CHADWICH LANE QUARRY LANDFILL



ENVIRONMENTAL MANAGEMENT SYSTEM CHADWICH LANE QUARRY LANDFILL

REF: EMS/EL/CLQ/1.00/2022

Carried out for: Chadwich Lane Quarry Ltd

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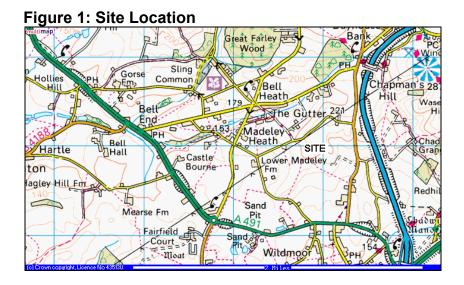
DRAWINGS

EMS FORMS PACK

1. SITE DESCRIPTION

1.1 SITE LOCATION

1.1.1 The site is south-western fringe of Birmingham at National Grid reference SO 395448 276819 is the centre of the site and the site entrance is SO 396373 276818 see Figure 1 and Drawing ESID 1.Access to the site is directly off Money Lane through lockable steel security gates.



1.1.2 The site is operated as an inert landfill. This EP application seeks to allow for inert waste landfill.

1.2 SITE DEVELOPMENT

- 1.2.1 The site is to operate as a quarry and inert landfill.
- 1.2.2 As part of the waste acceptance criteria for all landfill sites and to comply with the Environmental Permitting Regulations, and the site will except only inert waste for disposal in the landfill.
- 1.3 FACILITY TYPE
 - 1.3.1 The site will be classed as an Inert Landfill and will accept up to 200,000 tonnes per annum.
 - 1.3.2 The site will require an Environmental Permit to operate issued by the Environment Agency.

1.4 LANDFILL BOUNDARY

1.4.1 The landfill boundary is shown on Drawing No. Boundary Map.

1.5 HOURS OF OPERATIONS

1.5.1 The site will be open for the deposit of waste between the following hours:

07:30 - 16:30 Monday to Friday

- 1.5.2 Closed, Saturday, Sunday, Bank Holidays, Public Holidays. Appropriate temporary lighting will be provided for the working area during winter months if required.
- 1.6 MANNING LEVEL
 - 1.6.1 The staffing requirements for the landfill site and recycling facility, will require a technically competent person COTC/CCC Inert Landfill and Inert Treatment. Additionally, other staff will be required for the redevelopment and compaction operations as follows:

Site Manager	1
Plant Operatives	2
Weighbridge Clerk	1

1.7 SITE IDENTIFICATION

- 1.7.1 The site ID board will be displayed at the site entrance. This shall show the site name, address, permit number, the name and address and telephone number of the Agency, hours for receipt of waste and an emergency contact number and will be of durable construction. The site access layout is presented at Drawing Boundary Plan.
- 1.8 WASTE TYPES
 - 1.8.1 GENERAL
 - 1.8.1.1 The Chadwich Lane Quarry Landfill will take inert waste. A full list of waste types is presented in the application.

1.9 CLOSURE

1.9.1 GENERAL

- 1.9.1.1 The site will comply with the Closure Plan and will be required to carry out post landfill environmental monitoring for at least three years before applying to surrender the permit. Chadwich Lane Quarry Landfill will take inert waste. A full list of waste types is presented in the application.
- 1.9.1.2 The site will shut on the 31 December 2037 unless it ceases early due to inert landfill.

2. SITE ENGINEERING FOR POLLUTION PREVENTION AND CONTROL

- 2.1 GAS MANAGEMENT
 - 2.1.1 General
 - 2.1.1.1 Quarterly gas monitoring will be required at this site, as gas production potential is negligible.

2.1.2 Monitoring

2.1.1.2 Landfill gas monitoring will be carried out using a gas analyser to record the methane, carbon dioxide, oxygen and relative pressure in each borehole and the weather and barometric pressure will also be recorded as set out in Tables 1 and 2.

