

Permitting decisions

Bespoke permit

We have decided to grant the permit for Sapphire Specialised Fuel Plant operated by Sapphire Energy Recovery Limited.

The permit number is EPR/RP3203PQ.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

Or where there are key issues and/or consultation responses

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the <u>consultation responses</u>.

And

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

The Sapphire Specialised Fuel Plant permit controls the operation of part of an installation, whose purpose at this installation is to produce blended solid recovered fuel (SRF) to produce a homogeneous single stream fuel to feed the kilns at Tunstead Cement and Lime Works operated by Tarmac Cement and Lime Limited. The Sapphire Specialised Fuel Plant Shredding Facility is designed to blend SRF, carpet and tyres for final processing in the shredder. These streams are delivered to site, pre-processed to remove contamination. Once blended solid recovered fuel is then delivered to Tarmac Cement and Lime Works.

All operations take place inside a building. The operation does not result in any point source emissions.

Fire prevention Plan.

In technically assessing a fire prevention plan (FPP) we seek a proportionate approach that reflects the risks posed by the waste activity that is to be conducted. We take into account the location and proximity of sensitive receptors.

The measures set out in the Fire Prevention Plans: Environmental Permits Guidance (November 2016) (the Guidance) have been designed to meet the following three objectives:

- minimise the likelihood of a fire happening;
- aim for a fire to be extinguished within 4 hours; and
- minimise the spread of fire within the site and to neighbouring sites.

Where a site has sensitive receptors within 1km (as this site does) we expect an operator to make adequate provision for any fire to be extinguished as quickly as possible and within 4 hours.

If an operator were to adopt the measures set out in the Guidance then it is reasonable to conclude that we would approve their FPP.

How we took our decision

As the site is storing combustible waste the operator is required to comply with the Guidance. A FPP was submitted with the application, the final version being submitted during determination. The site complies with all the requirements of the guidance with the exception of the requirement for an automated suppression system for storing combustible waste within a building.

Our assessment of the FPP is that the operator has proposed appropriate alternative measures for suppressing fires and we consider that they meet the three objectives of the Guidance. The main factors which we considered in coming to this decision for each of the Objectives are detailed below.

Objective: Minimise the likelihood of a fire happening

Other than the provision of an automated suppression system within the building the operator has proposed methods compliant with all other sections of the Guidance. This includes, quarantine procedures to separate materials should they be found to exhibiting an elevated temperature, 24 hour manned security on site that control access and ensure no unauthorised persons are allowed on site. Out of hours they patrol the site and have radio contact with all the other 24/7 operations on site, 24 hour CCTV coverage within the building linked to Tarmac's Cement Plant Control Room, out of hours coverage using Open-area Smoke Imaging Detectors (OSID), 24 hour manned security shared with Tarmac and 6 metre separation distances between potential sources of ignition and combustible wastes. With the level of monitoring 24/7 for smoke and heat detection this will give a much earlier indication of an incident.

In the original application all the waste bays exceeded the maximum pile size and the maximum separation distance of 6m. Subsequently the operator relooked at the volumes and as a result has adjusted the requirements of each material to meet the allowable pile dimensions. The waste piles are split into two main waste piles divided by dry and damp bays. Dry fibre textile materials, which will be stored in the Dry bay, and damp more plastic type material which will be stored in the damp bay. The dry storage bay will now be split with an additional fire wall and extended out to split the material and will be constructed of the same blocks as used in the existing walls. All bays now meet the maximum dimensions indicated for these waste types in the Guidance. The reduced volume of material has allowed for a clear gap between the quarantine bays. There is now a 6m separation distance between the quarantine bays and waste piles and 6m separation distances between other potential sources of ignition and in line with the Guidance. The two main waste bays are located back to back and separated by a fire wall constructed of pre-cast "lego" block walling sections to a height of 3.2 meters. The two storage areas are segregated by two concrete block walls, each being 800mm thick. The walls are separated by a void of 700mm which will be filled with inert material, thus generating a fire break of 2.3 metres.

