ENVIROARM LIMITED

WALSALL WOOD SKIPS LIMITED

WALSALL WOOD SKIPS

WORKING PLAN
FOR A
MATERIALS RECYCLING OPERATION

COLLIERS CLOSE, COPPICE SIDE
INDUSTRIAL ESTATE, BROWNHILLS

REF: ARM/SCM/WWSH/1.01/2004

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WALSALL WOOD SKIPS LIMITED

WORKING PLAN

CONTENTS

1. LOCATION

1.1 The Walsall Wood Skips material recycling facility is located 1.5Km west of Brownhills high street and 2km from the centre of Pelsall, in the Metropolitan Borough of Walsall at National Grid Reference SK 035 053 (see Figure 1).

1.2 The site is set within the bounds of the coppice Side Industrial Estate in the yard of the former Pioneer Concrete Works, bound to the north and east by industrial units including a transfer station on Collier Close and to the south by the Anglesey Branch of the Wyrley and Essington Canal, and to the west by a dismantled railway line. The entire former infrastructure with the exception of the hardstanding and the brick built site office have been dismantled and removed.

1.3 This operational Working Plan describes the waste reception, checking and control procedures, and is designed to be updated and modified by the operator when the need arises or due to legislation changes and technical advice and guidance by submitting changes to the text for individual pages or sections. This is a detailed method statement prepared by the operator and may be changed from time to time by way of notification to the Planning Authority and Environment Agency.

1.4 The Waste Management Licence Boundary is set out on Figure 2.

1.5 The site elevation is set at approximately 145m Above Ordnance Datum, based on the Ordnance Survey Pathfinder Map 892, Lichfield and Brownhills, 1:25,000.

1.6 A site investigation has been carried out as part of the Planning requirements and no contamination has been recorded on site, see Appendix F.

2. GENERAL DESCRIPTION

2.1 The materials recycling facility is to be operated in the area shown on Figure 2 and 3. The proposed operational area covers the entire yard surface and would accept acc accept non-hazardous waste from industrial premises, commercial premises and domestic dwellings with the specific exclusion of putrescible household refuse and hazardous waste.

2.2 The site currently has Class B industrial use, which covered the operating of a concrete works on the site.

2.3 The proposed material recycling operations involve the separation and bulking up of commercial and non-hazardous wastes into large body lorries, which are transported to nearby landfill facilities in the area, or are sent to plastic, metal and wood reclaimers, in addition to producing sorted hardcore and soils.

2.4 Wastes segregated from the "light" materials include wood, cardboard and paper which are stored separately for removal to other recycling facilities in the designated storage containers, as shown on Figure 3. The exact location of the containers may change from time to time due to operational demands. Deposition of "light" waste materials will occur within a netted area initially.

2.5 The soil reclamation initially involves the stocking of material from excavation and demolition works operations in the "heavy inert bay". The material is then sorted and screened to produce re-usable end product, and is stored in bays as saleable stock.

2.6 Scrap metals are brought onto site, segregated and stored prior to sale off site.

2.7 This Planning Application Support Statement shows current operations and the longer term proposals over the next couple of years at which point some consolidation can occur following the assessment of the market in light of the implementation of the Landfill Regulations, Waste Strategy and the Aggregate Tax Levy.

3. INFRASTRUCTURE

3.1 General

3.1.1 The site will be used as an operating base for waste transfer and recycling operations as part of the overall material recycling and the following infrastructure is to be provided.

3.2 Access Road

3.2.1 The access road to the site is Collier Close which leads onto Coppice Side. This road is used by other industrial activities. The access to the site is through the main gates previously used by the concrete works. The site access is directly onto Collier Close and clear visibility is allowed to two other industrial units access and egress roads. All deliveries will be through this location. No hedgerows or trees require removing as part of the works.

3.2.2 The road entrance surface will be repaired and maintained as necessary.

3.2.3 Potholes will be infilled with consolidated clean hardcore or sub-base within 5 working days. A stockpile of suitable material will be maintained for this purpose. Permanent repairs will be carried out using concrete or tarmacadam within 10 working days and all repairs will be noted in the site diary.

3.3 Site Car Parking

3.3.1 An area next to the offices is allocated for car parking. This will provide car parking for at least six vehicles. In addition there is enough space provided for bicycle parking. On car park space will be marked for use by disabled people.

3.4 Office/Buildings

3.4.1 Office accommodation will be located in the existing office b an adjacent building at locations shown building as shown on Figure 3 and will be equipped with heat, light, water and telephone links together with appropriate manning. Foul sewage will be discharged to the industrial estate foul sewer. The office will be maintained in a tidy condition externally.

3.5 Fuel Storage

3.5.1 A fuel storage tank bunded to 110% of its capacity will be provided within the planning permission boundary as detailed on Figure 3. The fuel store is bunded to 110% of the holding capacity of the fuel tank. All oil wastes ancilliary to site operations will be collected for safe disposal or recycling. Disposal of any waste oils will be in accordance with the Environmental Protection Act 1990 - Section 34 Duty of Care and the Special Waste Regulations 1996. Sump oils will be contained a bunded compound. The storage area is less than 23,000 litres and waste oils will be collected on a regular basis and in any event, are not to be stored on site for a period exceeding 12 months. An oil interceptor is located on site at the lowest point and will intercept any spillages to prevent unauthorised release into the sewer.

3.6 Security

3.6.1 The site is totally enclosed with a 2 metre high brick supporting front wall and 2 metre high steel gates. A brick wall is also provided to the north and a 2 metre high chain link fence is provided to the west and east. The Wyrley and Essington canal also bounds the southern side of the site.

3.6.2 The bulking and sorting bays are located within a netted enclosure. The future development of the site is to include replacing the netting system with an enclosed building, which would consist of plastic coated steel cladding with a steel roller shutter door. The roller shutter gates would locked outside all operational hours.

3.6.3 The site walls and fences are to be inspected daily and comments are to be included in the site diary by the Site Manager. Repairs, where necessary, will be carried out within 24 hours and all repairs will be reported in the site diary.

3.6.4 Evening security is by means of site dogs allowed free access within the confines of the facility.

3.7 Hardstanding

3.7.1 The existing surface inside the facility for the light and heavy bays and the loading and separation storage skips are on hardstanding. The entire yard is hardstanding. A large percentage of the site has a substantial thickness of concrete placed as part of the infrastructure of the former concrete works and associated structures. It is intended to continue to use such surfaces for the purpose of the materials recycling facility, as these are considered satisfactory on the basis that there has never been a recorded pollution incident relating to surface water discharge from the facility previously. The hard standing is a requisite by the Environment Agency for such a development.

4. WASTE TRANSFER STATION

4.1 General

4.1.1 The whole surface area is to be covered by the planning permission as set out on Figure 2. Figure 3 shows the position of the tipping bay and general layout arrangements for the site.

4.1.2 The site is to be operated in an enclosed netted area initially. The net design is shown as Figure 4.

4.2 Waste Transfer Operations

4.2.1 Skip lorries etc., once loads have entered the site will be directed towards the netted tipping bay once the driver has signed a delivery and deposit ticket/transfer note, in accordance with requirements set out in the Environmental Protection Act 1990, Duty of Care.

4.2.2 Vehicles drive into the enclosed netted area and discharge loads in the designated bay or into or near the separate collection skips if the load is not contaminated with other material, e.g., clean load of paper, clean load of wood etc.

4.2.3 After depositing waste in the "general tipping area" the waste is sorted to remove any wood, paper and cardboard, which is placed in the allocated recycling skips for removal to third party recycling centres.

4.2.4 The waste from the heavy bays is separated for bulk loading and removal to third party inert recycling centres and third party landfill sites. In the event that the market is strong for inert recycled material the Company may wish to use a screen for the purpose of segregation of inert waste. Material would be loaded into the screen or the inert skips by use of a hydraulic excavator or loading shovel.

4.2.5 Waste is loaded into bulkers by use of a wheeled loading shovel or hydraulic excavator and removed to local third party landfill sites under a transfer note system.

4.2.6 The entire surface of the transfer station area is concreted and as such is totally contained.

4.2.7 The transfer bays volumetrically are:

- Heavy: 8m x 5m, with a volume of $80m^3$ and a daily throughput of up to the figure of 40 tonnes.
- General waste tipping: 9m x 6m x 2m, with an operational volume of $108m^3$ and a daily throughput of up to 60 tonnes.

4.2.8 Batteries from lorries and cars associated with the material recycling facility will be stored in a sealed skip unit within the materials recycling facility. The location may change dependent upon operation requirements.

4.3 Hours of Operation

4.3.1 The material recycling transfer station will operate between the following hours;

Mon - Fri	07:30 - 18:00
Sat	07:30 - 13:00

4.3.2 No operations on Sundays or Bank Holidays unless permission is sought from the Mineral Planning Authority and the Environment Agency.

5. WASTE RECYCLING OPERATIONS

5.1 General

The waste recycling operations are to be carried out in the areas shown on Figure 3. This area is to be sub-divided into scrap metal operations, 20m^3, and plastic and wood separation and bulking in the designated skips. Timber skips will hold some 20m^3 of waste wood. Inert materials (e.g. soils, hardcore etc) are separated out in the into the various types, 100m^3.

5.2 Scrap Metal

Scrap metal is separated from the light bay by use of a hydraulic excavator with a magnet or hand sorted. The scrap metal storage bay is 20m^3 shown on Figure 3. A minimum two skips will be provided for ferrous and non-ferrous metals.

5.3 Soil Recovery

5.3.1 General

5.3.1.1 Inert materials such as soils, hardcore, excavation and demolition materials are delivered to the inert recycling area, and are deposited in the "heavy" bay as indicated on Figure 3. Materials may be processed through a screen, and the new processed materials are to be stored in designated storage mounds as set out on Figure 3, either at the end of the screen run or will be stored as inert material designated for third party landfill. Stockpiles will if the market allows be divided into coarse, medium and fine products for aggregates and sub and top-soils.

5.3.2 Specific

5.3.2.1 Materials are to be stored in the "heavy" storage area set out in Figure 3 or are tipped directly into the general tipping area.

5.3.2.2 The processed materials are to be removed and placed in the segregated storage areas as indicated on Figure 3.

5.3.2.3 Total capacity in the storage mound will equate to some 80 tonnes of processed material, of which the material will be reusable and a saleable product.