Phase 1		Monitoring Point in waste	Design detail on ESID 7
Phase 2	LMP2.1,2.2	Monitoring Point in waste	Design detail on ESID 7
Phase 3	LPM3.1,3.2	Monitoring Point in waste	Design detail n ESID 7
Perimeter	BH 3,4,5	Monitoring Borehole outside waste. Combined gas and groundwater	Design detail on ESID 7

Table 1: Landfill Gas Monitoring Points

Table 2: Landfill Gas Monitoring Parameters

Determinands	Monitoring Frequencies	Units Accuracies	and
Methane (CH ₄)	Quarterly	%v/v ±0.5%	
Carbon Dioxide (CO ₂)	Quarterly	%v/v ±0.5%	
Carbon Monoxide (CH ₄)	Quarterly	-	
Oxygen (O ₂)	Quarterly	%v/v ±0.5%	
Atmospheric Pressure	Quarterly	±1 mb	
Differential pressure	Quarterly	±0.1 mb	
Meteorological Data	Quarterly	-	

2.2 LEACHATE MANAGEMENT

- 2.2.1 General
 - 2.2.1.1 The site does not require leachate management.

2.3 GROUNDWATER MANAGEMENT

2.3.1 General

2.3.1.1 Groundwater monitoring will be carried out on a quarterly basis to ensure that the landfill operations have no impact on surrounding groundwater quality. 5 groundwater monitoring boreholes have been installed in a phased manner and monitored for level quality on a quarterly basis as per Tables 3 and 4.

Table 3: Groundwater Monitoring Borehole Locations

Perimeter	BH 5	Perimeter Up Hydraulic Gradient	Level and Quality
Perimeter	BH 4	Perimeter Down Hydraulic Gradient	Level and Quality
Perimeter	BH 3	Perimeter Down Hydraulic Gradient	Level and Quality

Parameter	Closure/ A	
	Quarterly	Annually
Water Level	•	•
pH	•	•
Electrical conductivity 20°C	•	•
Ammoniacal nitrogen	•	•
Chloride	•	•
Sulphate	•	•
Alkalinity	•	•
Sodium	•	•
Potassium	•	•
Calcium	•	•
Magnesium	•	•
Iron	•	•
Manganese	•	•
Copper	•	•
Chromium	•	•
Lead	•	•
Nickel	•	•
Zinc	•	•
TPH	•	•
PAH	•	•
Phenol	•	•
Hazardous Substance Scan	Annual for first six years	Six Yearly

Table 4: Groundwater Monitoring Parameters

2.3.2 Groundwater Monitoring

- 2.3.3.1 Groundwater will be monitored at the locations shown on Drawing No. ESSD 10.
- 2.3.3.2 Groundwater sampling shall be undertaken on a quarterly basis in accordance with the list set out in Table 4.

All groundwater samples shall be taken according to the following sampling protocol:

- 1. Each monitoring point shall be checked for appearance and any damage or unusual occurrence noted. All damage shall be reported to the Site Manager;
- 2. Dip the borehole for groundwater level and record;
- 3. Calculate and record the volume of ground water in the borehole and purge the borehole to three times that volume;
- 4. Leave the borehole to fully recharge;
- 5. Take groundwater samples directly using low flow pumps;
- 7. The sample bottle shall be sealed when it is completely full;
- 8. The sample bottle shall be labelled with date, time, reference number and site;
- 9. A cool box shall be used for immediate storage of the samples and transportation to the laboratory;
- 10. The date of the monitoring round shall be recorded in the Site Diary.

All analytical work will be undertaken by a UKAS accredited laboratory and sampling procedures shall be in accordance with written procedures obtained from the testing laboratory for the appropriate determinands. The results of all monitoring and analysis will be forwarded to DEFA as soon as reasonably practicable. An annual report will be produced which details and interprets groundwater monitoring results. This report will be undertaken by a suitably qualified person.

2.4 SURFACE WATER MONITORING

- 2.4.1 General
 - 2.4.1.1 Surface water monitoring is not required for some time at the site.

2.5 GEOLOGICAL BARRIER

2.5.1 General

2.5.1.1 A fully engineered geological barrier will be constructed on the base and side walls.

2.5.2 Basal Lining System

- 2.5.2.1 This consists of 1 metre of worked inert material brought to site.
- 2.5.2.2 The basal geological barrier will be placed in accordance with the Construction Quality Assurance Plan and carried out under part-time CQA supervision.

2.5.3 Side Slope Lining System

- 2.5.3.1 This consists of 1 metre of worked inert material brought to site.
- 2.5.3.2 The basal geological barrier will be placed in accordance with the Construction Quality Assurance Plan and carried out under part-time CQA supervision.

2.5.4 Leachate Drainage System

2.5.4.1 This is not required on site.

2.5.5 Capping System

2.5.5.1 This is not required on site.

3. INFRASTRUCTURE

3.1 GENERAL

The site will be operated as a fully contained facility and the following infrastructure is to be provided.