OSID (open-area Smoke Imaging Detector) combines dual wavelength (IR and UV) beams with CMOS (complementary metal oxide semiconductor) imaging detection. This technology features high tolerance to vibration and structural movement and OSID differentiates better between smoke and environmental conditions than traditional beam detectors. OSID operates in both pitch dark as well as bright sunlight. The Imager (receiver) has 7 Emitters and provides 3D coverage of the waste bays. These will detect any smoke, hours before any flames will be visible giving time to relocate material and deal with the situation prior to emergency services arriving on site. Fires within SRF storage piles always produce smoke for at least 4 hours before flames are detected. Detecting smoke rather that flames increases the time available to deal with the situation. This system is linked to a light circuit for the building so when the lights are turned off at the end of a day, the system will be activated. In the event the lights are left on, an overriding timer is used for back up. Any alarm triggered is automatically picked up in the 24hr manned Cement plant control room who will have a visual CCTV camera link to the building that can be viewed with the lights turned off.

The OSID is off during normal working hours whilst the operations are manned, CCTV with heat detection is on 24/7. In addition the site has a temperature probe on site with spare batteries as back up should there be a fault with any of the systems and a manual check is necessary.

The CCTV is Bi-spectrum image fusion and gives the users a picture-in-picture preview. Clearer image details with optical details overlaid onto thermal images. The preview will also reduce bandwidth, and there's no need to switch from thermal to optical or vice versa. The cameras also have an alarm function which will be a back up to the smoke detection which is linked to the Tarmac's Cement Plant Control Room. The Thermal Bi-spectrum bullet camera will be used to provide and alarm direct on to the image seen at the 24hr manned Cement Plant Control Room. This is used to provide a backup secondary system. If there was activation on either system then this will trigger a response from the cement plant and security. Therefore the fire detection system over the storage areas is designed with a back-up system in place which will cover both smoke and heat detection.

Both OSID and Thermal Imaging CCTV cameras will have visual inspection on a daily basis which will be recorded in the site daily log. The OSID will be included in the site yearly maintenance schedule for a monthly clean to reduce any potential dust build up which may arise. Annually they have external service agreement with supply to test and rectify potential issues. Any faults will be rectified by the onsite electrical team or external supplier depending on the nature of the fault. The supplier will provide a suggested parts stock list to ensure a prompt repair can be completed.

Any batteries operating the system will be replaced on a two yearly interval instead of waiting to the anticipated 5 year potential life, the Operator is looking into the potential upgrade to power them so that any faults will be identified earlier on the control system. The Thermal Imaging CCTV will be in constant use so any faults will be identified immediately and rectified, the site will keep a spare camera to install if one becomes faulty. These will be repaired by the onsite electrical team that deal with all the other cameras on site (these range from CCTV, Thermal Imaging and ANPR).

The OSID will be calibrated yearly as part of the annual service or as required if a fault has been detected. The Thermal Imaging CCTV will be tested and calibrated in house with the onsite electrical team who currently calibrate thermal imaging cameras on the Cement Kiln. This will ensure that same day or next day repair can be completed.

With the increased electrical standards operated by Tarmac Cement and Lime Limited, and the requirement to adhere to regulations set out by The Quarries Regulations 1999 it becomes easier to purchase items direct, modify items to meet their requirements and install with their own or on site contractor teams. This standard only allows for specific cable, glands, isolators, termination boxes and control panels to be used. As a result of the stricter regulations covering quarries the Operator has made changes to control panels and cabling on the shredder isolation, firefly detection / protection, building lighting, door operation and controls including many more items to ensure they meet the higher standards requires to meet the Regulations. Each item has a new wiring diagram and has been tested for earth leakage impedance and resistance of both live and earth circuits. These results are recorded on a central database and certificates issued and a

copy located at each control panel/test point. The suppliers of OSID system will complete the final checks and commissioning sign off, all documents will then be retained for auditing.

The shredder and other mobile plant are installed with fire detection and suppression systems. The shredder is equipped with a rapid acting detection, suppression and control system that is linked into the shredder operation;

- Firefly Flame detectors fast-acting flame detectors, highly immune to external disturbances and designed to withstand tough industrial environments.
- Patented True IR detectors Insensitive to daylight, detecting flames as well as sparks and hot particles from the right ignition temperature and energy.
- Full-cone water spray -powerful extinguishing with a unique nozzle design and placement aimed to penetrate and cover the entire material flow. Activated within milliseconds after detection.
- Water mist suppression installed over the conveyor belt.