5.4 Plastic and Wood Recovery

5.4.1 Wood is separated out in the bay manually and placed in the designated wood recycling skip for shredding or removal to a third party wood reclamation facility.

5.4.2 Plastic is sorted out of the light bay manually. The location of the plastic storage skip is shown in Figure 3.

5.5 Paper and Cardboard Recovery

5.5.1 Paper and cardboard are separated out in the bay manually and placed in the designated paper and cardboard recycling skip for removal to a third party paper recycling facility.

5.4.2 Paper and cardboard is sorted out of the light bay. The location of the paper and cardboard storage skip is shown in Figure 3.

6. RECEPTION CONTROL FACILITIES

6.1 General Checking/Ticket Issue

6.1.1 A waste reception clerk will be permanently employed to inspect (as far as is reasonably practicable) all loads on arrival and to issue appropriate tickets to control movements of vehicles to the recycling area or tipping bay. No vehicles will be permitted access to the operational areas without valid tickets, which will act as a transfer note in their own right.

6.1.2 Inspection of all loads prior to deposition will not be possible (covered skips, roll-on-off containers, compaction vehicles etc). Such loads will be inspected by the operator during ejection into the bays in the transfer station area.

6.1.3 A Visitor's Book will be kept and all visitors will be required to report to the Site Manager and be signed in and out.

6.2 Rejection of Materials

6.2.1 Two circumstances of rejection will be possible:

(a) Rejection during initial inspection following discussions between the waste reception clerk and the Site Manager or invalid transfer note.

In those circumstances, materials will be removed off site for disposal elsewhere.

Facilities exist for secure overnight parking if necessary.

(b) Rejection at the bay area during or after deposition.

6.3 Briefing of Operatives

6.3.1 The operators will be fully briefed as to material licensed to be deposited on site and will be under instruction to inspect each load as it is deposited. Staff will undergo periodic training so that they understand the requirements of the Waste Management Licence, Planning Permission, Duty of Care, registration of Waste Carriers and general health and Safety requirements. Staff will be trained to report any irregularity to the Site Manager so that appropriate action can be taken. This will typically be:

(a) Isolate load or item in the working area;

(b) Inform the Site Manager who will inform the Agency;

(c) In consultation with the Agency appropriate actions will be taken.

6.4 Vehicle Circulation Routes

6.4.1 On-Site

Vehicles will be instructed to keep left on the access road and the main site road. In the working area, circulation routes will vary according to operations needs and will be appropriately marked and provisional indications are shown on Figure 4. Arrows show access and egress and general direction of vehicle flow within the MRF with black arrows.

7. OPERATIONAL CONSIDERATIONS

7.1 Dust Controls

7.1.1 The entrance area will be sprayed with water using a bowser when conditions necessitate.

7.1.2 Working areas will also be sprayed if absolutely necessary, although in general terms it is wished to minimise this as an operation, since the exclusion of water from the waste and oil is sought rather than adding to the loading to assist in screening and reduce bulk haulage payloads.

7.1.3 Operatives working in the area of waste deposition will be provided with equipment appropriate to their task and environment which is sufficient to comply with any relevant Code of Practice or regulation, e.g. personal protective clothing, face masks, safety boots etc. All operatives will be appropriately trained, and will be required to attend courses organised by the Company to acquaint themselves with current legislation and practices.

7.2 Mud on Roads

7.2.1 The site egress will be equipped with a concrete surface on which all vehicles leaving the site will pass and use. The haul distance to the main public highway is over 25m from the tipping bay and no mud problems are envisaged with this haul distance.

7.2.2 In the case of emergency or when conditions dictate, road sweeping equipment will be hired locally on an ad hoc basis.

7.3 Dust Suppression

7.3.1 At the direction of the Site Manager, spraying to suppress dust will be carried out. A bowser will be available when required for such circumstances. In addition, skirts will be added to any potential screen to be used on site. Dust management is detailed in Appendix C.

7.4 Record Keeping

7.4.1 Records will be kept on site regarding levels of waste input for the purpose of Monthly or Quarterly waste returns, Waste disposal plans or otherwise.

7.4.2 Input will be recorded in terms of tonnes per month of each category and will be forwarded to the Environment Agency monthly within 14 working days of the month end by the Site Manager on waste return forms to be agreed with the Environment Agency.

7.4.3 The following records are to be kept on site for the legally required time limits or kept until an application for licence surrender has been made. This will include:

- The site diary;
- Transfer notes;
- Section 62 consignment notes;
- Tip tickets.

7.4.4 These records will be recorded and files as master copies and/or photocopies and will be stored on site in a filing system. Depending upon operations, a permanent storage container for records may need to be used, this will consist of a metal storage container, the final position of this container will be agreed with the Mineral Planning Authority when required.

7.5 Manning Levels

7.5.1 The staffing requirements for the transfer and recycling site are as follows:

Site Manager (COTC Level TSB 4 & TMI 3)	1
Waste Reception Clerk	1
Plant Operatives	2
Waste Skip Vehicle Drivers	2
Full time Staff	6

7.6 Plant and Machinery

7.6.1 Appropriate static and mobile plant will be employed. It is anticipated that this will include:

7.6.2 Transfer Station

1 No. Hydraulic Excavator
1 No. Litter Net
1 No. Loading Shovel

7.6.3 Soil Recycling Area

1 No. Powerscreen or similar
1 No. Hydraulic Excavator

7.6.4 General

2 No. Skip Units
10No. Skips

7.7 Site Identification

7.7.1 An identification board of durable material and finish shall be permanently displayed at the main entrance to the site. This shall show the site name, address, licence number, the name and address of the Environment Agency, the name and address of the Operator, hours for receipt of waste and an emergency contact number.

7.8 Surface Water Discharges

7.8.1 An oil water interceptor is installed at the site and has been left as part of the infrastructure from the former concrete works. The fall of the yard is to the oil interceptor. In the event of water ponding within the yard area a collection sump will be constructed.

Any spillage's inside the materials recycling facility will be soaked up using sand, permanently stored in the building.

7.9 Noise Monitoring

7.9.1 Noise monitoring for personnel will be undertaken in accordance with the Risk Assessment, see Appendix D and E. It is likely that a noise restriction is set for the site not exceeding 55dBa.

7.9.2 Noise monitoring will be undertaken on a quarterly basis in accordance with the planning permission to ensure operations remain within the set levels.

7.9.3 Instrumentation used for sound measurement purposes shall conform to British Standards 5969: 1981 and 6698: 1986, Type 1 Precision Grade, as appropriate.

7.9.4 Calibration of the instrument shall be by way of a known acoustical sound reference shall possess a certificate of calibration traceable to a National Standard.

7.10 Nuisance

7.10.1 The Company considers that as the operations are to be entirely netted, litter will not be a problem. The nets will also help to discourage birds. Litter will be picked from the nets using a hand held extension grab and will be removed from any perimeter fencing. The nearest potential source receptor that could be affected by wind blown litter would be the canal. The following provisions are to be provided;

- mechanical hand held litter picker that can remove any litter found in the canal,
- to clean the site on a daily basis,
- check the perimeter fence and canal on a daily basis.

7.10.2 In the unlikely event of odours being produced, odourmasking will be adopted. The Company will control odour by the following means;

- to not allow household putrescible waste to be deposited at the site
- turn waste around so that no waste remains on site for longer than 48 hours
- to spray the waste tipping bay with odour mask in the event of detection of smells

7.10.3 The Company will use bait to control rodents on site. A third party pest control company will be employed on a regular basis to check for pests and undertake necessary control measures. The company will sign the diary and leave a copy of any inspection reports made.

7.10.4 The yard is fully hardstanding. It is unlikely that mud and debris will become an issue. In the event of mud being deposited on the highway, the Company will employ a roadsweeper on an adhoc basis as and when conditions necessitate.

7.10.5 Detailed management plans are set out bin Appendices A, B, C and D.

8. WASTE TYPES

8.1 General

8.1.1 The materials recycling facility will accept non hazardous commercial and industrial waste and non putrescible waste from households, primarily as builders waste. The site will not accept hazardous waste including Special Waste or any sludges or liquid wastes.

8.2 Waste Tonnages and Vehicle Movements

8.2.1 The maximum amount of waste to be accepted at the facility in any one year will not exceed 24,999 tonnes per annum. This equates to 2000 tonnes per month or 100 tonnes per day. The maximum amount of vehicles per day would therefore not exceed twenty vehicles delivering waste to the facility. Previously, more vehicles than this used the concrete works per day, and over 100 vehicles per day used to deliver waste to the Birch Coppice landfill site on Coppice Side. It is reasonable to assume that the vehicle movements therefore have no significant impact .

8.3 Specific Wste Types EWL Codes

8.3.1 The waste codes are set out below based on the European Waste Classification List. Description of the waste types is available in the Directive. A comprehensive list is produced separately.

