ENVIRONMENTAL FOCUS

Achieving Compliance & Quality

Addition of EWC codes

Application to Vary Existing Permit

Llantrisant Recycling Centre Ltd (EPR/AB3092/FR)

11th October 2018

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Customer:	Tom Prichard	Llantrisant Recycling Centre Ltd
Requirement:	Permit variation	EPR/ AB3092FR
Date of Submission:	October 2018	EMS-new activities
Signature:		Gareth Danter-Hill
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Introduction

The EMS produced for this application is designed to be only relevant for the new activities that are proposed to be undertaken. It is to supplement the existing EMS held for site that will be updated to suit when the variation is issued.

This application is for a variation to an existing permit **(EPR/AB3092FR)** to include additional EWC codes (detailed below). The following documents were used to aid the formulation of this and the associated documents. The standards outlined within these documents will be adhered to throughout site operations:

How to Comply, SGN5.06, WM3, H4 and H1 guidance.

The site is situated at:
Llantrisant Recycling Centre,
Pantybrad Lane,
Llantrisant,
Pontyclun,
CF72 8YY.
NGR: ST 04174 85254

The site operator is:
Llantrisant Recycling Centre Ltd
Earthmovers House, Unit 16,
Llantrisant Business Park,
Llantrisant,
Pontyclun,
CF72 8LF.

The site plan has been previously submitted to NRW and has been incorporated into the current permit held. The area for the waste operations is not to change as part of this application.

TCM

The site TCM is currently Mr Gareth Danter-HIll an Environmental Consultant contracting for the group. His qualifications held are attached to this application and cover all modules within the Managing Physical and Chemical Treatment of Hazardous Waste (HROC6).

IED requirements

Due to the nature of the waste currently permitted, the wastes to be accepted at site and the treatment processes to occur; it is not foreseen that the IED is a relevant consideration for this variation. Should this change in the future due to amendments to the Legislation etc., Llantrisant Recycling will address the requirements at this stage proactively.

R and D Codes

It is proposed that the R codes currently within the permitted activities table of the permit are sufficient for most of the new waste types proposed. However, one will need to be added so that the table will include:

R3-Recycling/reclamation of organic substances which are not used as solvents;
R4-Recycling/reclamation of metals and metal compounds;
R5-Recycling/reclamation of other inorganic compounds;
R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on site where it is produced).

D15-Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).
D9-Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination, etc.).

Site Infrastructure

The infrastructure currently on site consists of a substantial area of concrete that has a sealed drainage system. Within the concreted section of the yard are 2 building areas. The addition of the EWC codes listed below and the increased risk associated with the acceptance of them, will require improvements in infrastructure across one area of the site (for outside storage).

For the acceptance and storage of the new wastes types detailed below the infrastructure is to be improved towards the rear of the yard. An area of hard standing is to be converted into a reinforced concreted area that will benefit from a sealed drainage system (the area will be tied into the currently concreted area of the site). In summary, a substantial area of the yard is to be concreted and a series of bays are to be constructed on the newly laid concrete. The building to be used for waste storage will drain to a sealed drainage system currently in operation at the permitted site. The water is held in a submerged tank that is emptied as required. No discharge to the environment will be possible from the sump. The sump will be visually inspected by a qualified engineer every year as detailed within the Environmental_RA.

All clean rainwater flow that is generated by the roof is to be diverted from the site to fill and 'top up' a water storage tank (used for fire-fighting and dust suppression purposes); when full an overflow pipe will allow the clean water to join the water discharge system that runs adjacent to the site.

If any defects are found across the infrastructure of the site, these will be recorded within the site diary and appropriate action (remediation and repair work) will be taken to prevent any potential pollution events occurring. Repair work will aim to be completed within 5 working days of the initial defect report.

Operational Procedures

The way in which the site is currently operated will continue in that mobile plant will be used to process the wastes currently permitted. The waste types being applied for within this application are to be bulked and sorted by manual and mechanical means only on site for recovery elsewhere. The process on site will maintain a high turnaround of material to avoid unnecessary stockpile accumulation as this would hamper effective site operations and potentially result in environmental incidents/complaints.