The mobile plant is fitted with a DAFO fire detection and suppression system covering the engine compartment. This will be activated by damage to the trigger wire, covering the engine bay with a fire suppressant, but still allowing the vehicle to be moved to a safe area once activated.

The procedure for running the plant is that prior to the end of the shift the system run out button is pressed which allows for the whole system to empty from the hoppers to the loading out drag conveyors feeding the trailers, this is set at 10 minutes duration and has been tested with full hoppers to only take 8 minutes. During this time the operator will check to make sure the system is empty. A trailer collection is booked for the end of shift to remove loaded or part loaded trailer to the cement works so the morning shift can start production straight away with empty trailers.

There are two further thermal bi-spectrum bullet cameras, one covers the trailer loading and fuel tank areas and the other covering the electrical control room/maintenance bay including the rear of the building. Both of these cameras will be linked in with the CCTV screen and activation as monitored by the cement plant. These will be viewed on one single screen in quad view allowing all images to visible at the same time.

Objective conclusion

We have concluded that the operator has demonstrated they have alternative measures sufficient to meet the objective to minimise the likelihood of a fire occurring in the internal waste piles.

Objective: Aim for a fire to be extinguished within 4 hours

Upon activation of the alarm, journey time from Cement Plant is 3-5 minutes. Security response time is 2-4 minutes. Sapphire staff call out would be between 10-25 minutes depending upon operator on call and travel time to site. There are trained shift operators both in the Cement plant and Lime plant that can be called upon to drive equipment as required under the direction of the Fire Brigade, Security or Control Room Staff. The distance and journey time from the Buxton fire station is 5 miles and 12 minute journey time. The Fire Rescue Services have confirmed that the response time call out from Buxton is 5 minutes. The operator has visual contact of their operation 24/7 from the Cement Plant Control Room, where upon activations from the OSID or Heat detection on the CCTV, can be seen immediately. Two people will be dispatched to site with 5 mins to check, report or deal with the situation. In the event smoke is clearly seen then fire brigade and Sapphire on call will be contacted immediately.

The OSID supplier and commissioning company has the following accreditations/certificates

- (FIA) Full membership in the Fire Industry Association
- (BAFE) British Approvals for Fire Equipment for design, installation, commissioning/handover and maintenance
- ISO9001

- (NICEIC) National Inspection Council for Electrical Installation Contracting
- (NSI Gold) National Security Inspectorate Gold Standard for design, installation, commissioning/ handover and maintenance

All maintenance records will be located on site for audit purposes by an external auditor as part of Sapphire and Tarmac's accreditation to OSHAS 18001, ISO 14001 and ISO 9001.

Objective conclusion

We have concluded that the operator has demonstrated they have alternative measures sufficient to meet the objective of enabling a fire in the internal waste piles to be extinguished within 4 hours.

Objective: Minimise the Spread of Fire

There is fire water located adjacent to the building (process water lagoon holds approximately 28 Million litres) which has a dedicated access point for fire vehicles. There is also a process surface water tank located adjacent to the building that holds 28,000 litres of water and has a level control to keep it full all the time and throughout the year. Further water supplies can be obtained from the fire hydrants located by the cement plant operations. Four fire hose and connections are located on the site, three of which are adjacent to the quarantine storage area. (2 x 24m, 1 x 25m and 1 x 26m). A total of 20 fire extinguishers will be placed strategically around the processing plant building, offices and storage/ workshop containers.

The site has trained plant operators to separate and move smouldering or burning waste to the quarantine area in order to remove it from the parts of the waste pile which are not yet affected and also to spread the waste out, dissipating any heat. All cement plant staff, security and Sapphire Specialised Fuel Plant staff are trained in the use of fire fight fighting equipment to deal with small fires. All staff will be fire warden, fire extinguisher trained and fire prevention trained. All equipment is on an annual inspection rota.

Security Staff are trained in site response procedure to deal with fire alarm activations for the head office, data centre, stores which are all activated to an external call centre who then contact our site staff. Once the Fire Service is called one of the Security Staff mans the access road in a vehicle to escort the Fire Engine direct to the location. The internal radio is used and switched to the emergency channel which prevents anyone using the radio but allows all others on site to listen in and provide assistance if required. An annual check of training records will be made with fire training scheduled as necessary. As mentioned above the Fire and Rescue service should be on site and fighting the fire quickly. During operational hours the Operator will have plant operators on hand to separate and move waste piles in order to facilitate cooling and extinguishing of the fire. Out of normal operating hours the Operator has 24/7 emergency cover.