01 01
01 01 01
01 01 02
01 04 08
01 04 09
01 04 11
01 04 13

02 01
02 01 01
02 01 04
02 01 07
02 01 09
02 01 10

02 03

02 04
02 04 01
02 04 02
02 04 03

02 05
02 05 01

02 06
02 06 01

02 07
02 07 01

03 01

03 01 01
03 01 05

03 02

03 02 04

03 03

03 03 01
03 03 08
03 03 09

04 02

04 02 10
04 02 22

07 02

07 02 13
07 02 16

08 01

08 01 21

08 02

08 02 01

10 02

10 02 01
10 02 02

10 03

10 03 05

10 09

10 09 03
01 09 05

10 10

10 10 03
10 10 05

10 11

10 11 03
10 11 09
10 11 12

10 12

10 12 01
10 12 06
10 12 12

15 01

15 01 01
15 01 02
15 01 03
15 01 04
15 01 05
15 01 06
15 01 07
15 01 09

15 02

15 02 03

17 01

17 01 01
17 01 02
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17 01 07

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17 02 02
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17 04 01
17 04 02
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17 04 05
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17 04 07

17 05

17 05 04
17 05 08

19 12

19 12 01
19 12 02
19 12 03
19 12 04
19 12 05
19 12 08
19 12 09
19 12 12

20 01

20 01 01
20 01 02
20 01 08
20 01 10
20 01 11
20 01 39
20 01 40

20 02

20 02 01
20 02 03

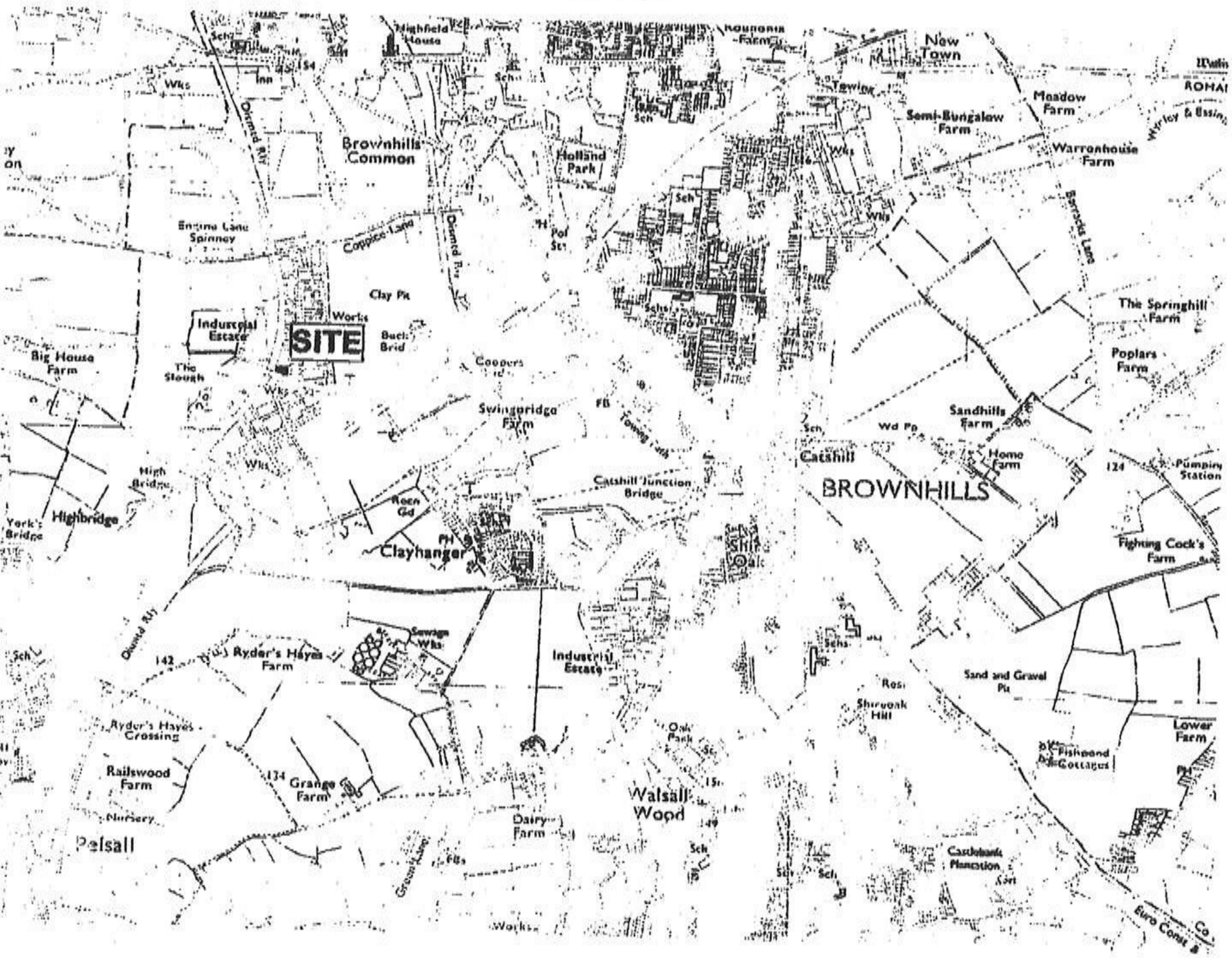
20 03

20 03 01
20 03 02
20 03 03
20 03 07

FIGURES

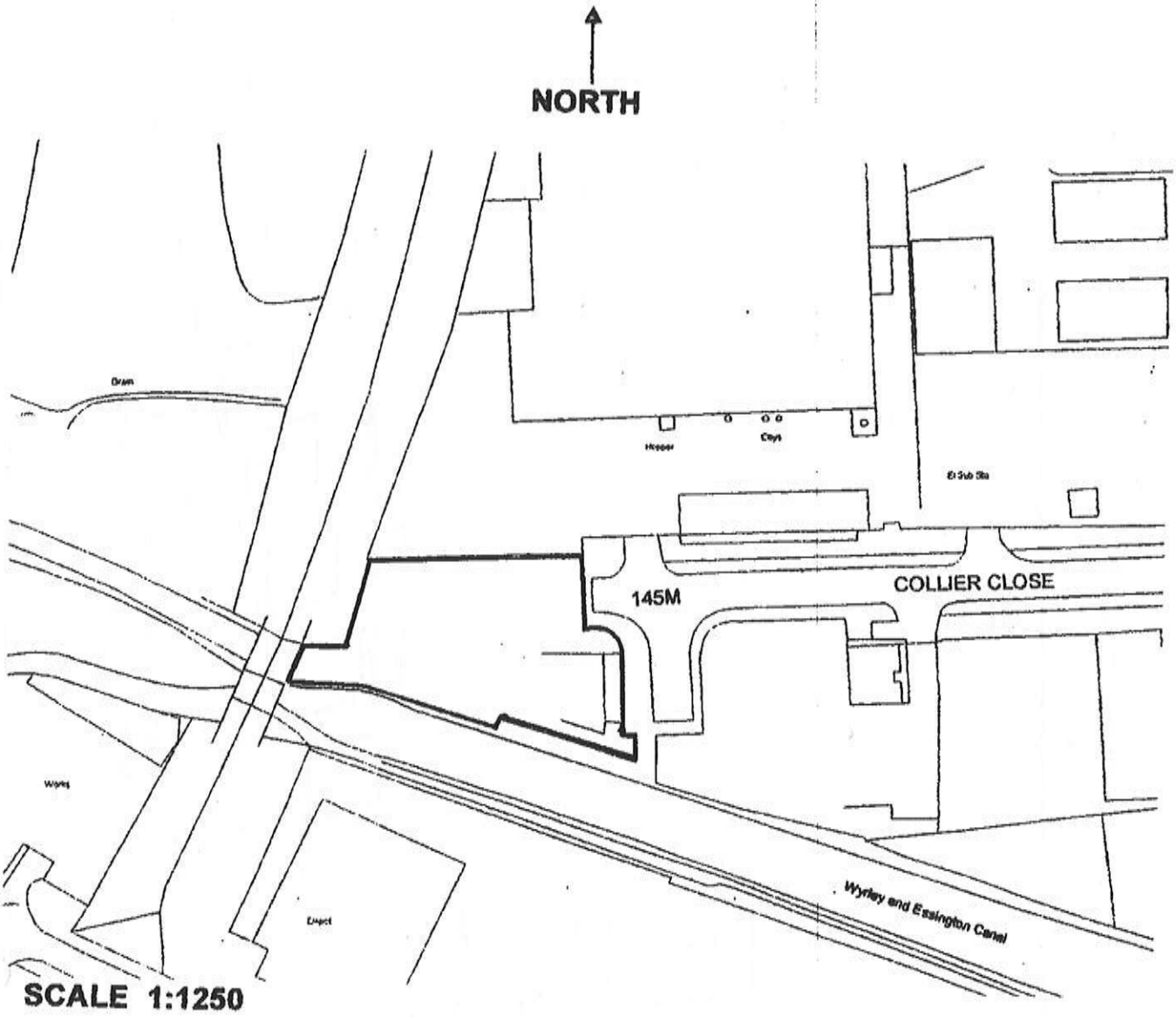
↑

North



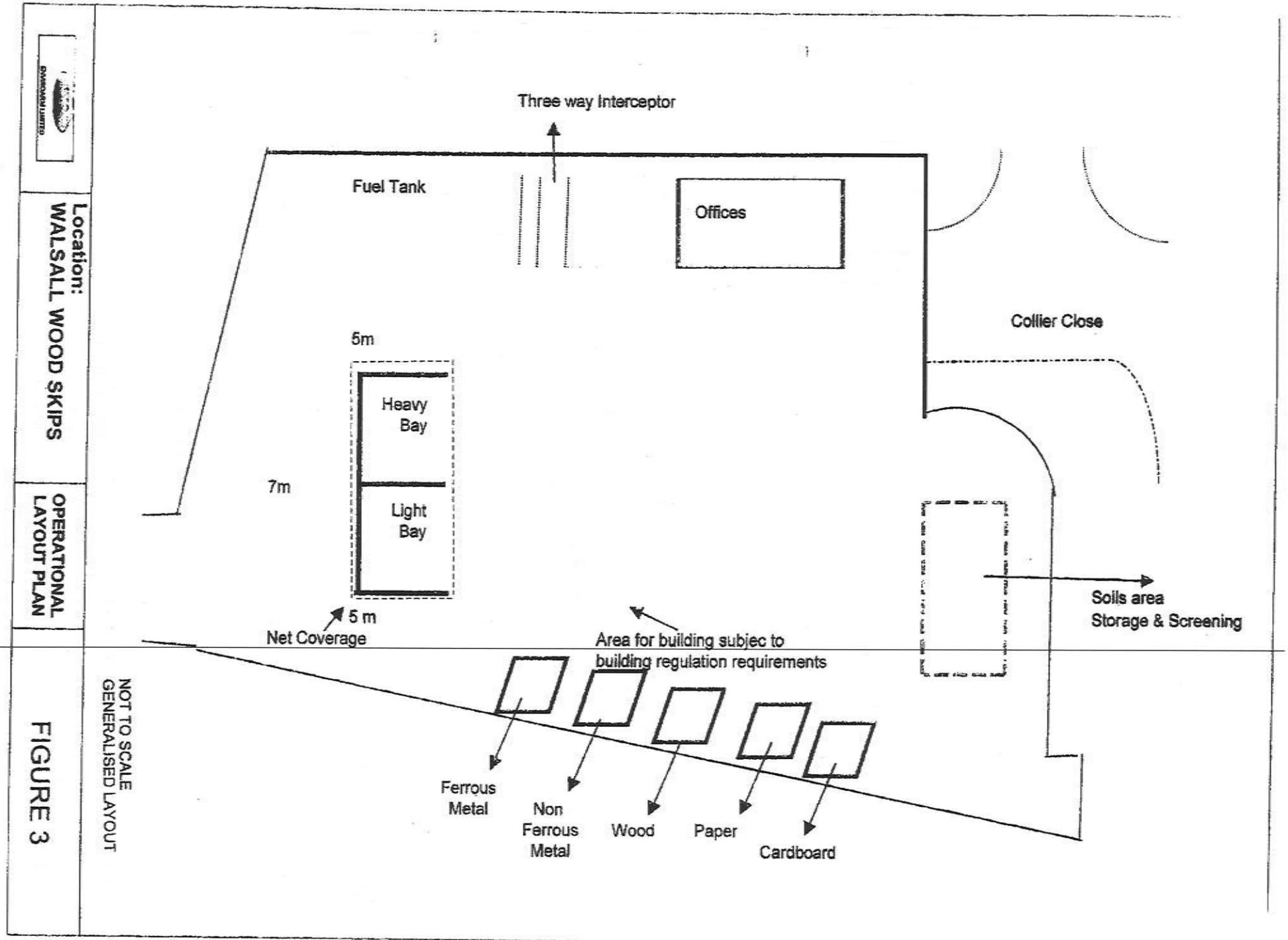
Licence No. AL543691

	Location: WALSALL WOOD SKIPS	SITE LOCATION PLAN	FIGURE 1



Licence No. AL543691

	Location: WALSALL WOOD SKIPS	SITE PLANNING PERMISSION AND WASTE MANAGEMENT LICENCE BOUNDARY	FIGURE 2


Location:
WALSALL WOOD SKIPS
OPERATIONAL LAYOUT PLAN
FIGURE 3
NOT TO SCALE
GENERALISED LAYOUT
Three way Interceptor
Fuel Tank
Offices
Collier Close
5m
Heavy Bay
Light Bay
7m
5 m
Net Coverage
Area for building subjec to building regulation requirements
Soils area
Storage & Screening
Ferrous Metal
Non Ferrous Metal
Wood
Paper
Cardboard

Location:
WALSALL WOOD SKIPS

TIPPING BAY CONSTRUCTION DETAILS

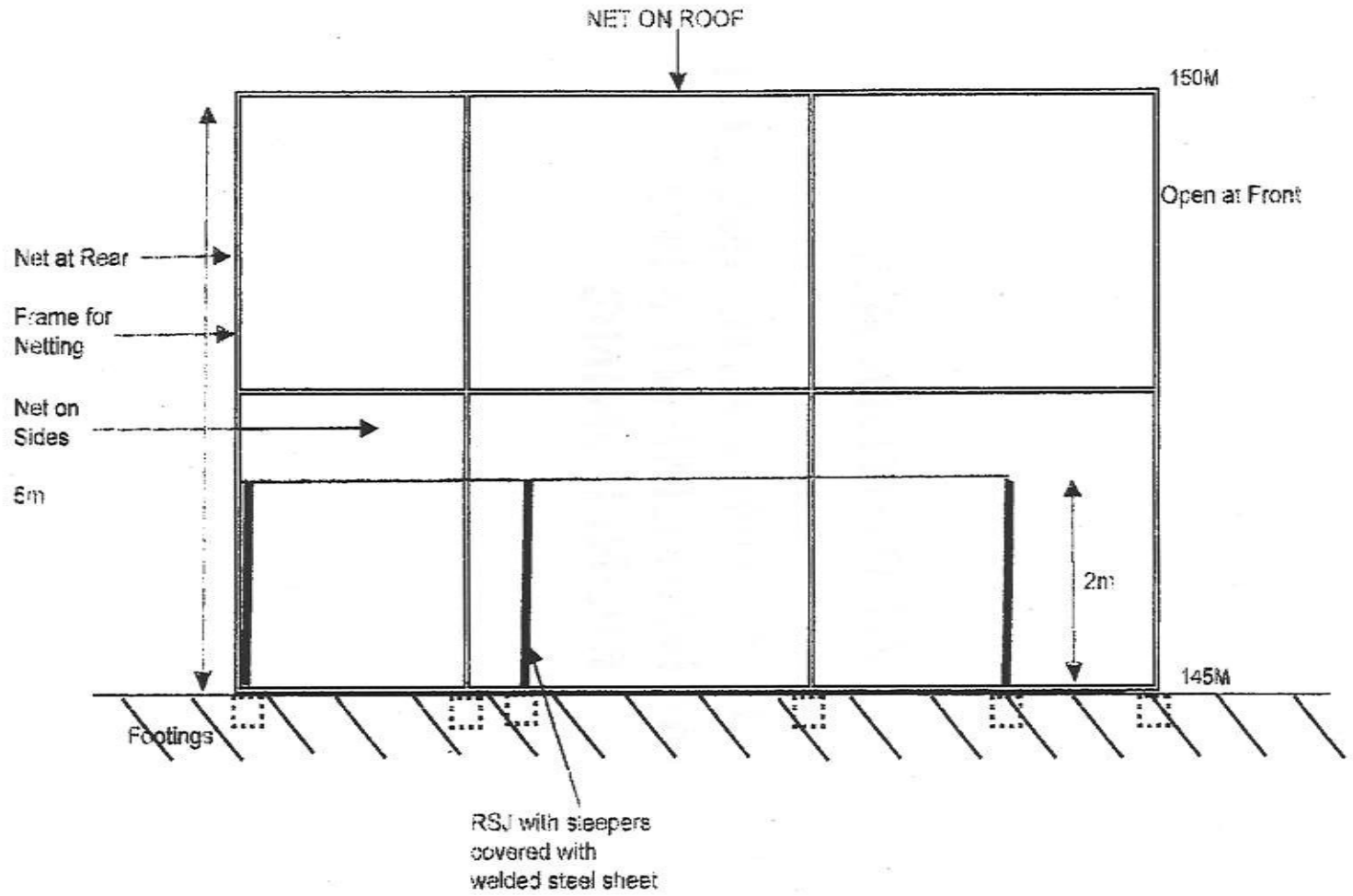


FIGURE 4

APPENDIX A:

BIRDS, VERMIN AND INSECT MANAGEMENT AND MONITORING

WALSALL WOOD SKIPS

Birds, Vermin and Insects Management and Monitoring

1. Risk Assessment

1.1 See assessment for litter dust odours etc and generic assessment matrix

2. Management Techniques

2.1 The control of birds, vermin and insects – generally, vectors of disease – is essentially the same for all species. This relies on effective monitoring for advance detection, good housekeeping at the active sorting bay, avoidance of the local creation of habitats conducive to breeding, and, ultimately, control techniques including chemical biocides where necessary.

2.2 So far as operational practice is concerned, non-hazardous biodegradable wastes are to be discharged, sorted, compacted and removed as quickly as is possible but with minimum physical disturbance, and within a period of 48 hours. This is to be ensured by employing only trained and experienced mobile plant operators.

2.3 Sorting and tipping bays will be netted and all skips used for separate storage will be netted or enclosed.

2.4 Bird control is not considered to be a problem at such a facility, as the waste types will be smaller in quantity and will not contain putrescing waste, which would for example be accepted at a Public Waste Disposal Facility. In the extremely unlikely evet that birds became a problem the Company would rely upon rely upon the use of intermittent gas canons since this has proved effective at other sites. Typically birds tend to be a problem at landfill sites as opposed to transfer stations. In the extremely unlikely event of habituation by gulls and other carrion, a selection of pre-recorded distress calls, aerial kites and/or helium balloons are to be deployed. If these prove ineffective, birds of prey are to be employed from professional Contractors or appropriately trained Company personnel.