Pre-acceptance procedures

The pre-acceptance procedures adopted at Llantrisant Recycling are in accordance with the Sector Guidance Note 5.06 section 2.1.1. In order to ensure that unsuitable wastes are not accepted onto site; the senior management team will be used to ensure that the materials delivered are suitable to be recovered on site. This will be done by checking that the waste being delivered firstly are coded correctly and secondly whether the EWC code is on the list of permitted wastes at site. The site management will also determine whether the waste is likely to be contaminated. This assessment will be visual only. If it is deemed that the wastes are not suitable to be recovered on site as a result of these procedures; they will not be accepted and will be returned to the waste producer. Upstream assessments will be carried out where possible and if the waste stream is consistent.

A pre-acceptance screening procedure will be used to ensure that the wastes that are being proposed for delivery comply with firstly the requirements of the environmental permit held and secondly, whether the wastes are suitable to be recovered. This process will involve a review of information from the waste producer which may include representative samples of the waste being brought to site before bulk loading inputs.

All waste deposits to be utilised within the above mentioned treatment process will therefore be pre-booked for acceptance to site.

Pre-booked deliveries will have to have the following information assigned to them:

- How the waste was derived including any variability within the process.
- The EWC code assigned for the waste.
- Chemical analysis (if required) and composition of the waste.
- Quantity of waste to be delivered.
- Any hazards within the waste.
- How old is the waste material, and;
- Contingency plans for non-conforming waste should the need arise.

The waste material is to be sourced from the local authority kerb side collections only.

Testing of feedstock supplies will identify the following:

- Nature of the waste and how it has arisen
- Any variations in the feedstock
- Inhibitory values in the feedstock

Wastes should not be accepted at the installation without a clear method or defined treatment and disposal/recovery route with a full costing.

Acceptance procedures

All wastes that are received at Llantrisant Recycling are both visually checked when tipped off and when weighed in at the weighbridge.

Duty of care paperwork is checked by the operative in the weighbridge to ensure that the waste is compliant with the EWCs on the permit of the site. It may be the case, as with some local authorities that a season ticket is used for wastes that are repeat loads.

All vehicles that are depositing materials onto site will be directed to the most appropriate waste reception area by the foreman on site. When the load is tipped off, the contents are visually checked for contaminants and to see if the waste matches that described and coded on the accompanying transfer note.

Due to the nature of the waste and how it is collected, there is inevitably going to be a certain amount of contamination in the waste. In order to remove these contraries an on-site picking operative is to be employed and the material will be picked through in order to remove as many of the contaminants before being batched for onward processing. All contamination will be held in a sealed skip within the building.

Waste will then be stored on the concrete surface waiting for collection for onward processing and recovery elsewhere. The wastes will be bulked up in order to gain enough of a tonnage to make the transport process commercially viable.

For all loads received, a detailed record is kept that will contain the following information:

- Description of waste
- EWC code
- Date and time of delivery
- Weight of load
- Waste carrier registration number

A monthly and quarterly log is kept (for waste return purposes) of all waste that is accepted at site. This log is checked each month and this ensures that the permitted throughput tonnage of 350,000 will not be breached. If this tonnage is at potential breach levels, then waste rejection procedures (detailed below) will be initiated to remain compliant on site.

Batch information is to be retained and used as part of the batching process and will include all information obtained during pre-acceptance, acceptance, storage, treatment and/or removal off-site.

These records will be kept in the site offices in dedicated files so that inspection of loads can be simply carried out.

The tracking system should operate as a waste inventory/stock control system and include as a minimum:

- date of arrival on-site
- producer details
- all previous holders
- a unique reference number
- pre acceptance and acceptance analysis results (chemical and visual) if required
- package type and size
- intended treatment/disposal route
- record accurately the nature and quantity of wastes held on site
- where the waste is physically located in relation to a site plan
- identification of operator staff who have taken any decisions re acceptance or rejection of waste streams and decided upon recovery / disposal options

The adoption of such a tracking system will allow for accurate figures with regards current storage and treatment tonnages on site at any one time to be provided.