3.2 ACCESS ROADS

- 3.2.1 Site access will be the existing access used for current operations. The site has a metalled surface entrance road which is at least 7m wide and will enable vehicles to be kept left.
- 3.2.2 The road surface will be repaired and maintained as necessary.
- 3.2.3 Any repairs undertaken at the discretion of the Site Manager will be noted in the site diary.

3.3 MAIN SITE ROAD

- 3.3.1 From the landfill reception area, a main site road will be provided to the general working level. This will be constructed from consolidated stone or hardcore and will be maintained in a condition appropriate to its use with suitable road-making materials, which will be delivered to the site in the course of operations.
- 3.3.2 A stockpile of suitable material will be maintained on site for this purpose.

3.4 SUBSIDIARY SITE ROADS

3.4.1 From the end of the main site road, subsidiary site roads will be marked, coned or otherwise indicated to direct traffic to the working face. These roads will be formed either from hardcore when conditions necessitate or will otherwise be unsurfaced with the vehicles running directly on the material; subject to traction needs of the vehicles using the site.

3.5 WHEEL AND VEHICLE CLEANING

3.5.1 A road sweeper will be used on an ad hoc basis and when deemed necessary as per the mud management plan.

3.6 WEIGHBRIDGE

3.6.1 A weighbridge is not to be provided.

3.7 OFFICE/BUILDINGS

- 3.7.1 Office accommodation will be provided at locations shown on Drawing No. Boundary Plan, and will be equipped with heat, light, water and telephone links together with appropriate manning. Car parking for vehicles will be provided.
- 3.7.2 A copy of the Permit and associated documents and plans are on display or available in electronic format in the offices.
- 3.8 FUEL STORAGE
 - 3.8.1 Fuel will be brought to site and not kept on site.
- 3.9 LANDFILL PLANT
 - 3.9.1 Plant to be used in the landfill will consist of a hydraulic excavators and crawler dozers. All plant will be regularly serviced as per the maintenance plan within the EMS forms

4. SITE OPERATIONS

4.1 GENERAL CHECKING/TICKET ISSUE

The company proposes to sign the Waste Transfer Notes at time of delivery to the weighbridge. If the waste is not compliant, the Waste Haulier required to remove the waste from the site. The company copy will be filed and retained.

- 4.1.1 Inspection of all loads prior to unloading will be carried out in accordance with the Waste Acceptance Procedure. As a further measure, the operator at the working area during deposition will inspect deposited loads.
- 4.1.2 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.

4.2 WASTE ACCEPTANCE AND DISPOSAL CRITERIA

4.2.1 General

We will only accept waste, which is compliance with the licence waste types. The Waste Acceptance Procedure is presented as part of the application documents.

4.3 REJECTION OF MATERIALS

- 4.3.1 Two circumstances of rejection will be possible:
 - (a) Rejection during compaction non-compliant waste.
 - (b) Consignment note does not describe waste accurately.

In these circumstances, materials may be removed offsite for disposal elsewhere, following discussions with the EA.

Facilities exist for secure overnight parking if necessary:

4.4 NON-CONFORMANCE PROCEDURES FOR REJECTED MATERIALS

- 4.4.1 Chadwich Lane Quarry Ltd will operate a nonconformance system for rejected loads, problematic waste delivered, and health and safety procedures of Carriers of Waste as a means of discharging their Duty of Care and as part of the Company EMS procedure. A copy of the load rejection log is contained in the WAC.
- 4.4.2 A non-conformance is an incident which breaches the Waste Disposal Licence, Duty of Care and the Safety Rules of the landfill.
- 4.4.3 Typical examples of non-conformance that can occur and need to be recorded are listed below:

Wastes not acceptable within the range of wastes set in the Environmental Permit; waste transfer note problems Breach of statutory regulations Misdescribed wastes.

- 4.4.4 Where a non-conformance occurs, the Site Manager shall:
 - (a) Obtain sufficient information from the carrier and producer of the waste and document details of the incident in the landfill logbook.
 - (b) The Site Manager will investigate the causes of the incident and will also implement the required corrective actions.
- 4.4.5 The Site Manager shall ensure that corrective actions are carried out within agreed deadlines.
- 4.4.6 Once the corrective action has been carried out to the satisfaction of the Site Manager, the site manager will sign off the logbook as complete.

4.5 BRIEFING OF OPERATIVES

4.5.1 The operator at the working face will be fully briefed as to materials licensed to be deposited on site and will be under instruction to inspect each load before it is compacted and 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 EA
- (c) In consultation with EA appropriate actions will be taken.