2.5 Vermin control is to rely upon baiting at appropriate times and places as recommended by professional Contractors.

2.6 Insect control is to rely upon a mixture of pre-emergence and post-emergence insecticides as recommended by professional Contractors or appropriately trained Company personnel. Preparations will comply with the applicable Pesticides Regulations.

2.7 There is a residual risk that, despite the avoidance and prevention measures described previously, there may still be an unacceptable presence of insects at the site. It will be a subjective judgment of the site manager as to whether or not such a presence is liable to leave the site boundary and present a nuisance to others.

2.8 If there is a real risk of birds, vermin and/or insects leaving the site and becoming a nuisance to others, the site manager is to close the site to those operations that are giving rise to the nuisance. In reaching this decision, the wind speed and direction are to be taken into account together with the location and proximity of the nearest sensitive receptors.

3. Monitoring Régime

3.1 The Company expects and requires its management, staff and site operatives to be vigilant in visually monitoring for and assessing the potential of both on-site and off-site nuisance from the presence of birds, vermin and/or insects and to take appropriate remedial and corrective action. Such visual assessment for birds, insects, rodents etc is to be undertaken at least on a working daily basis.

3.2 All such assessments and instances of remedial and corrective action are to be recorded in writing in the site diary.

3.3 In any event, daily meteorological monitoring will assist in managing and monitoring any off-site migration of birds, vermin and/or insects.

3.4 Additionally, and as noted in the Section dealing with the Waste Acceptance Procedures at the site, staff will have prior knowledge of the types of wastes due for delivery. This provides an opportunity to divert wastes from the site when particular problems might be envisaged for the time being.

3.5 At the site itself, the checking and booking in of waste provides a final opportunity to reject any loads that might present a particular problem during the prevailing weather conditions, odours or potential to fly infestation etc.

3.6 Vigilance in inspection wastes at reception and at the tipping bay will reveal the presence of vermin and/or insects in any particular load and inform the need for appropriate control measures.

APPENDIX B:

ODOUR MANAGEMENT PLAN

WALSALL WOOD SKIP HIRE
MATERIAL RECYCLING FACILITY

ODOUR MANAGEMENT PLAN

1. Risk Assessment

1.1 See risk assessment matrix for the site using wind rose.

2. Point Source Emissions

2.1 The site storage tank for gas oil is a potential source of odours from liberation of volatile organic compounds during its filling, during ambient storage and when being used to fuel mobile plant or equipment.

2.2 The Company expects and requires its management, staff and site operatives diligently to ensure that all fuelling operations are carried out with care so as to avoid spillages and thereby control consequent emissions of odour to the practicable minimum.

2.3 This diligence is to extend to effective supervision of any Contractors employed to use any such plant and equipment and to its refuelling.

