Fenestration Recycling Company Limited

Schedule 5 Response

1. Site Drainage

It is not clear from the information provided in the application what the drainage arrangements will be for the site. For example, some parts of the application state that the drainage will be sealed, whereas section 7 of the Environmental Management System Plan (EMS Plan) states that drainage will be by infiltration.

Action:

- Please confirm the drainage arrangements for the site and when these will be in place.

  Northern Yard

  The northern yard is impermeably surfaced. Surface water flows by gravity towards the south east of the yard (the staff/visitor parking area) where it pools against and impermeable bund wall, behind which is a 0.5m high soil bund that separates the site from the Tenant Canal. Surface water is removed and tankered away from site for treatment at a suitably licensed waste management facility.

  There is no drainage system within the buildings. A fall on the impermeable surface channels liquid by gravity to the centre of the pad where it can be manually removed.

  Roof water from the buildings is either directed through gutters and downpipes, or falls from roofs onto the surfaced yard from where it falls by gravity towards the south eastern corner and is captured within the bund wall described above.

  Foul water from the welfare facilities is discharged to combined sewer.

  The above drainage is currently in place.

  The Operator has made enquiries to Welsh Water to enable the discharge of surface run-off from the northern yard area to combined sewer. Once agreed with Welsh Water the Operator will submit a request to NRW to vary the discharge arrangements for the site. Subject to approval from Welsh Water, it is anticipated that the new drainage will be in place within the next 6-12 months.

  Southern Yard

  The southern yard is impermeably surfaced. The yard is graded such that surface run-off falls towards linear cut-off drains running in front and to the side of the existing processing building. A grip located approximately half way up the yard on the eastern side assists with moderating and directing the flow of water towards the linear drains. Surface run-off entering the linear drains passes into a silt trap from where it is transferred by underground pipe to the northern yard where it discharges to combined sewer.

  The yard is enclosed by a brickwork retaining wall and bund on both the western boundary with the railway embankment and the eastern boundary with the Tenant Canal. The retaining wall along the boundary with Tenant Canal terminates at the end of the impermeable surface (that finishes approximately half way along the processing

building). A sand bag wall between the building and retaining wall completes the site bunding. The rear of the site is separated from the canal by a 4m high bund.

There is no drainage system within the processing building. A fall on the impermeable surface channels liquid by gravity to the centre of the pad where it can be manually removed.

Roof water from the Processing Building is directed through gutters and downpipes towards the linear surface drains from where it passes into a silt trap before being discharged to combined sewer.

This drainage is currently in place. Drawing 10937 – 000 D has been updated to clarify the design of the current site drainage.

- Please confirm whether or not all waste will be stored and treated on an impermeable surface with sealed drainage. (Please note that 'drainage by infiltration' as noted in section 7 of the EMS Plan does not constitute sealed drainage.)

  All waste will be stored and treated on impermeable surface with sealed drainage.

  Drawing 10937 – 000 C and Drawing 10937 – 000 E have been updated to clarify the layout, surfacing and storage on the site.

  If the operator is planning to discharge the site drainage to sewer, please confirm when this connection will be made and agreed with the sewerage undertaker. (It would be beneficial to gain prior approval from the sewerage undertaker for firewater to be discharged to sewer, as well as daily/general site drainage.)

  As indicated previously, the Operator has submitted an application to Welsh Water to discharge surface water and firewater to foul sewer. Due to the volumes involved the enquiry has been escalated to Welsh Water's Network Team who have requested water sampling to confirm the composition of the discharge. Sampling was carried out on 09/07/16 and we are awaiting test results.

  Given the time scales typically taken by Welsh Water to approve a connection to the sewer, it is likely that it will be 6-12 months before any new drainage can be connected. This application to vary the site's environmental permit is based on the site's current drainage as described previously.

- If any drainage discharges are proposed other than to sewer, e.g. to groundwater or surface water (with the exception of clean, rainfall dependent drainage from areas of the site not used in connection with the storage and/or treatment of waste, e.g. clean water from roofs of buildings) please provide details of these.

  No other discharges are proposed.

- Please confirm whether or not the proposed linear drain along the Eastern / South-Eastern edge of the Northern Yard will capture all drainage / run-off from the Northern Yard (or any drainage entering the Northern Yard from any other part of the site) and prevent it from leaving the site or infiltrating into the bund / permeable ground along the same part of the site boundary?