Objective conclusion

We have concluded that the Operator has demonstrated they have alternative measures sufficient to meet the objective to minimise the spread of fire within the site and to neighbouring sites.

Decision

Taking into account the proposals contained within the FPP outlined above we agree that the measures proposed constitute an alternative to an automated suppression system and meet the three objectives of the Guidance. We are therefore satisfied that the FPP as a whole is compliant with the Guidance and that the operator has put in place appropriate controls to prevent, extinguish and minimise the spread of fires on the site.

Fire Water Runoff Control

The original application proposed ramps for the building at 10cm in height which gave insufficient capacity to retain fire water. The operator has now proposed 30cm flood barriers. Below are the calculation for fire water volume required with the area of the building available excluding internal structures and buildings which reduce the volumes available.

Available Storage Area		otorage volume of water required	
Building Areas	m2	Largest material volume pile of material required for water storage	540m3
Building 1	1080		
Building 2	1296	Water supply required I/m	3,600
Building 3	432	Duration of supply (hours)	3
Total	2808	Overall water supply required to be stored (litres)	648,000
Impact Area within the building that need to be removed	m2	Minimum required internal barrier height across door access points (m)	0.25
Cabins x 4	67.5		
		Manufacturers single panel barrier height, with 2 units employed on each personnel access doorway and a single barrier employed on the door access ramps giving minimum of 0.3m across the building	
Shredder	14	Manufacturers single panel height (m)	0.2
Walling 62.5m long in total	50		
Pallets, equipment, door ramps	20	New capacity is 2632.5m2 x 0.3m x 1000l = 789750 litres	789,750
Existing Plant	24		
Total Deductions	175.5	Required barrier height to store 789,750 litres is (648,000/2632.5) / 1000 = 0.2462m. Proposed barrier height is 0.3m Factor of safety of installed panel above that required (litres)	141,750
Total Area available to store water m2	2632.5	Factor of Safety as a % 141,750 / 789,750 = 17.95	18%

Available Storage Area

Storage Volume of Water Required

The containment barriers proposed are supplied via Stormeister and are constructed of aluminium with rubber seals fitted to the bottom and mounted in side support frame securely fixed to the internal concrete walling structures.

A single 200mm panel will be used on the vehicle access points to increase the already 100mm high ramp to a maximum of 300mm above the concrete floor, which is 50mm greater than required.

The personnel internal doors and external rear doors will have 2 x 200mm barriers secured to the same concrete walls internally but will have any existing step removed and the barrier located directly on the floor, which is 150mm greater than required

The only door to have the barrier fitted externally if the front single main access door which allows for the installation of the barrier after the premises has been secured. This will be secured in the same manner as all the other personnel doors and will give an additional protection of 150mm above the required. All the flood barriers will be sealed and bolted to the main concrete wall around the building and have been calculated by the supplier to hold the required volume.

All other none required access doors will have a permanent 300mm wall constructed across the opening. The containment barriers will be installed at the end of the last shift when no one is on site.

Pre-operational conditions

Two pre-operational conditions (PO1 and PO2) in relation to the fire prevention plan are incorporated within the permit. Both relate to our decision to approve the alternative measures.

PO1 relates to a fire wall that is proposed at the site to separate the dry material bay into two bays. The construction details have been provided and are satisfactory, the pre-operational condition ensures that the wall is constructed prior to operations commencing. PO1 also relates to the installation of the containment barriers to increase to the height to ensure sufficient containment is in place for fire water. The POM ensures that the barriers are constructed and in place prior to operations commencing.

PO2 requires the operator to provide written evidence to demonstrate that the fire and rescue service have carried out an operational risk assessment at the site, further clarifying the procedures carried out by the fire and rescue service on the site in the case of a fire.

Aspect considered	Decision	
Receipt of application		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.	
	The decision was taken in accordance with our guidance on confidentiality.	
Consultation		
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	No responses were received from members of the public via Citizens Space.	
	We consulted the following organisations:	
	Local Planning Authority (High Peak Borough Council)	
	Health and Safety Executive	
	Public Health England	
	Foods Standard Authority	
	Environmental Health (High Peak Borough Council)	
	Department of Public Health (Derbyshire)	
	Derbyshire Fire and Rescue Service	
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .	
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of part of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.	

