

3 SITE OPERATIONS

3.1 Preliminary procedures

3.1.1 Guidance will be given by the site management to all employees, sub-contractors, other waste carriers and customers regarding the waste types and operations which are acceptable at the site i.e. a copy of Appendix III of this document. The site will be used for the waste collection by Thorncliffe Building Supplies Ltd's own skip hire operations and for waste from third-party users, whose details will be checked prior to delivery of waste to the site. The procedures below are followed prior to the receipt of waste on site.

3.1.2 For in-house collections, the driver employed by the permit holder will arrive at the waste producer's premises he/she will inspect the load for conformity with relevant regulations and safety procedures.

- a) If the load is satisfactory the driver will sign the relevant paperwork (Duty of Care transfer note/delivery ticket) and remove the load from the premises.
- b) If the waste does not meet the description stated on the controlled waste transfer note the customer is advised to check the note and give a more detailed description of the waste.
- c) If the more detailed description of the waste reveals that the waste is not permitted at the recycling centre then the customer is advised that the waste must be taken to another site which is appropriately permitted to accept the waste(s).
- d) If further instructions are needed the driver may also report back to the site manager.

3.2 Checking in & inspection of loads

3.2.1 All incoming vehicles are required to report to the site office. The details of the load will be recorded and the Duty of Care transfer note and company documentation will be further checked by the operator to ensure that the load is acceptable at the site. Any deviation from these procedures or problems with any loads will be reported to the site manager.

- 3.2.2 Once a load has been accepted by the operator, the driver will be asked to unsheet the vehicle (if it is sheeted) and a visual inspection of the contents will be carried out to ensure that the waste types comply with the Environmental Permit. The nature of mixed construction/demolition and general skip waste makes full inspection difficult until the load is deposited. If rejected waste is discovered before deposit, the load will remain on the delivery vehicle and will be returned to the producer if possible or disposed of at an approved facility. In cases where the presence of unauthorised waste is likely to lead to a breach of permit conditions, Natural Resources Wales will be contacted immediately to agree a course of action.
- 3.2.3 If the load is acceptable the driver is instructed to deposit it within the relevant waste reception area, as shown on Drawing No. 2875/012/03. If the load is unacceptable after deposit it is loaded back onto the delivery vehicle and returned to the producer if possible. Otherwise Natural Resources Wales are contacted and the load is taken to a suitably permitted or exempt site.
- 3.2.4 Municipal waste accepted for RDF production will be directed to the designated storage and processing building for preparation prior to being exported off site.
- 3.2.5 All loads are pre-booked as part of the waste acceptance procedure as they are either delivered by Thorncliffe's own vehicles or as part of the local authorities contracts.
- 3.2.6 The weight of incoming loads will be derived according to Section 2.6.

3.3 Waste deposit, handling and storage

- 3.3.1 The non hazardous types of wastes accepted at the site do not generally require special storage arrangements. However there may be circumstances when specific characteristics of the waste require special handling and storage. Therefore if those wastes are accepted at the site or are due to storage or weather conditions start to develop these characteristics then the following steps will be taken:

Dusty/dry wastes:

- Waste consisting solely of loose powder will not be accepted
- Damping down with water of dusty wastes
- Particular care will be taken with bonded asbestos as detailed below.

Odorous wastes:

- Waste accepted for RDF production will be stored and processed under cover. Processed material if baled and wrapped may be stored externally on impermeable hardstanding with sealed drainage. All loose RDF will be stored within the building.
- Wastes of a particularly odorous nature will not be accepted at the site.
- If any waste develops an unpleasant odour which could cause detriment to the amenity it will be removed from the site within 24 hours of the odour being apparent.

Solid wastes which are likely to give rise to contaminated run off:

- Such wastes are to be stored on impermeable pavement within the storage and processing transfer buildings.