  The proposed linear drain will be designed to capture all run-off from the northern yard area and prevent it from leaving the site or infiltrating into the bund along the same part of the site boundary.

We reiterate that the drainage scheme is subject to detailed design following consultation with Welsh Water and the proposed scheme may require amendment based on the ability of the local network to receive the propose discharges and at the proposed flow rates e.g. attenuation may be required to reduce flow rates, etc.. The final detailed design will be discussed and agreed with NRW prior to construction and the Operator will submit a request to NRW to vary the permit's discharge arrangements for the site. This application to vary the site's environmental permit is based on the site's current drainage as described previously.

2. Fire Prevention and Mitigation (Plan and Measures)

Waste Storage / Stockpile Location

Section 4.2 of the Fire Prevention and Mitigation Plan states that the layout of the stacks will be such as to allow 'unimpeded access around the stockpiles by the emergency services', however drawings 10937 - 001 - C (site (block) plan (proposed)) and 10937 - 001 - E (storage plan (proposed)) show the stockpiles to be located immediately adjacent to the site boundary / fences around the site.

Action: Please confirm whether or not waste stockpiles will be located away from the site boundary / fences and by what the separation distance. Please also confirm whether or not push walls / bays will be used to contain the waste within stockpiles / designated storage areas and to prevent it from spilling over the fence / out of the designated storage areas.

In the northern yard there is an existing concrete block push wall along part of the boundary where pre-sort materials (wastess to be subject to screening and picking to recover recyclable wastes) are stored. As the current stockpile is cleared, this wall is being relocated 2m from the boundary fence and extended as necessary to contain the pre-sort waste in designated storage areas. Perpendicular concrete walls will be installed as necessary to create bays and 6m wide fire breaks. Similarly, a bay 2m from the boundary will also be erected for unprocessed uPVC waste. Stockpile heights will be maintained below the height of the retaining wall. The 2m clear access between the storage bays and boundary will allow any waste inadvertently deposited over the back wall during waste handling to be accessed and cleared away from the site boundary.

Bagged waste will be placed against the existing retaining walls where they are present, or at least 2m from any boundary fence where no retaining wall is present.

In general, loose waste will be stored in the northern yard area and bagged waste in the southern yard area.

We will delete "unimpeded" from the FPMP as it can be argued that the proposed separations do not allow unimpeded access in the event of a fire.

Nearby Sensitive Receptors and Impacts

The plan considers many nearby sensitive receptors, but does not consider the pumping station to the north of the site entrance, or the Tennant Canal (the canal itself and the people who are present along the canal). The plan should also consider the impacts of fire on businesses (e.g. loss of business) and those who use the A465 and other roads nearby for access (e.g. disruption to travel, road closures etc).

Action: Please consider these receptors and impacts and provide the relevant information.

The pumping station to the north of the site is not permanently staffed and people are only infrequently present for maintenance operations. In the event of a fire the Operator would confirm whether the pumping station was occupied and advise anyone present to evacuate the site to a safe distance. Due to its proximity to the site, Welsh Water would be contacted at the earliest opportunity to make them aware of the fire such that they can liaise with the emergency services should precautionary or preventative measures be necessary to avoid environmental pollution from the pumping station. The pumping station is located at an elevation of 1.7m above the low point of the northern yard (the bunded south eastern boundary of the site) and 1.3m above the height of the access road separating the northern and southern yards. Assuming the site bunding is maintained as existing, fire water within the northern yard would escape across the access road to the southern yard before reaching a level where it would inundate the pumping station.

Visitors to the Tenant Canal are normally infrequent and for short-durations. In the event of a fire, the Operator, in consultation with the F&RS, would take steps to ensure visitors are stopped from using the tow path or canal until safe to do so (the canal waters are rarely trafficked). This would be through the erection of a barrier on the towpath in either direction of the site and/or a member of staff being present to provide information.

Were it not suitably contained, fire water could escape the site and lead to contamination of the canal. Measures to contain fire water are detailed in response to the next question.