Decision checklist

Aspect considered	Decision	
The facility		
The regulated facility	We considered the extent and nature of the facility/facilities at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.	
	The extent of the facilities are defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.	
	This permit applies to only one part of the installation – AR1, S5.4 A1 (b) (ii), AR2, AR3 and AR4. Recovery of non-hazardous waste with a capacity exceeding 75 tonnes per day - pre-treatment of waste for incineration. The names and permit numbers of the operators of other parts of the installation are detailed in the permit's introductory note.	
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility and the location of the part of the installation to which this permit applies on that site. The plan is included in the permit in Schedule 7.	
	Note: Drawing reference C18041-004 Rev P4 dated 10/09/2019 details the site layout.	
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.	
Biodiversity, heritage, landscape and nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	
conservation	South Pennine Moors SAC 5.8km	
	Peak District Dales SAC 1.4km	
	Peak District Moors SPA 5.8km	
	The Wye Valley SSSI 1.4km	
	Waterswallows Quarry SSSI 1.4km	
	There are no point source emissions from this activity. It is a shredding and sorting of SRF operation inside a building. The Sapphire Specialised Fuel Plant Shredding Facility is designed to blend SRF, carpet and tyres for final processing in the shredder. These streams are delivered to site, pre-processed to remove contamination. Once blended solid recovered fuel is then delivered to Tarmac Cement and Lime Plant. All operations take place inside a building. Given this fugitive emissions, such as dust, are insignificant. There will be additional noise but given operations are inside a building and given the distance to the SAC, SPA and SSSI's this is also considered insignificant. The operation does not result in any point source emissions.	
	Closest activity is Tunstead Cement and Lime Works EPR/XP3532DP (multi- operator permit). We have assessed the application and its potential to affect	

Aspect considered	Decision			
	all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.			
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.			
	We have consulted Natural England on the application for information only (HRAS). An Appendix 4 has also been completed and filed on the Public register for information only. The decision was taken in accordance with our guidance.			
Environmental risk assessn	nent			
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.			
	The operator's risk assessment is satisfactory.			
	The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment or similar methodology supplied by the operator and reviewed by ourselves, all emissions may be categorised as environmentally insignificant.			
Operating techniques				
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.			
	The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.			
Fire prevention plan	We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance. The operator has proposed using alternative measures for meeting the requirement for an automated suppressions system in the building. Please see the <u>key issues</u> section for more information.			
Permit conditions				
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.			
	We are satisfied that the operator can accept these wastes for the following reasons:			
	they are suitable for the proposed activities			
	the proposed infrastructure is appropriate			
	the environmental risk assessment is acceptable.			
Pre-operational conditions	Based on the information in the application, we consider that we need to impose pre-operational conditions.			
	Refer to <u>key issues</u> .			

Aspect considered	Decision
Emission limits	We have decided that emission limits are not required in the permit.
Reporting	We have specified reporting in the permit.
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.
	The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Technical competence	Technical competence is required for activities permitted.
	The operator is a member of an agreed scheme. We are satisfied that the operator is technically competent.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.
	No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Growth Duty Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.
Growth Duty Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says:
Growth Duty Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says: "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."
Growth Duty Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says: "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation." We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from		
Derbyshire Fire and Rescue		
Brief summary of issues raised		
 There is no suppression over storage areas. Layout of storage of fuels unclear. Are the fuel types stored together? 		

- 3. Distance from quarantine bays and storage area are closer than 6m.
- 4. Storage capacity of quarantine area unknown.
- 5. Possible that more water is required for Firefighting than bund area is capable of when the risk is unsuppressed. How much water run-off is to be contained in the event of fire?

Summary of actions taken or show how this has been covered

1. Refer to <u>key issues</u> section. Taking into account the proposals contained within the FPP outlined above we agree that the measures proposed constitute an alternative to an automated suppression system and meet the three objectives of the Guidance. We are therefore satisfied that the FPP as a whole is compliant with the Guidance and that the Operator has put in place appropriate controls to prevent, extinguish and minimise the spread of fires on the site.