Combustible waste:

- No flammable or highly flammable waste (H3) will be accepted at the site (with the exception of empty gas bottles which will be stored in a lockable cage).
- All wastes such as paper and wood are to be stored on an impermeable pavement with drainage systems in place or within the transfer buildings (unless accepted under a relevant registered waste exemption).
- All wastes accepted onto site for the production of RDF will be stored within the designated RDF waste transfer building which has sealed drainage to contain any fire water. Storage times and quantities will be strictly adhered to as proposed in the Fire Management plan.

In the future if the baling and wrapping equipment is installed on site, bales of RDF may either be stored under cover or on an impermeable pavement with sealed drainage and the bales will be stored as required in Section 5.1 of the Fire Prevention & Risk Plan.

3.3.2 In addition the hazardous waste accepted at the site ie loads containing asbestos require special storage arrangements.

3.3.3 Once a load has been accepted by the operator the contents of the delivery vehicle are discharged into the appropriate bay/container, the waste treatment processes undertaken at the site generally involve the physical/mechanical sorting and treatment of waste for recovery, e.g

- The physical/mechanical treatment includes sorting and separating of mixed wastes by means of hand sorting and/or mechanical treatment including a picking station and trommel, mechanical air separators, over band magnetic bands, eddy current separators.
- Screening and crushing of unprocessed demolition wastes and soils.
- Shredding of wood
- Baling card, paper,
- Bailing and wrapping of RDF
- Blending of soils and soil substitutes (possible future activity dependant on customer need)

3.3.4 Upon arrival on site the waste will either be directed to the appropriate transfer station building for unloading or if the waste can go directly to one of the external storage areas for wood, green waste, demolition waste, WEEE, gas bottles, waste oil or asbestos it will be directed to the appropriate area for unloading. Waste once unloaded will be sorted and/or treated, if relevant for recycling.

- a) General mixed loads are deposited in the mixed waste reception area and subjected to physical sorting by hand and or mechanical treatment which may include trommel and a picking station, into recyclable materials such as paper/ cardboard, plastics, wood/timber, metals and green waste and the sorted material transferred into the appropriate recycling bay/container which are positioned within the transfer building or located externally as shown on Drawing No. 2875/012/03. If a trommel and picking line are being used on site, the pre-sorted material would be loaded into the trommel screen using the loading shovel or 360° grab for mechanical sorting. The remaining material would then be passed through the picking line station for removal of recyclable materials.
- b) Once the non-combustible element of the waste such as glass and metals has been removed the residual material (lights) may be transferred to the on-site RDF processing building for further treatment or taken off-site to the sister facility at Gofer, Abergele for processing into RDF.
- c) RDF process – mixed municipal waste will be directed to the RDF processing building where it will be shredded using a Doppstadt shredder. The shredded material may then pass through a Nihot air-controlled separator, picking line, eddy current separator to form Refuse Derived Fuel (RDF). The RDF may then be baled and wrapped or may be exported loose off site, to be used by the Energy sector to produce electricity. By baling and wrapping the RDF material will contain the material in transit as it is exported off site to a facility where it will be used to produce energy for the local grid.
- d) The applicant proposes that the resulting waste fines (ie heavy fraction) are themselves transferred to a fines treatment plant for processing to remove further metal and any other recyclables. The Kinetic flow technique process will involve a screening unit throwing the materials violently and high into the air giving time for separation to take place. The screens are self cleaning, the screens allow the apertures in the unit vibrate and stretch slightly, resulting in clean screens and product.
- e) Clean demolition materials and soils are taken direct to the soils and aggregates storage and treatment area to await screening or crushing.
- f) Bulky inert wastes will be further processed to recover saleable aggregates.
- g) Recyclable fractions will be stored in the appropriate bay/skip/container to await onward distribution to an appropriate recycling/recovery facility.