2.4 Any spillages are to be treated with absorbent materials without unjustifiable delay and those materials properly disposed.

2.5 Individual loads of waste that may give rise to odours are required to be treated at source so as to reduce their odours where practicable.

2.6 Any and all deliveries of wastes that are inherently odorous are to be removed as soon as possible and within at least 24 hours. Generally waste is removed within 48 hours to stop odours developing from degradation of the waste in the storage bays.

3. Area Emissions

3.1 There is a risk of emissions of odours to atmosphere arising from adverse chemical interactions between wastes and from the long-term biodegradation of organic fractions in the waste transfer bays.

3.2 Sufficient and speedy removal by bulking and transferring waste is the most effective way to control and minimise any such odours. This is carried out by ensuring that waste is turned around within a 48 hour period to ensure that the waste bays are constantly emptied.

3.3 There is a residual risk that, despite the avoidance and prevention measures described previously, there may still be odours emitted from the site operations. It will be a subjective judgment of the site manager as to whether or not such odours are liable to leave the site boundary and present a nuisance to others.

3.4 If there is a real risk of odours becoming a nuisance to others, the site manager is to close the site to those operations that are giving rise to the nuisance without justifiable delay. In reaching this decision, the wind speed and direction are to be taken into account together with the location and proximity of the nearest sensitive receptors.

3.5 In the unlikely event of a long-term problem with odours at the site, chemical countervailant sprays may be necessary.

4. Odour Monitoring

4.1 On the basis of past experience at the site, the nature of anticipated wastes to be delivered and the disposition of the site itself with respect to sensitive receptors, no particular measures are to be deployed for the routine monitoring of odours.

4.2 Nevertheless, the Company expects and requires its management, staff and site operatives to be vigilant in monitoring for and assessing the potential of off-site nuisance of odours and to take appropriate remedial and corrective action without unjustifiable delay. Such olfactory assessment for odours is to be undertaken at least on a working daily basis.

4.3 All such assessments and instances of remedial and corrective action are to be recorded in writing in the site diary.

4.4 Should a particular problem arise or persist, a more extensive odour-monitoring programme will be implemented at and around the site in accordance with a programme to be submitted for approval to the Planning Authority and Environment Agency.

4.5 In the event of any complaint about unacceptable odour either at or leaving the site, the details of the complaint are to be recorded in writing, the basis for the complaint is to be investigated and, if deemed to be justified, appropriate remedial action is to be taken to mitigate the complaint. The results of the action are to be noted and their effectiveness assessed and recorded.

5. 'Problem' Wastes

5.1 Particular care is to be taken on receipt of the following wastes as to their potential to give rise to dust nuisance, assuming they are classified as industrial or commercial wastes accepted at the facility: —

S31	**Wood**
S60	**Paper**
S61	**Cardboard**
S40	**Leather**
S32	**Trees, bushes, grass, weeds and hedge cuttings**

5.2 Any such wastes will be expected to have been treated at source to minimise inherent odour nuisance.

5.3 Any and all such wastes are to be transported within the site, discharged, and removed as quickly as possible, and at least within 48 hours.

5.4 It may, nevertheless, be necessary to close the site on occasions to some or all of these waste types and management is expected to take such decisions as are appropriate and to record such actions.

5.5 Odour monitoring will be by way of visual assessment of detectable smell at the boundary of the site.

APPENDIX C:

PARTICULATE MANAGEMENT PLAN

WALSALL WOOD SKIPS

MATERIAL RECYCLING FACILITY

PARTICULATE MANAGEMENT PLAN

1. Risk Assessment

1.1 See risk assessment and risk matrix for the site using wind rose.

2. Point Source Emissions

2.1 Mobile plant and pumps are potential point sources of emissions of particulates to air. The principal type of such emissions would be unburned or part-burned fuel oil in exhausts from internal combustion engines (black smoke).

2.2 Only proprietary plant and equipment of reputable manufacture and supply are to be deployed and used at the site.

2.3 The Company expects and requires its management, staff and site operatives diligently to ensure that manufacturers' instructions for routine maintenance and repair of such equipment are carried out so as to control such emissions to the practicable minimum.

2.4 This diligence is to extend to effective supervision of any Contractors employed to use any such plant and equipment or to carry out such maintenance and repair.

2.5 In instances where emissions become visually noticeable and unacceptable, equipment is to be replaced and withdrawn from service without unjustifiable delay and more effective repairs attempted.

2.6 If repairs are ultimately effective, the equipment can be put back into service. If emissions remain unacceptable even after repair, the equipment is not to be used on site again.

3. Fugitive Emissions

3.1 There is a risk of emissions of particulates to atmosphere arising from the raw wastes themselves during delivery in vehicles. Where vehicles do not have enclosed bodies, instructions will be given to customers to sheet or net open bodied vehicles and/or containers to minimise such emissions.

3.2 Emissions of particulates from incoming wastes are intimately associated with escape of litter or dust.

3.3 There is a risk of emissions of particulates to atmosphere from vehicles driving along the site yard area both when delivering waste loads and returning empty onto the public highway. This risk is to be minimised by sweeping the hard surfaced site roads and public roads (as necessary and without unjustifiable delay) and by using water damping sprays delivered from a point source water supply near to the site entrance. A film of water is to be visible on the site roads during dry and windy weather conditions that would otherwise allow dust to blow from the site.

3.4 There is to be imposed a speed limit of 5 miles per hour and appropriate signage is to be displayed by way of instructions to site users.

3.5 There is a risk of emissions of particulates to atmosphere when vehicles are discharging their loads in the tipping bays. This is particularly so where fine and dry wastes are involved. Such emissions are to be minimised by ensuring that dusty loads can be tipped inside the bay area and/or by damping down such loads with water before or during tipping. Wastes that are particularly dusty are to be covered down with non-dusty wastes as quickly as possible within the tipping bays.

3.6 Wastes are to be discharged, emplaced, crushed and covered down where necessary, as quickly as is possible but with minimum physical disturbance. This is to be ensured by employing only trained and experienced mobile plant drivers.

3.7 Tipping occurs inside designated enclosed tipping bays. To help reduce wind flow through the site a site security wall has been constructed and will be properly maintained.

3.8 There is a residual risk that, despite the avoidance and prevention measures described previously, there may still be particulate matter emitted into the atmosphere. It will be a subjective judgment of the site manager as to whether or not such emissions are liable to leave the site boundary and present a nuisance to others.

3.9 If there is a real risk of particulate matter leaving the site and becoming a nuisance to others, the site manager is to close the site to those operations that are giving rise to the nuisance without unjustifiable delay. In reaching this decision, the wind speed and direction are to be taken into account together with the location and proximity of the nearest sensitive receptors.

3.10 The most obvious and sensitive receptor in the path of the most common wind direction is the adjacent industrial factories and housing some +500 metres to the north east down wind and houses 250 metres away upwind on the Pelsall Road. This is to be monitored if there is a prospect of dust leaving the site and used to inform site management of any decision on closure of individual operations: staining or filming on the surrounding fields or the canal will be a good indication that dust levels leaving the site are unacceptable.

4. Particulates Monitoring

4.1 On the basis of past experience at similar types of site, the nature of wastes anticipated to be delivered and the disposition of the site itself with respect to sensitive receptors, no particular measures are to be deployed for the routine monitoring of particulate matter emissions to atmosphere.

4.2 Nevertheless, the Company expects and requires its management, staff and site operatives to be vigilant in visually monitoring for and assessing the potential of off-site nuisance of particulate emissions and to take appropriate remedial and corrective action without unjustifiable delay. Such visual assessment for dust/particulates is to be undertaken at least on a working daily basis.

4.3 All such assessments and instances of remedial and corrective action are to be recorded in writing in the site diary.

4.4 In any event, daily meteorological monitoring, will assist in managing and monitoring particulate matter emissions.

4.5 Additionally, and as noted in the Section dealing with the Waste Acceptance Procedures at the site, staff will have prior knowledge of the types of wastes due for delivery owing to their having been subjected to 'Level 1 - Basic Characterisation' testing. This provides an opportunity to divert wastes from the site when particular problems might be envisaged for the time being.

4.6 At the site itself, the 'Level 3 - On-site Verification' testing provides a final opportunity to reject any loads that might present a particular problem during the prevailing weather conditions.

4.7 Should a particular problem arise or persist, particulate monitoring equipment is to be deployed at the site in accordance with a programme to be submitted for approval to the Planning Authority and Environment Agency.

4.8 Any such programme will conform to the requirements and recommendations in '*Technical Guidance Document M17: Monitoring of Particulate Matter in Ambient Air around Waste Facilities*' of the Environment Agency.

4.9 Any equipment so deployed is to be of proprietary manufacture and/or supply and operated in accordance with user's instructions. Such equipment will most probably comprise deposition gauges and gravimetric analysis: these would be deployed at appropriate locations at the site boundary and at or near the façade of any built receptors. All such monitoring results are to be recorded in writing.

4.10 Bioaerosols are not expected to be a problem at the site since wastes are to be removed within a 48-hour period from receipt at the site.

4.11 Thus, there is not to be any monitoring proposed for bioaerosols.

4.12 In the event of any complaint about particulate matter either at or leaving the site, the details of the complaint are to be recorded in writing, the basis for the complaint is to be investigated and, if deemed to be justified, appropriate remedial action is to be taken to mitigate the complaint. The results of the action are to be noted and their effectiveness assessed and recorded.

5. 'Problem' Wastes

5.1 Particular care is to be taken on receipt of the following wastes as to their potential to give rise to dust nuisance: —

J27 Sand
S93 Silica
S31 Wood(including sawdust, sander dust
J90 Plasterboard
L20 Plastics
J28 Cement
J22 Foundry Sand
S93 Unsorted demolition waste

5.2 All such wastes are to be transported within the site discharged and loaded with extra care and attention.

5.3 Customers making regular deliveries of 'problem wastes' will be encouraged to use bags or sacks instead of loose load deliveries.

5.4 It may, nevertheless, be necessary to close the site on occasions to some or all of these waste types and management is expected to take such decisions as are appropriate and to record such actions.