The wastes to be added to be the permit for this variation application are detailed within the following table, it is anticipated that a maximum of 20,000T per annum will be required:

EWC Code	Description
15 01 01	Paper & Cardboard Packaging
15 01 02	Plastic Packaging
15 01 04	Metallic Packaging
15 01 05	Composite Packaging
15 01 06	Mixed Packaging
15 01 07	Glass Packaging
17 04 07	Mixed Metals
17 08 02	Gypsum based construction materials
17 09 04	Mixed C&D other than those mentioned in 17 09 01, 17 09 02 & 17 09 03
19 12 01	Paper & Cardboard
19 12 02	Ferrous metal
19 12 03	Non-ferrous metal
19 12 04	Plastic & rubber
19 12 07	Wood
20 01 01	Paper and cardboard

20 01 02	Glass
20 01 08*	Biodegradable kitchen and canteen waste
20 01 39	Plastics
20 01 40	Metals
20 03 01	Mixed municipal wastes
20 03 07	Bulky wastes

*biodegradable wastes will be accepted segregated and stored within sealed skips only. **Batteries (if accepted) will be segregated and stored in appropriate containers pending collection

For any new wastes that are to be accepted onto site, an upstream audit will be carried out throughout the life of the contract, at random intervals. This will ensure that the quality of the wastes remains the same as those that were witnessed in the initial pre-acceptance phase. The risk of accepting these new EWC is not foreseen to increase for site if the correct processes identified within the site specific risk assessment are maintained.

Waste rejection procedures

Waste shall only be accepted at site if it conforms to the list of permitted wastes, if it conforms to the written description of the waste producer and if the tonnage limit allows it.

If, in the unlikely event a waste type is accepted onto site that does not comply with the above then the usual site rejection procedures will be enforced:

- The waste will be separated from any other wastes currently on site and will be stored in a dedicated quarantine bay (if deposited).
- The driver of the load will be instructed to return the load and will provide detailed reasons as to why the load has not been accepted at site (if not deposited).
- NRW will be informed of the non-compliant load and sent a copy of the on-site log of the activity that will detail the origin and carrier of the load.
- The waste will be re-directed from site to another suitably permitted facility (under the control of Tom Prichard Contracting Ltd group if possible).

The quarantine area is a section of the yard that also benefits from concrete and sealed drainage. It is located away from the rest of the waste and product material on site to avoid any potential cross contamination. Due to the waste acceptance procedures on site, it is not foreseen that more than 1 load of rejected material will be physically deposited on site and so the load will be able to fit in a 40yd sealed skip.

The tipped material will be tested (if chemical contamination is suspected) and where appropriate, removed from site to a facility permitted to accept it within 10-15 days (this is to allow for sample analysis to be returned and to correctly classify the waste). If the contamination is physical or the EWC is not as described and so not permitted; this waste will be removed from site within 5 days

and NRW will be notified of it acceptance. An internal investigation will be implemented to prevent this acceptance happening again.

If multiple loads are booked in from the same origin site and 1 load is deposited and subsequently rejected, no further loads will be deposited and all loads will be more closely monitored while still on the delivery trucks. If required, they will not be accepted at Llantrisant Recycling and returned to the waste producer.

Product storage

Materials will be stored within the reception areas. Regular weekly collections will be booked in to ensure that the waste volumes do not build up unnecessarily. Despite the incoming waste being regular, Llantrisant Recycling will always ensure that the weekly input tonnage will be removed within a 4-week period. This will maintain relatively low tonnages being held on site at any one time.

The proposed areas measure approximately 2,250m² (90m x 25m) and 240m² (30m x 8m) consequently has the storage capacity for large waste stockpiles to be held within the site. The storage of the waste will be in accordance with the Fire Prevention & Mitigation Plan guidance.

The stockpiles will have a suitable gap enabling FRS and machine access. No waste will be stored in these areas and the waste will also not be stored on site for longer than 4 weeks. For more detailed information, please see the Fire Prevention and Mitigation Plan (FPMP) attached to this application.

Treatment Procedures

The bulk of the waste that is to be accepted onto the site will be from private contracts and will be directly brought in from the collection site. This section of the accepted wastes will be bulked up and sorted externally and the recovered separate fractions will be stored separately within the building. This material will be stored for a maximum of 4 weeks before being taken to another facility for onward processing/recovery.

The material will be sorted either manually or by the use of a mechanical grab machine within the reception area. This would depend on the volume of waste being accepted in any one day. Llantrisant Recycling would not want the waste being deposited and left until the next load came in as this may be several days; therefore, sorting of the waste would be carried out as soon as the materials are deposited on site.