- h) Waste and recyclables are bulked up for transportation for recycling, reuse or for disposal.
 - i) Waste for landfill which is not suitable for recycling is bulked up and stored in the waste for landfill bay to await removal off site for disposal at an appropriately permitted facility.
- 3.3.5 Waste oil accepted on site under S1 or S2 waste exemption and will be directed and stored in a 1250 litre waste oil tank.
- 3.3.6 Any lead acid batteries accepted at the site under a S2 exemption will be separated and placed in an upright position in an acid proof and weatherproof container. No more than 20 batteries will be store at any one time.
- 3.3.7 WEEE accepted under a relevant registered waste exemption will be stored according to the requirements of the WEEE Directive Annex III paragraph 1.
- 3.3.8 Any fridges found in a load will be stored in a clean condition with any foodstuffs removed if necessary. The door or rubber door seal may be removed for health and safety reasons. No treatment will take place on site, instead the fridges are collected by a third party and taken way for degassing and recycling.
- 3.3.9 Bonded asbestos will be accepted at the site and will be immediately segregated into a covered skip which will be stored outside the transfer building on a concreted and drained area of the site. The area designated for the skip is shown on Drawing No. 2875/012/03. The asbestos material will be handled according to the following procedure to ensure that there is minimal disturbance and breakage of sheets. No more than one skip will be stored at any one time:
 - i) Inform customers of requirements regarding bonded asbestos.
 - ii) Check loads of incoming waste for asbestos.
 - iii) Reject all non notified asbestos found in incoming loads.
 - iv) Spray asbestos materials with water to reduce dust hazard.
 - v) Ensure that all staff likely to come into contact with asbestos have been issued with the relevant PPE and trained in its use.

- vi) If the asbestos is not in cement-bonded sheet form consult a specialist contractor for removal (FIBROUS ASBESTOS IS NOT ACCEPTED AT THE SITE).
- vii) Separate from all other waste streams.
- viii) Deposit all asbestos in a enclosed lockable container direct from the delivery vehicle, and spray with water to eliminate any potential dust problems. Spray contents of skip with water prior to adding further waste.
- ix) The skip/container will be loaded with doors open to prevent impact from waste being lowered in the skip. When the skip is half-full, i.e. can not be loaded by hand any longer, loading plant will lower sheets onto existing load.
- x) Where practicable sheets will be wrapped in polyethylene sheeting to reduce dust emissions.
- xi) The container will be secure at the end of the working day.

3.3.10 Any gas bottles found in the loads will be stored upright in a lockable cage and no more than 20 bottles will be stored on site at any one time.

3.3.11 Rejected wastes are deposited in a designated skip/container provided for non-conforming wastes. This occurs when non-conforming waste is discovered after the deposit of a load and the producer of the load cannot be contacted (or identified) or where the removal off-site of the waste may cause further problems. Natural Resources Wales is then contacted to agree a course of action where necessary. The contents of the skip/container will be recorded in the site diary.

3.3.12 When a collection vehicle arrives at the site the driver is instructed to report to the site office or the machine/plant operator. All relevant documentation is completed and the vehicle is passed to pick up the load and take it to the designated recycler/disposal site.

3.4 Record keeping

3.4.1 The details in this section will be recorded on a combination of the record keeping forms listed in Appendix II, invoices and the site diary. Records will be kept in paper/electronic format.

3.4.2 The following details will be recorded for every load deposited at the site (i.e. record form TBS/RF/1):

- i) The date and time of delivery.
- ii) The name and address of the waste producer.
- iii) The detailed and accurate description of the waste including type, quantity (in tonnes and/or cubic metres) and EWC codes.
- iv) How the waste is contained e.g. loose, container type.
- v) The carrier's name and address.
- vi) Driver's name, signature and vehicle registration No.
- vii) Signature or initials of person(s) producing/ accepting/ inspecting/ carrying the waste.
- viii) Additional handling details/notes made by the driver after inspection of the load.
- ix) SIC code of the premises which produced the waste (where relevant).
- x) Waste hierarchy declaration.
- xi) Information on previous treatment of the waste e.g. manual or mechanical.