APPENDIX D:

NOISE MANAGEMENT PLAN

WALSALL WOOD SKIPS

MATERIAL RECYCLING FACILITY

NOISE AND VIBRATION MANAGEMENT PLAN

1. Risk Assessment

1.1 See risk assessment matrix

2. Fixed/Mobile Sources

2.1 There is no fixed plant currently used on site, and all proposed plant will be mobile.

2.2 Mobile plant and equipment to be deployed at the site will includea wheeled loading shovel and 360° hydraulic excavator for normal, daily use. In addition screens are used and potentially crushers could be operated under an Authorisation.

2.3 Only proprietary plant and equipment of reputable manufacture and supply are to be deployed and used at the site. Such plant and equipment will be fitted with appropriate silencers and/or acoustic deadening panels, insulation, etc. where required by Regulations.

2.4 The Company expects and requires its management, staff and site operatives diligently to ensure that manufacturers' instructions for routine maintenance and operation of such equipment are carried out so as to control noise emissions to the practicable minimum.

2.5 This diligence is to extend to effective supervision of any Contractors employed to operate any such plant and equipment or to carry out maintenance and repair.

2.6 In instances where noise and/or vibration nuisance become noticeable and unacceptable, equipment is to be replaced and withdrawn from service without unjustifiable delay.

2.7 If repairs are ultimately effective, the equipment can be put back into service. If emissions remain unacceptable even after repair, the equipment is not to be used on site again.

3. Operational Sources

3.1 Vehicles delivering wastes to the site will produce noise and vibrations during their travel to/from the site and manoeuvring at the site itself.

3.2 Site yard surfaces are to be constructed and maintained such that steep gradients that the surface reduces rumble by maintaining a surface free of potholes as far as is reasonably practicable.

3.3 There is to be imposed a speed limit of 5 miles per hour and appropriate signage is to be displayed by way of instructions to site users.

3.4 There is a risk of noise and vibration when vehicles are discharging their loads in the tipping bays. Nuisance is to be minimised by requiring good operational practice by drivers (or example, avoiding banging open doors, shutters, etc. on vehicle/container bodies) and arranging tipping into the enclosed bays.

3.5 There is a residual risk that, despite the avoidance and prevention measures described previously, there may still be noise and/or vibration nuisance evident from site operations. It will be a subjective judgment of the site manager as to whether or not such noise/vibration is liable to become a nuisance to others.

3.6 If there is a real risk of such a nuisance to others, the site manager is to close the site to those operations that are giving rise to the nuisance without unjustifiable delay. In reaching this decision, the wind speed and direction are to be taken into account together with the location and proximity of the nearest sensitive receptors.

4. Noise Monitoring

4.1 On the basis of past experience at similar types of facility, the disposition of the site itself with respect to sensitive receptors, no particular measures are to be deployed for the routine monitoring of noise and/or vibrations.

4.2 Nevertheless, the Company expects and requires its management, staff and site operatives to be vigilant in monitoring for and assessing the potential of off-site nuisance from noise and/or vibrations and to take appropriate remedial and corrective action without unjustifiable delay. Such visual assessment for noise/vibration is to be undertaken at least on a working daily basis.

4.3 All such assessments and instances of remedial and corrective action are to be recorded in writing in the site diary.

4.4 In any event, daily meteorological monitoring will assist in managing and monitoring particulate matter emissions.

4.5 Should a particular problem arise or persist, noise and/or vibration monitoring equipment is to be deployed at the site in accordance with a programme to be submitted for approval to the Planning Authority and Environment Agency. Results will be recorded for assessment and action.

4.6 In the event of any complaint about noise and/or vibrations either at or leaving the site, the details of the complaint are to be recorded in writing, the basis for the complaint is to be investigated and, if deemed to be justified, appropriate remedial action is to be taken to mitigate the complaint. The results of the action are to be noted and their effectiveness assessed and recorded.

APPENDIX E:

NOISE ASSESSMENT

NOISE ASSESSMENT

WALSALL WOOD SKIPS

NOISE ASSESSMENT

WALSALL WOOD SKIPS
MATERIAL RECYCLING FACILITY

CONTENTS

1. INTRODUCTION

Enviroarm Limited, acting on behalf of Walsall Wood Skips have carried out a noise assessment for the small scale material recycling operations proposed at Collier Close in an industrial area in Brownhills

An Application for the planning permission has recently been submitted to Walsall MBC for recycling, sorting bulking and treating non-hazardous and inert wastes.

This report presents the results of a noise monitoring exercise carried out at the closest sensitive properties, which have been used to determine the appropriate noise limit at this location. An assessment of future noise levels has been carried out to determine whether the proposed noise mitigation measures are sufficient to ensure that the appropriate noise limits are not exceeded during the future operations on site.

2. SCOPE OF THE ASSESSMENT

Walsall MBC have requested that a small scale material recycling facility would require a scoping opinion even though the site is not listed within the terms of Environmental Impact Assessment, and as such a noise assessment has now been undertaken in relation to potential noise generation levels at the site of a former concrete batching works. In particular, the following information has been reviewed:

- Baseline noise monitoring at Pelsall Road;
- Assessment of noise levels generated by the material recycling facility and;
- Information on noise levels generated by the proposed plant.

This assessment includes:

- a description of the noise units referred to;
- establishment of the existing baseline situation;
- an assessment of the existing noise environment at potentially affected noise sensitive locations, including existing activities related to the operation of the facility;
- standards for the assessment of noise from extraction and landfill operations, although not applicable to waste transfer stations or material recycling facilities;
- predicted noise levels from operations; and
- an assessment of the predicted levels against the proposed noise criteria.

3. NOISE UNITS

Decibels (dB)

Noise can be considered as 'unwanted sound'. Sound in air can be considered as the propagation of energy through the air in the form of oscillatory changes in pressure. The size of the pressure changes in acoustic waves is quantified on a logarithmic decibel (dB) scale firstly because the range of audible sound pressures is very great, and secondly because the loudness function of the human auditory system is approximately logarithmic.

The dynamic range of the auditory system is generally taken to be 0 dB to 140 dB. Generally, the addition of noise from two sources producing the same sound pressure level will lead to an increase in sound pressure level of 3 dB. A 3 dB noise change is generally considered to be just noticeable, a 5 dB change is generally considered to be clearly discernible and a 10 dB change is generally accepted as leading to the subjective impression of a doubling or halving of loudness.

A-Weighting

The bandwidth of the frequency response of the ear is usually taken to be from about 18 Hz to 18,000 Hz. The auditory system is not equally sensitive throughout this frequency range. This is taken into account when making acoustic measurements by the use of A-weighting, a filter circuit that has a frequency response similar to the human auditory system. All the measurement results referred to in this report are A-weighted.

Units Used to Describe Time-Varying Noise Sources (L_{Aeq}, L_{Amax}, L_{A10}, and L_{A90})

Instantaneous A-weighted sound pressure level is not generally considered as an adequate indicator of subjective response to noise because levels of noise usually vary with time.

For many types of noise the Equivalent Continuous A-Weighted Sound Pressure Level ($L_{Aeq,T}$) is used as the basis of determining community response. The $L_{Aeq,T}$ is defined as the A-weighted sound pressure level of the steady sound which contains the same acoustic energy as the noise being assessed over a specific time period, T. The calculations and assessment criteria presented in this report are in terms of $L_{Aeq,\ 1\ hour}$.

The L_{Amax} is the maximum value that the A-weighted sound pressure level reaches during a measurement period. $L_{Amax\ F}$, or Fast, is averaged over 0.125 of a second and $L_{Amax\ S}$, or Slow, is averaged over 1 second. All L_{Amax} values referred to in this report are Fast.

The L_{A10} is the noise level exceeded for 10% of the measurement period. It has been used in the UK for the assessment of road traffic noise.

The L_{A90} is the noise level exceeded for 90% of the measurement period. It is generally used to quantify the background noise level, the underlying level of noise that is present even during the quieter parts of measurement period.

4. APPLICABLE STANDARDS

The principal guidance used to assess noise from minerals operations is provided in Minerals Planning Guidance (MPG) Note 11.

MPG 11 suggests nominal daytime and night-time limits in terms of free-field (i.e. away from reflective surfaces other than the ground) 1 hour L_{Aeq} noise levels for the working week. The working week is described as Monday - Friday plus Saturday mornings and excluding Public/Bank Holidays.

MPG 11 suggests a nominal free-field daytime (normally defined as being between 07:00 to 19:00 hours Monday - Friday and 07:00 to 13:00 hours on Saturday) limit of 55 dB $L_{Aeq,\ 1\ hour}$ at noise-sensitive properties, unless this would exceed existing background noise levels by more than 10 dB.

MPG 11 suggests a nominal free-field limit at other times of 42 dB $L_{Aeq,\ 1\ hour}$.

In addition to the general daytime noise criterion in MPG 11, the guidance advises that provision should be made for temporary works that could not be achieved within the normal daytime noise limits, such as during the construction of baffle mounds or during restoration. A free-field noise level limit of 70 dB $L_{Aeq,\ 1\ hour}$ is suggested as a temporary limit for up to eight weeks in any one year.

5. BASELINE SITUATION

The site has previously been operated as a concrete batching plant and used as a general builders storage yard. The yard is currently used on an intermitent basis for temporary storage. No noise levels are presently set for the site.

6. NOISE MONITORING

At present, the yard is unoccupied. Properties are lived in along Pelsall Road. and should be considered to be the noise-sensitive receptors.

Daytime noise levels at the properties are potentially affected by noise from activities on the site and it was considered appropriate to carry out sample attended noise monitoring during the period prior to start up, between 06:00 – 07:00 hours and during two periods where there was activity on the site although at a low level, between 07:00 – 07:30 hours and 09:50 – 10:20 hours.

The measurements were carried out on Wednesday 2nd July 2003 using a Rion NL-31 Type 1 Sound Level Meter, calibrated with a Rion NC-74 Class 1 Acoustic Calibrator. The measurements were made over periods of 15 minutes at a position on the lane adjacent to the property. The measurements were made freefield and carried out at a height of 1.2m above the prevailing ground height, in accordance with the guidelines in MPG 11. The weather during the exercise was fine and dry with light and variable winds, which were considered suitable conditions for carrying out noise measurements.

The results of the measurements are presented in Table 1.