4.6 COMMUNICATION ON-SITE

4.6.1 Communication will be maintained between relevant personnel by telephone.

4.7 VEHICLE CIRCULATION ROUTES

4.7.1 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 operational needs.

4.7.2 Off-Site

On leaving the site, all HGV's will be required to be cleaned when deemed necessary by site management and follow any traffic routing agreement for the site. An appropriate sign will be erected at the site exit if required.

4.8 METHOD OF LANDFILLING

- 4.8.1 Soils will be tipped and pushed into thin 300mm layers and subject to compaction.
- 4.8.2 No waste will be deposited into standing water. Pumping will take place where necessary to de-water or maintain a de-watered situation prior to commencement of deposition within such area.
- 4.8.3 Surface water run-off will be diverted from the active working area to the surface water lagoon.
- 4.8.4 The depth of each lift will be 1000mm when instructed by the engineer.

- 4.9.5 Materials, once deposited, will not be excavated without the consent of the EA, except to comply with any relevant Code of Practice or legal enforcement notice.
- 4.10 LITTER CONTROL
 - 4.10.1 Due to the nature of the waste no litter screens will be required.
 - 4.10.2 Waste produced on site, which is not licensed for disposal at Chadwich Lane Quarry landfill is removed by an approved Registered Carrier of Waste to a suitably permitted facility.
- 4.11 DUST CONTROL
 - 4.11.1 The entrance area will be sprayed with water when conditions necessitate using the water supply system.
 - 4.11.2 Working areas will also be sprayed if absolutely necessary, although in general terms it is preferable to minimise this as an operation. The exclusion of water from landfill is beneficial rather than adding to the loading of the landfill.
 - 4.11.3 Operatives working in the area of waste deposition will be provided with equipment appropriate to their task and the Environment. It will be sufficient to comply with any relevant Code of Practice, e.g. protective clothing, face masks, etc.
 - 4.11.4 The site will comply with the Dust Management Plan and all staff will be made aware of then plan prior to commencement of operations
- 4.12 MUD ON ROADS
 - 4.12.1 The site egress will cleaned using a tractor and brush or road sweeper hired in on an ad hoc basis.
 - 4.12.2 In the case of breakdown or emergency, when conditions dictate, road-sweeping equipment will be hired locally on an ad hoc basis.

4.13 DUST SUPPRESSION

4.13.1 At the direction of the Site Manager, spraying to suppress dust will be carried out. A bowser will be kept on site for such circumstances, such as during dry weather.

4.14 RECORD KEEPING

- 4.14.1 Records will be kept on site regarding levels of waste input for the EA.
- 4.14.2 Input will be recorded in terms of tonnes per month and will be forwarded to the EA on a quarterly basis within 14 working days of the month end by the Site Manger.
- 4.14.3 An electronic site diary will be kept of site recording all events of each day and all service records for plant including the weighbridge.

4.15 PLANT MACHINERY

4.15.1 Appropriate mobile plant will be employed. It is anticipated that the plant completion will be similar to that described below:

Landfill

2 x loading shovels 2 x crawler dozers

4.15.2 All plant is to be maintained as per the service schedules attached in the EMS forms and all records of services are to be kept at the site office. This will ensure that plant operates efficiently. In the event of breakdowns replacement requipment will be hired in within 24 hours to replace equipment under repair.

4.16 FIRE PRECAUTIONS

- 4.16.1 No wastes will be burned within the site.
- 4.16.2 Any outbreak of fire will be treated as an emergency and Fire Department will be informed and NRW as soon as possible.

4.17 LIGHTING

- 4.17.1 Lighting shall be provided on site to adequately illuminate operational areas during hours of darkness as defined by the Science and Engineering Research Council.
- 4.17.2 If considered necessary, mobile lighting rigs are to be used in conjunction with adequate lighting on the site machines. The rigs and machine lights will comply with the Mines and Quarries Regulations 1999.

4.18 FENCING AND SECURITY

- 4.18.1 The fencing is with post and two strands of wire, around the perimeter of the site offices and weighbridge.
- 4.18.2 Site gates shall be located at the access and shall remain locked outside working hours.
- 4.18.3 The site shall remain securely fenced and shall be kept in good repair. Records of inspections will be held in the site office.
- 4.18.4 If a hole or breach is found during the daily inspection then temporary repairs will be undertaken on the day of inspection and full repairs within 3 working days.
- 4.18.5 The site has security camera located on site that allow viewing of site offices, landfill and plant parking area.