3.4.3 The following details will be recorded for all deposits of non-conforming waste at the site and will be forwarded to EA, where required (i.e. record form TBS/RF/2):

- i) Date and time of deposit.
- ii) A detailed, accurate description of the waste including type and EWC code.
- iii) The quantity of waste (in tonnes or cubic metres).
- iv) How the waste is contained e.g. loose, container type.
- v) Name, address and telephone No. of waste producer.
- vi) The carrier's name, registration number and vehicle registration.
- vii) Signature or initials of persons who produced, accepting/inspecting and carrying the waste.
- viii) Reason for the rejection of waste and action taken.

3.4.4 The following details will be recorded for every load of waste leaving the site (i.e. record form TBS/RF/3):

- i) The date and time of removal.
- ii) Detailed and accurate description of the waste including type, quantity of waste (in tonnes or cubic metres) and EWC codes.
- iii) How the waste is contained e.g. loose, container type.
- iv) The destination waste management site or exempt facility.
- v) The name and registration No. of the carrier or employee removing the waste (if applicable) and vehicle registration No.
- vi) Signature or initials of persons i.e. transferor, transferee and carrier of the waste.
- vii) SIC code of the premises transferring the waste.
- viii) Waste hierarchy declaration.
- ix) Type of treatment waste subjected to (if relevant) e.g. manual, mechanical.

3.4.5 A summary of waste types and quantities deposited at and removed from the site and origin and destination details are then forwarded to Natural Resources Wales using the standard Generic Operator Returns electronic spreadsheet(s), with submission due within one month of the end of each quarter as below:

- a) Quarter 1: January to March (due on or before 30th April)
- b) Quarter 2: April to June (due on or before 31st July)
- c) Quarter 3: July - September (due on or before 30th September)
- d) Quarter 4: October - December (due on or before 31st January of the following year)

3.4.6 Outcomes of inspections of waste types, hardstanding areas, transfer/treatment areas, storage areas, drainage channels, interceptor, etc., will be recorded on site inspection form TBS/RF/4 and detailed comments will be entered into the site diary (including action taken or proposed).

3.4.7 Visitors to the site will sign the visitor's book upon arrival and exit stating the purpose of their visit and whom they represent (TBS/RF/5).

3.5 Preventative maintenance

- 3.5.1 All items of plant and vehicles are subject to preventative maintenance checks to ensure their safe operation and to prevent any potential situations which may give rise to adverse impacts on the environment.
- 3.5.2 Much of the plant and equipment on site and all vehicles in the fleet are subject to periodic manufacturer maintenance to ensure proper working order in the form of service contracts. Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis to ensure, where possible, the machinery is mechanically sound. These checks will be carried out using the preventative maintenance checklist given as TBS/RF/9 in Appendix II and any results which are flagged as needing attention will also be recorded in the site diary.

3.6 Management Techniques

- 3.6.1 All measures necessary to achieve a high level of protection of the environment and to ensure that the site is operated in accordance with the various management systems and permit conditions will be strictly adhered to.
- 3.6.2 The manner in which the facility is managed is a critical element in ensuring emissions from the site operations are minimised. Therefore the management of the facility ensures:
- staff are competent to manage and operate the facility i.e. fit and proper persons;
 - operational procedures are in place to minimise the risk of odours having regard to the waste types being accepted and the waste processing activities at the facility;
 - waste acceptance are procedures are in place with majority of loads pre-booked as part of the pre-acceptance criteria;
 - appropriate storage and handling procedures are in place;
 - waste despatch procedures are in place;
 - all biodegradable/putrescible wastes are removed from the premises as soon as practicable to minimise risk of odours;

- provision of impermeable surface with kerbing or sloping to protect any adjacent permeable areas;
- wastewater management procedures in place;
- procedures and control techniques in place to minimise potential emissions to air, land and water;
- there is an Environmental Management System (EMS), i.e. this document, in place to ensure standards are maintained, including incidents and complaints management procedures;
- there is a Fire Prevention & Risk Plan in place, and,
- a communication programme is in place.