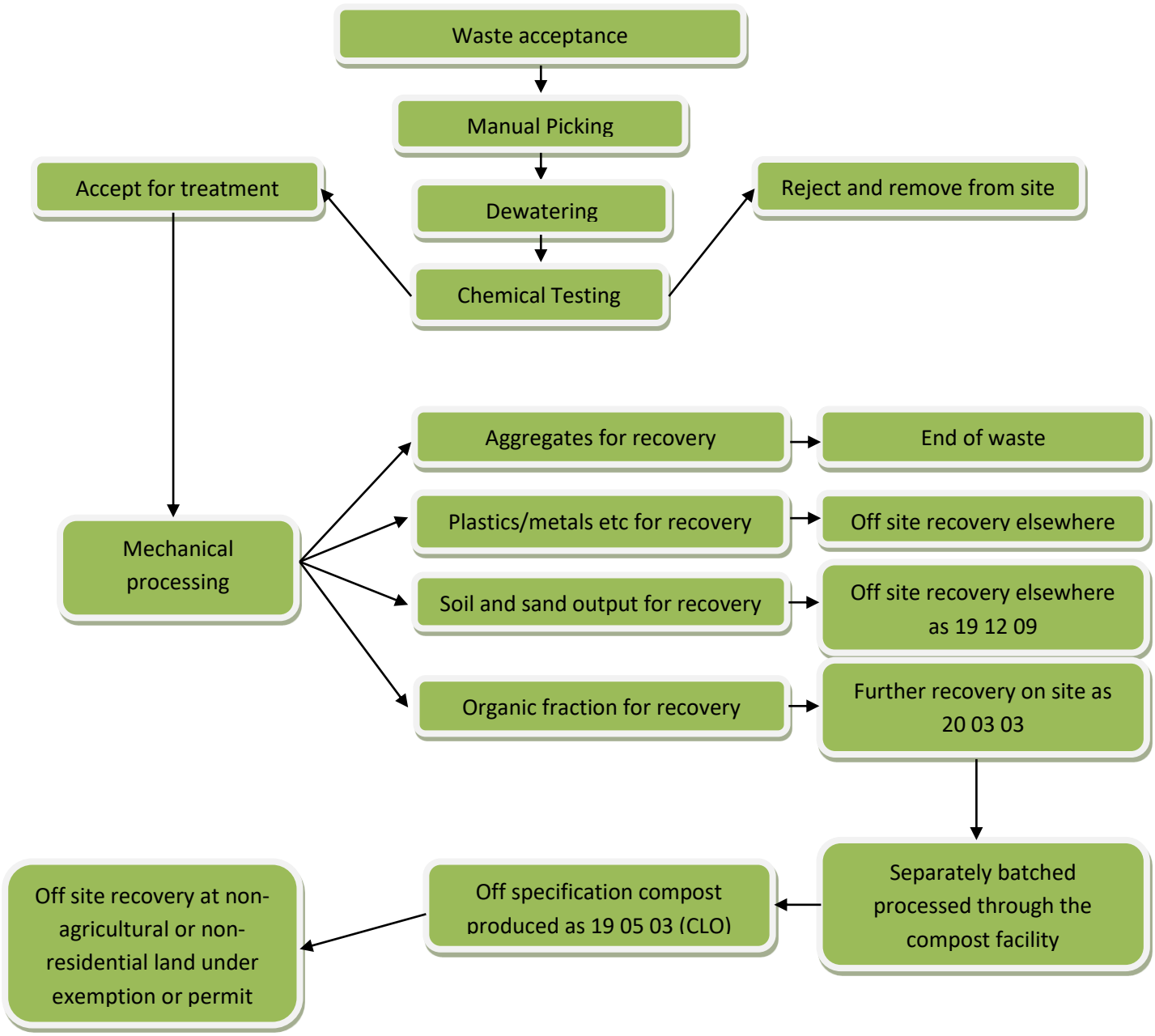
Once the sorting of the waste has been completed the separated fractions will be stored in the dedicated storage bay within the building for each waste type. The separated fractions will then be bulked up to enable the transport to be commercially viable. However, this stage of waste storage will not be for a period of time greater than 4 weeks. All storing of this material will be undertaken within a concrete bay and within the distances committed to within the Fire Prevention & Mitigation Plan that forms part of this variation application.