Measurement Period	Measured Free-field Noise Levels dB				
	L_{Aeq}	L_{A10}	L_{A90}	$L_{Amax,F}$	Comments
06:00 – 06:15	45.1	46.5	43.3	57.7	Birdsong was the main influence on the measured noise level. Road traffic on the Pelsall Road clearly audible throughout and was the principal influence on the background noise levels.
06:15 – 06:30	46.2	47.2	43.8	62.7	
06:30 – 06:45	47.1	48.3	45.2	65.5	
06:45 – 07:00	47.3	48.8	45.3	59.1	
07:00 – 07:15	46.9	48.1	45.0	61.3	Site activities from factories on Coppice Side just audible at times, although having no influence on the measured noise levels, which were principally influenced by road traffic on the Pelsall Road.
07:15 – 07:30	47.3	48.9	45.5	57.6	
09:50 – 10:05	47.4	49.0	42.9	64.4	
10:05 – 10:20	45.4	47.5	42.6	64.9	

Table 1: Results of Sample Noise Measurements

Noise levels at the dwelling are principally influenced by road traffic on the Pelsall Road. Site activities associated with the general industrial activities on Coppice Side and Pelsall Road were occasionally audible, although having no influence on the measured noise levels. The reversing bleeper, fitted on the certain haulage lorries, was audible at times.

In defining an appropriate noise limit in relation to site activities at this dwelling, it is considered appropriate to use the results of the noise monitoring between 06:00 – 06:30 and 09:50 – 10:20, as site activities were generally not audible during these periods, and the noise levels were not influenced by rush hour traffic on the Pelsall Road, as can been seen by the increase in background noise levels between 06:30 and 07:30.

7. ASSESSMENT CRITERIA

7.1 MPG 11 Guidance

The MPG 11 guidelines suggest a nominal freefield daytime assessment criterion of 55 dB $L_{Aeq,\ 1\ hour}$ at noise-sensitive properties, unless this would exceed existing background noise levels (L_{A90}) by more than 10 dB(A). Normal working hours are considered to be between 07:00 to 19:00 hours, weekdays and 07:00 to 13:00 hours on Saturdays, although it is considered appropriate in local circumstances to allow a dawn (06:00 to 07:00 hours) and an evening (19:00 to 20:00 hours) period to be defined and appropriate limits defined.

Outside normal working hours and during the night-time period, MPG 11 suggests a freefield limit of 42 dB $L_{Aeq,\ 1\ hour}$.

For all temporary operations, the MPG 11 assessment criterion of 70 dB $L_{Aeq,\ 1hour}$ has been adopted for the assessment.

7.2 Proposed Assessment Criteria

The current Planning Consent does not specify a limit for the yard though it is expected that a noise limit may be imposed for the recycling facility. A limit of 55 dB $L_{Aeq,\ 1hour}$ associated with site activities at the potentially affected properties is expected.

The baseline noise monitoring carried out recently at the properties indicates that the background noise levels indicate that a marginally lower limit should be considered at this dwelling. Based on the Background noise levels + 10dB(A) as recommended in MPG 11, this would equate to a noise limit of 53 dB $L_{Aeq,\ 1\ hour}$ at this dwelling.

8. ASSESSMENT

8.1 Potential Sources of Impact

Noise source terms for the items of plant proposed at the facility have been reviewed by Enviroarm Limited. .

Table 2 lists the plant assumed for the calculations along with the source term information

[illegible]	[illegible] dB(A)	Distance [m]	Index
Komatsu PC 210 Excavator	73.0	10	L_{Aeq}
HGV Passby	80.7	10	SEL
HGV Tipping	88.9	10	SEL
Extec Crusher & Screener	79.8	10	L_{Aeq}
Loading Shovel	73.6	10	L_{Aeq}

Table 2: Noise Source Terms for Equipment Likely to be used on Site

8.2 Estimated Noise Levels

Noise levels have been predicted at the potentially affected receptors for the principal items of plant likely to be used. It has been assumed that the working method will remain consistent throughout the operations, involving tipping in the bays, sorting and bulking up of wastes.

Noise levels have been calculated using the methodology described in BS 5228:Part 1 [2]. Where barrier performances have been calculated, the methodology described in a 'Calculation of Road Traffic Noise' (CRTN) [3] has been adopted.

Estimated worst-case noise levels, based on a realistic operating scenario, have been compared to the criteria described in Section 7 in order to determine whether mitigation is likely to be necessary to achieve the required standards.

The calculation details are given in the Appendix.

8.3 Assessment of Noise from Site Operations

Preamble

The site is enclosed on three sides by a brick wall , and is further screened by trees, a railway embankment and is surrounded by other industrial proteries.

During normal operations, noise levels will be of the order of 40 – 43 dB L_{Aeq}, whilst the plant is operating. Noise levels will increase to the order of 49 dB L_{Aeq} during the loading of noisy materials such as scrap metal into bins.

Noise levels throughout the duration of activity are expected to remain below the proposed limit of 53 dB $L_{Aeq,\ 1\ hour}$ at this location and no additional noise mitigation measures are considered to be required to protect any future

occupants of this dwelling and the noise limit will have no impact at the SSSI on Clayhanger.

9. SUMMARY

An assessment of the potential noise generated from activities associated with future operations at the Materials Recycling Facility in Collier Close has been prepared to support an application to obtain Planning Permission for the site.

Walsall MBC has requested an EIA be carried out as part of the scooping opinion. Measurements have been obtained at the noise sensitive properties on Pelsall Road during periods when noise levels from site operations would be minimal. On the basis of the measurement results an appropriate noise limits has been defined for the properties, based on MPG 11 guidance.

An assessment of the noise levels generated from the future operations, with the proposed noise mitigation measures in place will remain below the appropriate noise limits and are considered to be acceptable. No additional noise mitigation measures have therefore been considered necessary to further reduce noise levels from site operations.

References

1. Department of the Environment. Minerals Planning Guidance: The Control of Noise at Surface Mineral Workings. MPG 11. 1993.

2. British Standards Institute. Noise and Vibration Control on Construction and Open Sites. Part 1. Code of Practice for Basic Information and Procedures for Noise and Vibration Control. BS 5228: Part 1. 1997.

3. Calculation of Road Traffic Noise (CRTN). Department of Transport 1988. HMSO.

Appendix
Calculation Details

Walsall Wood Skips
Collier Close Recycling
Calculated Noise Levels

2-July 2003

Receptor:
Height

Houses on Pelsall Road m

Uses BS5228:1997

Predicted Freefield Noise Levels

	Ref LAeq @10m	No.	% On Time	Source Ht	Dist S-R	Barrier Ht	Dist S-B	Distance Attenuation Hard	Distance Attenuation Soft	CRTN Barrier Attenuation	Max Attenuation	LAeq [dB]		Total LAeq [dB]
Use of Crushing Plant														
Excec Crusher & Screener	79.8	1	100	3	200	5	10	-20.0	-23.0	-11.3	-31.3	48.5	70209.13	
Loading Shovel	73.6	1	100	2	200	5	10	-20.0	-23.0	-13.2	-33.2	40.4	10997.61	
HGV Passby	45.1	20	-	2	200			-20.0	-23.0	0.0	-23.0	35.1	3271.261	
HGV Tipping	61.3	10	-	2	200	5	10	-20.0	-23.0	-13.2	-33.2	38.1	6469.575	48.6

APPENDIX F:

LAND CONTAMINATION ASSESSMENT

ENVIROARM LIMITED

WALSALL WOOD SKIPS LTD

COLLIER CLOSE MATERIAL RECYCLING FACILTY

CONTAMINATED LAND ASSESSMENT

REF: ARM/SCM/WWSH/CLA/1/2004

Carried out for: Walsall Wood Skips Ltd

Enviroarm Limited
597 Walsall Road
Great Wyrley
Nr. Walsall
Staffs WS6 6AE

Tel: **01922 412209**
Mobile: **07801 980984**

CONTENTS

1. INTRODUCTION

In January 2004, Enviroarm Ltd were requested by Walsall Wood Skips Limited to carry out a site investigation on chemical contamination tests on land to be occupied by the Material Recycling Facility at Collier Close, Brownhills.

During the works, Enviroarm personnel were in attendance on site to assess and report on the trial pits and to take random samples from the trial pits. Samples were taken in accordance with the BS 10175:2001 Guidance on Contaminated Land and BS 5930:1999 on Site Investigations.

All samples were submitted to Severn Trent CAS Laboratories Limited for the ICRCL Pathfinder analysis suite. The CAS laboratory is UKAS accredited.

A landfill gas survey was undertaken at the site to ensure that no gases were being produced from the material beneath the concrete.

This report describes the work undertaken together with the quality control monitoring and presents the results of all the testing both in the field and the laboratory.

2. THE SITE

The site is located on Collier Close and consists of a predominantly concreted surface associated with the former concrete batching plant operated at the site during the 1980's.

The site is located on an industrial estate and bound to the south by the Wyrley Essington Canal.

3. SITE HISTORY

The site has historically been used as a concrete batching plant and as a builders yard.The yard is currently being used for storage of building materials and has a large concrete floor.

4. SITE GEOLOGY

The site is located geologically on glacial sand and gravel overlying the Productive Coal Measures. The glacial deposits are of the Pleistocence Period. The glacial deposits are generally found as a three-fold division of clayey gravels, finer soils and clays and sand and gravel lenses.

5. TRIAL PITS

Trial pits were undertaken by use of a backhoe loader (JCB 3CX) to a depth of 1.5 metres into the glacial deposits, at three random locations on site. The locations of the trial pits are shown on Figure 1.

Samples were collected from each trial pit. All material samples were taken in accordance with Section 4, sub section 19 of BS: 5930: 1999 Code of Practice for Site Investigations. All samples were given a unique reference and placed in sealed sample bags before removal to the approved analysis laboratory and for specific testing by Enviroarm Ltd personnel.

All the trial pits at Collier Close were logged and are summarised in the section "Trial Pit Logs".

6. SOIL TESTS

Soil samples were collected from each of the trial pits and a 25kg composite sample was collected, labelled and sealed. Samples from each of the trial pits were submitted to a UKAS accredited laboratory (CAS/Severn Trent Laboratories) for the ICRCL pathfinder analysis suite to assess the level of contamination and a leachability test was conducted on one sample.