4.19 ACCIDENTS AND EMERGENCIES

- 4.19.1 In the event of an accident or emergency both Health and Safety or environmental the relevant Regulator will be informed and an accident log will be completed as per the attached EMS forms.
- 4.19.2 A spillage procedure is set out within the forms dealing with a spillage of site from fuel or servicing.

5. ENVIRONMENTAL MONITORING

5.1 GENERAL

5.1.1 Results of on-site monitoring will be retained on site and will be available for inspection and forwarded to the EA in accordance with the Permit.

5.2 GROUNDWATER

- 5.2.1 Groundwater will be sampled from the peripheral groundwater monitoring boreholes shown on Drawing No. ESSD 11 on a quarterly basis.
- 5.2.2 Groundwater sampling will be by use of low flow pumps.
- 5.2.3 Groundwater level will be monitored by use of a dip meter.
- 5.3 LEACHATE
 - 5.3.1 Leachate monitoring is not required on an inert landfill site.
- 5.4 LANDFILL GAS
 - 5.4.1 Limited low volumes of gas will be generated on this site due to the nature for the material being landfilled.
 - 5.4.2 Quarterly landfill gas monitoring will be carried out from the boreholes.
 - 5.4.3. Treatment of potential odours is detailed in the odour management plan and will most likely consist of carbon filters if required
- 5.5 SURFACE WATER
 - 5.5.1 Surface water will not be monitored on site.

6. AMENITY MONITORING

6.1 NOISE MONITORING

- 6.1.1 Noise monitoring will not be required at this facility unless there is a complaint. A copy of the compliant form is presented in the EMS forms.
- 6.1.2 The site has a Noise and Vibration Management Plan which sets out the procedures in the event of a complaint for monitoring, in the event of noise monitoring.

6.2 DUST MONITORING

- 6.2.1 A visual inspection for dust will be carried out each working day and actions recorded in the site electronic diary. No formal dust monitoring is required.
- 6.2.6 The site has a Dust Management Plan which sets out the procedures in the event of a complaint.

7 RESTORATION

7.1 GENERAL

7.1.1 The site is to be finished as a field and will be completed by 31 December 2037.

APPENDIX A: EMS Forms

ENVIRONMENTAL MANAGEMENT SYSTEM FORMS	Have you completed the template for your site and has it been filed?	Signed by: Date:
1. Environmental Impacts Plan and Controls		
2. Accident / Pollution Incident Management Plan, including;		
A – Site Plan		
B – Key Site and Emergency Contacts		
C – List of Substances and Storage Facilities		
D – Preventing Accidents… and what to do if they happen		
3. Maintenance Checklist and maintenance record		
4. Training Checklist / Record for your staff		
5. Complaints Form for recording complaints about your site from members of the public.		
6. Accident (and incident) recording form		
Appendix A Raw and Auxiliary Materials Assessment		
Appendix B Spillage Procedure		
Appendix C Electronic Site Diary		

1. Environmental Impacts Plan and Controls

Table 1																
	QUARRY LTD CHADWICH LANE	QUA	RR	Y IN	ERT	LA	NDF	ILL S	SITE							
The key pieces of environmental legislation affecting this sector are: (Add as many as apply to your site activities – you should ensure that this list is kept up to date for your site and covers all applicable legislation)	 The Environmental Permitting (Engla 2016, SI 3538 Groundwater regulations 1998, SI 27 Water Resources Act 1991, as amen Environmental Protection Act 1990 Control of Pollution (Oil Storage) (En 2954 	746 Ided.			,	•										
	Process / Activity/Equipment	Α	w	Е	D	L	Ν	R	Process / Activity/Equipment	Α	w	Е	D	L	Ν	R
Processes / Activities / Equipment at your site:	e.g. Oil / water separator – operation	L	Н	-	Н	L	-	-								
(insert H or M or L where applies)	Fuel Delivery and offloading	L	н	-	Н	L	-	-								
List all the processes / activities /	Chemicals storage	L	н	-	н	L	-	-					<u> </u>			
equipment at your site in these columns.	Surface water drainage	L	н	-	L	L	-	-								
Then put an (H) high impact, or (M)	Waste Acceptance	М	L	L	Н	L	L	Н								
medium impact, or (L) low impact in the box next to the process / activity /	Inert Landfill	М	L	L	н	L	L	Н								
equipment if it can result in an environmental impact listed below under normal or abnormal operation.	Inert Waste Treatment	М	н	-	н	н	L	Н								
 Emissions to Air (including dust) - A Emissions to Water - W 															_	
 Energy Usage (e.g. electricity, gas, oil) - E 													<u> </u>		\neg	
 Waste Disposal - D Land Contamination - L 													<u> </u>		\rightarrow	
 Nuisance (i.e. noise or odour) - N Resource Consumption (e.g. water, chemicals, not energy) - R 																