The businesses most likely to be affected in the event of a fire are the Waste Transfer Station/MRF (Receptor C1), the Asphalt Plant (Receptor C2), Metal Recycling Facility (Receptor C5) and the currently vacant unit (C6). In the event of a fire, and depending on its scale and the prevailing wind direction, it is likely that the Emergency Service will close the access road to Neath Abbey Wharf, either at its junction with the Neath Abbey Industrial Estate or after the entrance to the Waste Transfer Station/MRF (Receptor C1). This will cause a loss of business to the Receptors affected by the closure.

Depending on the wind direction and the need for the closure of the A465 the Petrol Station (Receptor C3) and Fast Food Restaurant (Receptor C4) may suffer a loss of business.

Users of nearby roads may be affected if the Emergency Services consider it necessary to close roads, or there is travel disruption caused by slowing traffic, rerouting of HGVs destined for local businesses, etc. This may result in minor impacts on businesses and individuals outside of the local area.

The FPMP will be updated to reflect the above impacts and/or response measures. Drawing 10937 – 000 F has also been updated to include the additional receptors.

We are grateful for your suggestions to include Neath Port Talbot Local Authority and Public Health Wales in notifications in the event of a major fire and to make reference to the rotation of waste stocks. We will include these points in the revision to the FPMP.

Firewater Containment

Section 3.3.4.3 of the Fire Prevention and Mitigation Plan mentions that aggregate stockpiles and sandbags will be used ‘to rapidly reinforce the existing boundary and stop fire water from exiting the site and reaching the Tennant Canal’. Section 6.1 also mentions that, when safe to do so, a firewater containment bund will be constructed ‘at the boundary of the site and the

Tennant Canal (by reinforcing existing bunding or creating a bund where none exists) to stop fire water flowing from the site at its low point …'.

It is likely that this will not be possible in the event of a major fire when the site will be evacuated or if the site is unoccupied when a fire occurs. 'Creating a bund where none exists' implies that the bund along this edge of the site will be incomplete. It is also likely that a rapidly constructed 'bund' of soil/aggregates will not be impermeable and therefore not effectively contain all firewater.

Section 5.2.2 regarding inert materials mentions that 'soil and other inert materials that are free of organic materials is helpful in extinguishing fires'. The 'inert stockpile' on site is currently very overgrown (with trees/plants) and therefore contains a significant quantity of organic material, which may fuel a fire and would not be useful in extinguishing it. It would also be difficult to quickly access the soil/material in a fire emergency.

Action: Please provide information to address the above points, and details of how firewater will be contained at the site in the event of fire. The linear drain and proposed connection to sewer (as mentioned in the section above regarding drainage) may form part of the containment measures.

Your points that it may not have been possible to reinforce the bund during a fire are noted.

A topographic survey has recently been undertaken to establish levels within the site.

Based on the survey, water would reach a maximum depth of approximately 0.4m at the lowest point of the northern yard boundary before it started to flow across the roadway under the railway bridge and into the southern yard area. The existing 0.5m high bund along the south eastern boundary of the northern yard (and terminating at the railway embankment) is sufficient to stop fire water from entering the Tenant Canal. Assuming a maximum depth of 0.4m of water can be entrained by the bund before it flowed into the southern yard, approximately 150m3 of fire water would be stored and be available for recirculation onto a fire.

Fire water flowing across the roadway and entering the southern yard would flow into the drainage system and ultimately be discharged to combined sewer. In the event of a fire and the drainage system in the southern yard being overwhelmed by fire water, the water levels would rise and at a depth of 0.15m would flow past the eastern side of the processing building and would exit the site at the point where the retaining wall terminates. At this point a pathway exists for fire water to reach the adjacent canal via a drainage channel running parallel with the site boundary. To stop fire water escaping the site a sand bag wall between the building and retaining wall forms a barrier to the fire water escaping. Approximately 130m3 of firewater can be contained before levels would rise to the point where fire water would begin to flow into the processing building.

Were a fire to occur in the southern yard, fire water management would similarly flow into the existing drainage system and be discharged to combined sewer.

Since submitting the FPMP the Operator has decided to relocate the inert material for fire suppression from along the embankment to a concrete block bay between the pre-sort waste stockpile (this area also acting as a fire break). The cleared area would be used for additional parking. The inert material will be removed and cleared of vegetation over the next 4 weeks.

3. Noise and Vibration (Management Plan and Mitigation Measures)

The Noise Management Plan provided with the application mentions the hammer mill as the main source of noise on site, and mentions the two 5m high walls along the sides of the hammer mill and the light-weight roof above it as noise mitigation measures.