Tonnage increases

As part of this variation application is the request to allow for an increase in the tonnage of road sweepings accepted at the site.

This application is to increase the permitted acceptance limit from 500T to 15,000T. The increase in tonnage is to allow Llantrisant Recycling to tender for more local authority contracts in the future. The tonnage is not to be added to the total throughput of the site but absorbed within it.

The road sweepings will be stored and treated in the same area as they are currently on site. They are to be deposited and stored on a concrete surface, in a dedicated bay with sealed drainage. However, the storage bay is to be made slightly larger to allow for a storage maximum of 1,500T at any one time. The process for treating the road sweepings will remain as submitted in a previous permit variation application and as is detailed within the EMS for site as shown below:



Accident Management

The processes to be followed in the case of an accident/incident on site are to remain in place and so the site will follow those procedures previously detailed within the EMS submitted to NRW in the original permit application. Any incident response relating to a fire are detailed in the attached FPMP.

Emissions and Monitoring

Generally, the emissions and monitoring of the site activities will be carried out as described within the previously submitted EMS. Odour is not foreseen to increase substantially off site, however the OMP currently in place at the site has been amended to include the new waste types listed in this application. The actual level of noise created at the site is not anticipated to increase beyond what is witnessed at the facility currently. It is of worth noting that there have never been any noise complaints to site in relation to the screening and crushing activities and the bulking up of municipal type wastes are likely to create less noise than these activities.

The screening and crushing activities on site take place at the furthest point away from the closest receptor (approximately 180m); additionally, the activities only take place between the hours 08:00-18:00 Monday-Friday and 08:00-13:00 Saturday. The site also is approximately 6m lower than the surrounding fields with a row of hedges and trees growing along one side of the site, the perimeter bund is also in place to help reduce the noise levels that leave site. The site will continue to maintain and service the plant in accordance with the manufacturer recommendations to help keep the machinery as quiet as possible and working effectively.

Mud, debris and dust will be managed in the way that it is currently on site. The variations will not impact on the levels of these emissions. Llantrisant Recycling has robust procedures in place that will act as sufficient abatement to these risks of pollution. The use of a road sweeper that is stationed at the site during working hours will be used more frequently if required. A water bowser is also stationed at the site for use in periods of high wind and low rainfall to prevent any dust being blown off site from the storage piles. Any loose wastes such as the paper, plastics and card etc are to be stored within the building only when separated and will not be subjected to environmental conditions that encourage wind-blown litter. When stored outside, a netting will be secured to the top of the concrete bunker to prevent any little blowing from the pile.

If the above measures are not working as effectively as required and dust/mud continues to be taken out of site and onto the local highways; Llantrisant Recycling will install a wheel wash on the haul road leaving the site.

The use of the dust suppression systems that are linked to the mobile plant will continue to be used whenever the screening and crushing is taking place; therefore, the increase in waste types is not foreseen to increase the levels of dust produced from processing the material as the mixed wastes will not be put through these treatments.

However, if complaints about noise and dust are received from outside of the permit boundary then an investigation will be initiated. This will include Frisbee monitoring for dust and a noise monitoring programme will be developed that incorporates monitoring of noise levels at several locations at

different times of the operational day. This will enable management at Llantrisant Recycling to identify any patterns in the complaints and noise levels and reduce them.

Odour monitoring will be undertaken in line with those procedures identified within the accompanying OMP.

Plant and vehicle maintenance

Each item of plant and machinery used at Llantrisant Recycling is visually inspected each day before the plant is operated. This includes maintaining equipment specifically to reduce noise levels, for example balancing fans and fixing loose covers. If any defects are noted, these are immediately reported to the plant manager and the defect is fixed either onsite, or if this is not possible, the plant is transported to the maintenance department at Tom Prichard Contracting head offices in Llantrisant where a full repair workshop is sited. When not in use, the plant will be shut off to avoid any potential nuisance being caused by the turning over of the engines.

The plant and machinery are routinely fully serviced and maintained at 6 month and annual time periods to ensure the effective and efficient operation of the site.