1. Environmental Impacts Plan and Controls (Table 1 - Continued)

Table 1 Site Activity: CHADWICH LANE 0	QUARRYLTD CHADWICH LANE (QUAF	RRY	' INE	ERT	LAN		ILL S	SITE							
The key pieces of environmental legislation affecting this sector are: (Add as many as apply to your site activities – you should ensure that this list is kept up to date for your site and covers all applicable legislation)	• Plant and Equipment								• Loading and Unloading							
	Process / Activity/Equipment	Α	w	Е	D	L	N	R	Process / Activity/Equipment	Α	w	Е	D	L	N	R
Processes / Activities / Equipment at your site: (insert H or M or L where applies) List all the processes / activities / equipment at your site in these columns.	DOOSAN 300 EXCAVATOR KOMATSU 215 CAT D6T Dozer	L	-	-	-	-	M M M	M M M	Inert Landfill	H	L	-	L	H	L	Н
Then put an (H) high impact, or (M) medium impact, or (L) low impact in the box next to the process / activity / equipment if it can result in an environmental impact listed below under normal or abnormal operation.																
 Emissions to Air (including dust) - A Emissions to Water - W Energy Usage (e.g. electricity, gas, oil) - E 																
 Waste Disposal - D Land Contamination - L Nuisance (i.e. noise or odour) - N Resource Consumption (e.g. water, chemicals, not energy) - R 																

<u>1. Environmental Impacts Plan and Controls</u>

For each Process / Activity / Equipment identified in the Table 1 above complete the following tables if there is an environmental impact [at least High (H) or Medium (M)] under normal or abnormal operation *(the examples included are guidance only)*

Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipment?	Is equipment included on maintenance checklist?	Is impact controlled by a procedure?	Person using the procedure received training?	Comments
Dust from site activity A (landfilling waste in cells)	Potential for local air quality issues from dust. Also, a cause for complaints	Yes- dust suppression and inside building	Yes Spray	Yes-Dust Management Plan	Yes	Site Induction All staff
Dust from site activity A plant traffic and site traffic)	Potential for local air quality issues from dust. Also, a cause for complaints	Yes- dust suppression and water bowser	Yes Spray	Yes-Dust Management Plan Concrete roads	Yes	Site Induction All staff

Table 2B. Energy Usa					-	• ·
Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipment?	Is equipment included on maintenance checklist?	Is impact controlled by a procedure?	Person using the procedure received training?	Comments
Electricity usage for site offices	The impacts associated with electricity production are well documented (e.g. Air emissions) There is scope to reduce these impacts by using electricity efficiently on site.	All equipment is PAT tested and energy using light bulbs	N/A	YES-SITE RULES AND SIGNS	Yes	See Appendix A
Electricity usage for transfer station	The impacts associated with electricity production are well documented (e.g. Air emissions) There is scope to reduce these impacts by using electricity efficiently on site.	All lights to be turned off in out of hours	N/A	YES SITE RULES AND SIGNS	Yes	
All Plant	Dozer, Loading Shovel and Excavators	New engine, complies with EU Stage III 3a compliant	Yes	Yes R and M Contract with Volvo and CAT	Yes	
	Crusher	New engine, complies with EU Stage III 3a compliant	Yes	Yes R and M Contract Blue	Yes	
	Screener	New engine, complies with EU Stage III 3a compliant	Yes	Yes R and M Contract with Blue	Yes	
	Water Bowser		250 HOUR SERVICE		Yes	

Table 2C. Emis	sions to Water [W]			_	-	
Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipmen t	Is equipment included on maintenance checklist?	Is impact controlled by a procedure?	Person using the procedure received training?	Comments
e.g. Oil/Water separator	Oil passes through the separator into a watercourse potentially causing harm to environment	N/A	N/A	N/A	N/A	
e.g. Surface water run- off from buildings, car parks and concrete hard standing	Under normal conditions surface water run-off should be uncontaminated. However, if contamination occurs by accident, it has the potential to cause water pollution to local watercourse if there is a site drain failure	No- manual	N/A	Yes Spillage procedure set out in Appendix B		The accidental contamination case is considered in our Accident / Incident Management Plan-see Appendix B Spillage Procedure
Surface water discharge from site	All water runs to low sump area. Potential for leachate runoff and contamination stopped by bund at entrance to building	N/A	N/A	N/A		