The plan also mentions the 'plant associated with the granulation and the electrostatic colour separation of waste PVC' and 'the movement and transportation of waste PVC material around the site using front end loaders and feeding of the conveyor system via an excavator', but does not provide adequate information on how the noise from these sources will be mitigated. The plan mentions that 'these sources/processes are relatively quiet in comparison to the hammer mill', however, they could be more significant/noticeable if the hammer mill is not operation.

The plan does not consider all potential sources of noise on the site. We require the plan to consider all potential sources of noise on the site, including (but not limited to) the loading/unloading of waste containers/vehicles, the sorting/treatment of waste on site, traffic/deliveries, movement and transportation of wastes other than PVC around the site, the weighbridge, and other plant/equipment on site (e.g. vehicles, trommel, cutting equipment and other plant/equipment as listed in the EMS Plan).

The plan does not mention any sources of vibration on the site (for example the hammer mill and other plant/machinery). We require details of any sources of vibration, their significance, and any proposed mitigation measures (if applicable).

Action: Please provide information to address the above points as well as any other applicable information. (This could be in a revised version of the Noise Management Plan, in a revised EMS Plan, or in a separate document).

Please refer to revised NMP attached

4. Waste Acceptance Procedures

The application mentions Waste Acceptance Procedures but does not give details of what they are.

Action: Please provide details of the Waste Acceptance Procedures to be used on site.

Procedure PR7 – Waste Acceptance Procedure is appended to this document.

PR7 – Waste Acceptance Procedure

Staff must ensure compliance with the Environmental Permit at all times.

All waste, as allowed under the terms of the site's Environmental Permit and the conditions of the planning consent, enters the facility via the secure main access gates as shown on the site layout plan (Drawing 10937-000-C).

The acceptance criteria for incoming waste is that it must be within the list of permitted materials shown in the site's environmental permit and be free of significant contamination and odour. Wastes having any of the following characteristics shall not be accepted:

- consisting solely or mainly of dusts, powders or loose fibres
- wastes that are in a form which is either sludge or liquid

All waste carrying vehicles entering the facility via the site main entrance are directed to the Reception/Unloading area. The driver is required to attend at the site office where all waste transfer notes are inspected by the Site Supervisor (or other competent person on-site) and the information is recorded.

A schedule of permitted wastes is clearly displayed at the weighbridge office for ease of reference by the designated member of staff who is trained and proficient in the role undertaken. In addition, further support, if needed, is provided by the site's Technically Competent Person.

The Site Supervisor (or other competent person on-site) then carries out visual checks on the waste to confirm that it is described adequately, conforms to any pre-acceptance checks and that the waste is permitted for acceptance at the site.

All responsible staff undertake waste awareness training to ensure they are proficient in identifying waste types and in recording the necessary information under the duty of care provisions and other requirements as described in the Environmental Permit.

In the event of any delay in the examination of the waste consignment documentation or doubt in respect of the consignment, the vehicle is directed to a holding area until the Technically Competent Person is satisfied that the documents are in order and the waste conforms with the terms of the site permit.

Vehicles are unloaded and loads inspected again before being placed in the storage area. Following inspection, either:

- Wastes are acceptable, the company takes responsibility for the duty of care of the waste, and the driver is issued with a conveyance note confirming receipt of the waste; or
- If the Site Supervisor/Technically Competent Person finds any irregularities with the waste after deposit then the waste will be either re-loaded back into the vehicle and rejected from the site, or will be quarantined within a secure quarantine area pending further enquiries and agreement with or instructions received from Natural Resources Wales (as required). The Best Practicable Environmental Option for recovery/disposal of the non-conforming material will be used. Arrangements for the offsite transfer/disposal of non-conforming wastes will be made as soon as arrangements can be finalised taking due account of their potential to cause environmental impact/nuisance e.g. odour etc.

Remedial measures (via a CAR Form FR10) will be taken in order to reduce the potential for recurrence via site records/documentation being passed to the waste producer/carrier/disposer as determined after investigation by site management.

Any minor leaks or spills during unloading are handled in accordance with the site Spill Procedure (Procedure PR3).

All waste movements will conform with the requirements of the Environmental Permitting Regulations.