission of the customer, of the fire risk assessment and its related premises in order to ensure that the said risk assessment complies with BAFE Scheme document SP205-1 (the Scheme) Section 7 and generally.

3 NSI requires every NSI LIFE SAFETY FIRE RISK ASSESSMENT GOLD Approved Company to issue a Certificate of Conformity in accordance with the Scheme for all fire risk assessments it carries out that wholly or partly address life safety.

4. The Certificate of Conformity when completed is a clear statement that the Approved Company conducted the fire risk assessment for life safety, it is suitable and sufficient and compliant with the BAFE SP205-1 Scheme document and is certified by a registered competent fire risk assessor.

5 Where life safety and other aspects of fire protection are addressed in the same fire risk assessment a Certificate of Conformity shall be issued but the certificate shall make clear that the certificate applies only to the life safety aspects of the fire risk assessment and not further or otherwise.

6 Should the customer be dissatisfied with the fire risk assessment covered by this certificate, he/she should at first contact the Approved Company at its local office. If satisfaction is not obtained, the customer should address a written complaint to the customer services department at the head office of the Approved Company. If the customer remains dissatisfied, he/she may address a written complaint, outlining the nature of his/her dissatisfaction and the circumstances of the fire risk assessor company's response, to the Customer Care Manager at NSI.

NSI will not normally consider complaints unless the Approved Company has been given the opportunity to resolve the dispute as set out above.

Subject thereto and as hereinafter provided, NSI will endeavour to assist in the resolution of the dispute between the contracting parties, provided always that NSI will not deal with or be involved in any discussions or negotiations with either party with regard to financial or other loss, claims or potential loss claims, outstanding payments or construction and/or interpretation of the Approved Company's terms and conditions of contract.

NSI shall not be liable for any act or omission arising from any assistance it may provide as hereinbefore provided unless such act or omission is shown to have been fraudulent or deceitful.

7 This Certificate confirms conformity with the requirements of BAFE Scheme document SP205-1 applicable at the date of issue by the issuing company. NSI does not undertake to investigate any query or complaint in relation to future changes to BAFE scheme documents, policies or other regulations that render the fire risk assessment in need of further updating. In that event, the appropriate update should be carried out by a company holding NSI LIFE SAFETY FIRE RISK ASSESSMENT Approval.

8 NSI does not accept any responsibility or liability for any fire risk assessment produced by the Approved Company

9 Unless the issuing company's obligation to NSI in respect of the fire risk assessment are undertaken by another NSI Approved Company, NSI will not enforce its Rules or Standards on the Approved Company or on its successor in business in respect of any fire risk assessments after the issuing company ceases to hold NSI LIFE SAFETY FIRE RISK ASSESSMENT Approval.

10 The Certificate is issued subject to the terms and conditions of the company issuing the certificate for the fire risk assessment service.

11 On this certificate and in these terms and conditions, where the context permits, the reference to the issuing company shall include any Approved Company who shall undertake the issuing company's obligations to NSI in respect of the fire risk assessment.

Footnote

"SP205" is a Scheme Document published by the British Approvals for Fire Equipment (BAFE).