Table 2D. Waste Disp	Table 2D. Waste Disposal [D]											
Process / Activity / Equipment on Site	Potential Impact	ls impact controlled by equipmen t	Is equipment included on maintenance checklist?	Is impact controlled by a procedure ?	Person using the procedure received training?	Comments						
e.g. Hazardous Waste from activity A (<i>state</i> <i>specific machine /</i> <i>activity</i>)	e.g. Chemicals, ink jet cartridges, fluorescent tubes, waste oils, all must be handled in accordance with Hazardous Waste Legislation					EMS Recycling Bins in offices						
e.g. General unsorted waste	Waste from site offices sent to transfer station for sorting.					General rubbish sent to transfer station for sorting						
Inert Treatment Station Operations	All non-hazardous waste tipped in transfer station sorted using selector grab and manual handling and loaded out	Yes	Yes	Yes- Working Plan	WAMITAB In house							

Table 2E. Nuisance (e.g. Noise, Odour) [N]						
Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipment?	Is equipment included on maintenance checklist?	Is impact controlled by a procedure ?	Person using the procedure received training?	Comments
Noise from site activities (landfill and transfer station plant	Section III of the Environmental Protection Act 1990 , noise can be classified as a statutory nuisance	Yes,silencers on plant SAE JI1166 OCT98 Compliance	Yes	Yes	Yes PPE	Operations carried out inside building
Noise from transport movement on site	Section III of the Environmental Protection Act 1990 , noise can be classified as a statutory nuisance	No	N/A	Yes site speed limit 10mph		Speed Limit 10mph
Odour from site activities <i>(landfill)</i>	Section III of the Environmental Protection Act 1990 , odour can be classified as a statutory nuisance	N/A	N/A			48 hours to move waste
Odour from site activities (transfer station)	Section III of the Environmental Protection Act 1990 , odour can be classified as a statutory nuisance	No	N/A	Yes		Waste turnaround 48 hours

Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipmen t	Is equipment included on maintenance checklist?	Is impact controlled by a procedure ?	Person using the procedure received training?	Comments
use of chemicals for activity A (state specific activity)	Harm to human health or escape to the local environment. Management of hazardous substances according to COSHH and Hazardous Waste Regulations	Yes	Yes	SOP Health and Safety File	Yes	See Health and Safety Files See Appendix A
use of hydraulic oil for machine A <i>(state</i> <i>specific machine)</i>	Harm to human health or escape to the local environment. Management of hazardous substances according to COSHH and Hazardous Waste Regulations	Yes	Yes	SOP Health and Safety File	Yes	See Health and Safety Files See Appendix A
use of water	Inefficient use results in natural resource depletion	Yes	Yes	SOP Health and Safety File	Yes	See Health and Safety Files See Appendix A
use of diesel	Harm to human health or escape to the local environment. Management of hazardous substances according to COSHH and Hazardous Waste Regulations	Yes	Yes	SOP Health and Safety File	Yes	See Health and Safety Files See Appendix A
use of antifreeze	Harm to human health or escape to the local environment. Management of hazardous substances according to COSHH and Hazardous Waste Regulations	Yes	Yes	SOP Health and Safety File	Yes	See Health and Safety Files See Appendix A

Process / Activity / Equipment on Site	Potential Impact	Is impact controlled by equipmen t	Is equipment included on maintenance checklist?	Is impact controlled by a procedure ?	Person using the procedure received training?	Comments
e.g. Storage of substance A (Fuel Diesel Tank Storage)	Substance A can cause harm to the ecotoxicity of the soil, and could leak into groundwater.	Yes	Yes	Yes	Yes	Impact assessed in RA
Inert Treatment Station						Site Condition Report prepared to set baseline values

Table 3. General Waste Management Review to be carried outannually						
Waste Produced at Site (with EWC, if known)	Where does the waste go?	Can it go to recovery / recycling?	Is it being stored correctly on site?	Are Duty of Care requirements being met?	Comments	
e.g. General waste (EWC ref) sent for disposal						

Table 4. List of Procedures (list procedures identified in Table 2A to 2G above, and any other procedures you have in addition)

(use as many forms as required)							
Procedure Name	What process / activity / equipment does it relate to?	Where is the procedure kept?	Version Number	When was the procedure last reviewed?	Comments		
Non-Hazardous Waste Transfer	CAT Dozers,Excavators Loading Shovels	Head Office and Site Office	Health and Safety File Standard Operating Procedures	2022			
	Tractor and Bowser	R& M Maintenance		2022			
COSHH ASSESSMENTS		Head Office and Site Office	Health and Safety File Standard Operating Procedures	2022			

2. Accident / Pollution Incident Management Plan

Further help is available from Pollution Prevention for Business	

Created by:_S Amos

Date:

Review Date:

Version:

Accident / Pollution Incident Management Plan Contents

- A Site Plan
- B Key Site and Emergency Contacts
- C List of Substances and Storage Facilities
- D Preventing Accidents / Incidents... and what to do if they happen.