The following determinands were analysed:

Arsenic as As, dry weight
Boron as B, hot water soil dw
Cadmium as Cd, dry weight
Chromium as Cr, dry weight
Copper as Cu, total dry weight
Cyanide as CN, total dry weight
Lead as Pb, dry weight
Mercury as Hg, dry weight
Total phenol, dw
Nickel as Ni, dry weight
PH
PAH
Selenium as Se, dry weight
Sulphate water sol as SO_4
Sulphide, dry weight
Zinc as Zn, dry weight

Results are reported in Appendix A.

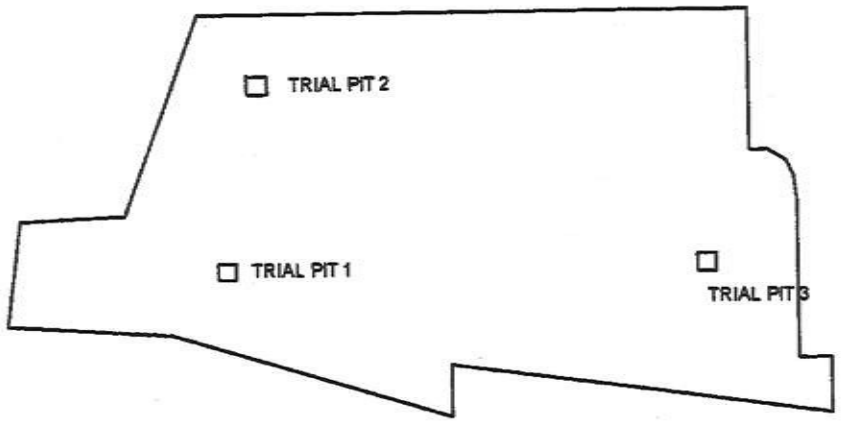
7. CONCLUSIONS

The analyses taken from the Collier Close site in Brownhills shows virtually no contamination and levels fall mostly below the lower limit values and none exceed the upper limit values for domestic dwellings. The material consists primarily of a general clayey sand and gravel glacial deposits found beneath 300-450mm of concrete. An area to the east of the yard consists of hardcore above the glacial deposits. No water was encountered in the trial pits.

The leachability values show no potential for pollution from the underlying materials and therefore creates an easy baseline for assessment completion criteria for the site in the event of activation of completion criteria requirements at Collier Close.

Report prepared by **ENVIROARM**

IF IN DOUBT ASK



CAD FILE NAME

ENVIROARM LIMITED

DRAWING NUMBER : FIGURE 1

ANDY MORRIS
CONSULTANT
597 Walsall Road
Great Wyrley
Staffs WS6 6AE
1922 412209
Mobile : 07801 880864

DRN	ARM	DATE 02/03/04
CHKD	ARM	DATE
APP'D		DATE

TITLE
WALSALL WOOD SKIPS
COLLIER CLOSE

TRIAL PIT TEST
SAMPLE LOCATIONS

APPENDIX A

TRIAL PIT LOGS

TRIAL PIT 1:	350mm reinforced concrete, 1250mm of red / orange sandy clay.
TRIAL PIT 2:	320mm reinforced concrete, 1500 red orange gravely sandy clay deposit.
TRIAL PIT 3:	30mm stone and soils, 300mm crushed brick, 1300mm orange sandy clay.

3 February 2003

Mr A Morris
Enviroarm Limited
597 Walsall Road
Great Wyrley
Staffs
WS6 6AE

Test Report : EARM/72296

Dear Mr Morris

Please find enclosed the results of the analysis carried out on the samples submitted from Collier Close, Brownhills on Friday 23 January 2004

I trust you will find these satisfactory but should you have any queries please contact me.

Yours sincerely

M C Lane
AUTHORISED SIGNATORY

Determinations marked * in this certificate are not included in the UKAS accreditation schedule for our laboratory. Opinions and interpretations expressed herein, and marked #, are outside the scope of UKAS accreditation. Determinations marked $ were subcontracted. Unless otherwise stated, CAS Ltd was not responsible for sampling. Information about methods and performance characteristics of the determinations are available on request. Unless otherwise agreed, as received soils will be disposed of after 30 days; dried soils after 30 days and waters/leachates after 10 days from the issue of the final report. Soil analysis is carried out on air-dried and ground test portion of the sample.

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Soil Analysis

EARM/72296
Collier Close
Your Reference:-
Your Order:- 01/STCS.SCM

CAS Number:			334758	334759	334760	334761
Sample Ref			TP1	TP2	TP3	TP4
Detname	Method	Units				
Arsenic (Total)	30/30C	mg/kg	6.6	13	7.8	14
Boron (Soluble)	6	mg/kg	1.3	2.7	1.4	1.7
Cadmium (Total)	30	mg/kg	0.93	2.2	0.55	1.4
Chromium (Hexavalent)	30B	mg/kg	N/S	N/S	N/S	N/S
Chromium (Total)	30	mg/kg	11	16	11	13
Copper (Total)	30	mg/kg	23	49	26	45
Lead (Total)	30	mg/kg	39	83	52	64
Mercury (Total)	30C	mg/kg	< 0.10	0.17	0.25	< 0.10
Nickel (Total)	30	mg/kg	22	45	21	28
Selenium (Total)	30C	mg/kg	0.29	1.4	0.35	0.53
Zinc (Total)	30	mg/kg	140	610	170	190
Cyanide (Total)	14	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50
Phenols (Total)	40A	mg/kg	0.53	< 0.50	< 0.50	< 0.50
Sulphate (Total) as SO3	45	%	0.050	1.3	0.050	0.26
Sulphide as S	47	mg/kg	< 5.0	16	< 5.0	< 5.0
pH	39	pH units	8.6	6.9	7.6	7.7
TPH (Total)	317	mg/kg	N/S	N/S	N/S	N/S
Sulphur (Elemental)	51	mg/kg	< 100	230	< 100	< 100
PAH (Total)	307	mg/kg	8.0	13	6.0	6.0

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AGS Key
N/S - Not Scheduled
I/S - Insufficient Sample

SEVERN TRENT CAS

Soil Analysis

EARM/72296
Collier Close
Your Reference:-
Your Order:- 01/STCS.SCM

CAS Number:			334762	334763	334764	334765
Sample Ref			TP5	TP6	TP7	S1
Detname	**Method**	**Units**				
Arsenic (Total)	30/30C	mg/kg	9.9	11	8.9	4.7
Boron (Soluble)	6	mg/kg	1.7	2.4	4.0	0.36
Cadmium (Total)	30	mg/kg	< 0.50	1.4	0.73	7.6
Chromium (Hexavalent)	30B	mg/kg	N/S	N/S	N/S	0.17
Chromium (Total)	30	mg/kg	13	12	15	27
Copper (Total)	30	mg/kg	36	41	48	20
Lead (Total)	30	mg/kg	53	69	51	17
Mercury (Total)	30C	mg/kg	0.50	0.24	0.13	< 0.10
Nickel (Total)	30	mg/kg	25	24	42	10
Selenium (Total)	30C	mg/kg	1.1	2.0	1.5	0.67
Zinc (Total)	30	mg/kg	190	400	260	90
Cyanide (Total)	14	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50
Phenols (Total)	40A	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50
Sulphate (Total) as SO3	45	%	0.11	0.28	0.010	0.010
Sulphide as S	47	mg/kg	< 5.0	< 5.0	< 5.0	< 5.0
pH	39	pH units	7.9	7.5	7.7	8.2
TPH (Total)	317	mg/kg	N/S	N/S	N/S	< 50
Sulphur (Elemental)	51	mg/kg	< 100	< 100	< 100	< 100
PAH (Total)	307	mg/kg	12	22	11	< 2

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SEVERN TRENT CASIII

Soil Analysis

EARM/72296
Collier Close
Your Reference:-
Your Order:- 01/STCS.SCM

CAS Number:			334766	334767
Sample Ref			S2	S3
Detname	Method	Units		
Arsenic (Total)	30/30C	mg/kg	13	13
Boron (Soluble)	6	mg/kg	0.85	0.90
Cadmium (Total)	30	mg/kg	< 0.50	< 0.50
Chromium (Hexavalent)	30B	mg/kg	N/S	N/S
Chromium (Total)	30	mg/kg	5.7	8.2
Copper (Total)	30	mg/kg	26	20
Lead (Total)	30	mg/kg	43	13
Mercury (Total)	30C	mg/kg	0.13	< 0.10
Nickel (Total)	30	mg/kg	11	41
Selenium (Total)	30C	mg/kg	1.7	1.3
Zinc (Total)	30	mg/kg	120	190
Cyanide (Total)	14	mg/kg	< 0.50	< 0.50
Phenols (Total)	40A	mg/kg	< 0.50	< 0.50
Sulphate (Total) as SO3	45	%	0.35	0.22
Sulphide as S	47	mg/kg	< 5.0	8.6
pH	39	pH units	6.0	7.1
TPH (Total)	317	mg/kg	< 50	< 50
Sulphur (Elemental)	51	mg/kg	150	< 100
PAH (Total)	307	mg/kg	29	24

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Leachate Analysis

EARM/72296
Collier Close
Your Reference:-
Your Order:- 01/STCS.SCM

CAS Number:				334768
Sample Ref				TP2
Detname		Method	Units	
Arsenic (Soluble)*	*	25C	µg/l	< 10
Boron (Soluble)*	*	53	mg/l	0.17
Cadmium (Soluble)	*	56	µg/l	1.1
Chromium (Soluble)	*	53	µg/l	< 10
Copper (Soluble)	*	53	µg/l	< 10
Lead (Soluble)	*	53	µg/l	< 10
Mercury (Soluble)	*	56	µg/l	< 0.20
Nickel (Soluble)	*	53	µg/l	43
Selenium (Soluble)*	*	25C	µg/l	< 2.0
Zinc (Soluble)	*	53	µg/l	380
Cyanide (Total)*	*	14A	mg/l	< 0.05
Sulphate as SO3	*	37	g/l	0.50
Sulphide as S	*	38A	mg/l	< 0.050
pH	*	31	pH units	7.2
PAH (Total)*	*	PAHLOW	µg/l	0.25
Total Phenol*	*	PHOHLO	µg/l	< 0.50

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APPENDIX C

LANDFILL GAS RESULTS

WEATHER: COLD, CLEAR, SUN ATMOSPHERIC PRESSURE: 1009 mb

1	0.0	0.0	20.4
2	0.0	0.0	20.4
3	0.0	0.1	20.3