2. Once blended, the SRF is loaded directly onto transporters and transported to the cement and lime silo's. Waste types delivered to site are segregated in to dry fibre textile materials, which will be stored in the Dry area of the building, and damp more plastic type material which will be stored in the Damp area of the building. Plan reference Site Movement Safety Plan C18041-004 Rev P4 details these areas.

3. Refer to <u>key issues</u> section. The waste material bays have subsequently been reduced in size and further divided by an additional fire wall. There is now a separation distance of 6m to other combustible waste and the quarantine bays. For all waste bays the dimensions are now in line with the Fire Prevention Guidance.

4. Quarantine bays have been reconfigured and are now large enough (4 bays) to hold at least 50% of the volume of the largest pile and have a separation distance of 6m to the nearest waste bay. Refer to <u>key issues</u> section. An updated FPP version 4 details the amended layout and has been updated with the additional detail received in response to both schedule 5 notices. (Plan reference Site Movement Safety Plan C18041-004 Rev P4). The updated FPP and layout plan have been referenced in the operating techniques table in the permit, table S1.2 Operating techniques.

5. There is no internal drainage within the building area. The Operator is using the 1m high internal walls to provide and impermeable barrier to retain any fire water run-off. To increase the volume of water retained in the building the operator is now proposing containment barriers across the main exits (the shutter doors) and is increasing the height of the ramps across the other pedestrian door openings within the building. The ramps and barriers will be at a height of 30cm. These barriers will be deployed at the end of the working day and at any time during the day where there is a potential fire issue. This will allow 648,000 l/m (overall water required to be retained over 3 hours) to be retained within the building with a capacity of 789,750 litres of fire water. This is a factor of safety of 18% over and above what is required to retain the fire water for an incident lasting three hours.

The following POM has been imposed.

POM1 Prior to operation of the site the operator must submit a report to the Environment Agency demonstrating that they have made the following necessary improvements to infrastructure:

- The installation of an additional fire wall that separates dry material bay into two waste bays.
- The installation of ramps or containment barriers at all the entrances to the building for fire water retention to the proposed height of 30cm;

The operator shall not accept any waste or carry out any permitted activities at the site unless the Environment Agency has given prior written permission under this condition.

Response received from

Public Health England Environmental Hazards and Emergencies Department Centre for Radiation, Chemical and Environmental Hazards (CRCE)

Brief summary of issues raised

The main emissions of potential concern are fugitive emissions of dust from the handling, shredding, loading and unloading of material accepted at the site for processing; no point-source emissions are outlined from the process. Control of fugitive dust is proposed through working practices and site inspections.

Summary of actions taken or show how this has been covered

There are no point source emissions from this activity. The activity is wholly within a building. The waste types are not considered to be excessively dusty.

The site and its and local environment are inspected daily for mud, debris, dust and litter.

Various road sweepers are employed around the site to keep the roads clean and gritted in winter. The Sapphire Specialised Fuel Plant operation will be included in the site sweeping route. If a spillage of material occurs during normal hours of operation the sweeping company will be contacted immediately to be deployed to the area.

Storage areas within the building will be swept with a brush attachment that fits on to the forks of the loader. The site also uses an air powered intrinsically safe vacuum cleaner for smaller areas and spillages from the process plant.

Quantitative monitoring of environmental parameters on site will be completed periodically as part to the Environmental Management System. These will include dust, vibration and noise monitoring. This is undertaken via an external accredited source.

The site is monitored daily for dust. Any observation of dusty conditions will be suppressed using a water spraying system and the issues recorded in the site daily log.

The site does not generally receive dusty wastes. However if a load is received and the site team feel it poses a dust issue, then the existing water spray will be used to lay the dust as the load is tipped. The site would then be cleaned by the sweeping attachment for the loader or a road sweeper. All staff involved in such an operation would be issued with the appropriate respiratory and eye protection to augment their regular issue PPE. Vehicles tipping into the waste reception area have originated from commercial waste operations, therefore the instance of mud on the wheels of vehicles delivering, or when leaving site is very minimal. All vehicles leaving site will be checked for their condition and the onsite wheel wash used on departure.

Condition 1.1.1 of the permit requires the operator to manage the site in accordance with their written management procedures and records to be kept demonstrating compliance.

Response received from

High Peak Borough Council Environmental Health

Brief summary of issues raised

No concerns made.

Summary of actions taken or show how this has been covered

No actions required