<u>A – Site Plan</u>

Insert site plan showing location of the following items:

- > Site entrances and exits available to the emergency services
- > Buildings; the buildings and other main constructions
- > Drainage; including
 - o foul drainage (marked in red),
 - o surface water drainage (marked in blue)

showing

- the direction of flow and
- o the discharge points to the sewer
- o The location of manhole covers and drains,
- o The location of stop and diverter valves and interceptors
- Service mains; the routes of
 - water supply, gas, electricity)
 - o mains water stop tap, and gas and electrical supply isolating valves / switch.
- Storage of hazardous materials; eg oil and fuel tanks, chemical stores, raw materials, waste materials etc.
- > **Process lines**; location and direction of main process lines/pipes.
- Accident and emergency response items; such as fire extinguishers, fire hydrants, fire water tanks / ponds, spill kits, sand bags, alarms, first aid kit etc.
- Vulnerable receptors; on site or adjacent receptors that could be affected by the site operations, such as porous / unmade ground, watercourses, springs, boreholes, ecologically sensitive sites, residential properties, schools, offices, hospitals etc.
- > Pollution control points; such as inspection or monitoring points, bunds,.
- > **Treatment**; location of any on site trade effluent or sewage effluent treatment plant.

<u>**B** – Key Site and Emergency Contacts</u> This table contains information and contacts you may need in an emergency (amend, as required, to suit your site).

SITE DETAILS							
Location: Parrys Quarry	Location: Parrys Quarry Landfill, Pinfold Lane,Mold						
Postcode:CH7 6NY							
Site Access Grid Reference: SJ 27477 66279							
SITE CONTACTS Name		Office Hours (specify)	Out of hours				
Owner:	Chadwich Lane Quarry	See master file on site	See master file on site				
General Manager:							
Site Manager:		See master file on site	See master file on site				
Site Supervisor:		See master file on site	See master file on site				
Security Contact:		See master file on site	See master file on site				
Landowner / Agent:		See master file on site	See master file on site				
EMERGENCY SERVIC	ES	Office Hours	Out of hours				
Emergency		999	999				
Medical:							
Police: West Bromwich		999	999				
Fire:		999	999				
REGULATORS		Office Hours	Out of hours				
Health and Safety Exec	utive (HSE) Fax	0300 003 1647	0300 003 1647				
Local Authority:		01905763763					
EA		03708506506					
EA (24 hour emergency	hotline)	0800807060					
UTILITY / KEY SERVIC	ES Name	Office Hours	Out of hours				
Water undertaker:	Severn Trent	t					
Sewerage undertaker:	Severn Trent						
Gas supplier: TRANSC	C						
Electricity supplier:							
Oil supplier:							
Fuel supplier:	ТВС						
Chemical supplier:							
Oil spill contractor:							
Maintenance contractor	:						
Electrician:							
Plumber:							
OTHER KEY CONTAC	TS Name	Office Hours	Out of hours				
Head Office:							
Adjacent landowners:							
Neighbours:							
Specialist advisors:	Enviroarm Ltd	01922 412209					

C - List of Substances and Storage Facilities

The following is a list of liquids, powders etc that are stored on site and could be harmful to the environment if they escape.

Use as many of these forms as required

Material	Maximum Quantity	Type and size of storage	Type and size of Secondary Containment
Fuel Oil	Not on site	Above ground 2,500 litre single skin steel tank	Double skinned and bunded tank
Antifreeze	Not on site	Steel drums	ISO Steel Container
Lube Oil	Not on site	Steel drums	ISO Steel Container
Grease	Not on site	Steel drums	ISO Steel Container
Hydraulic Oil	Not on site	Steel drums	ISO Steel Container

D - Preventing Accidents / Incidents and what to do if they happen

The objectives of the emergency plan are to make use of the combined resources of the site and outside services to:

- Effect the rescue and treatment of casualties. •
- Safeguard other people. •
- Minimise the damage to property and the environment. Prevent escalation and ultimately bring the incident under control. •
- Restore the site to normal operations as quickly as possible.

Possible Accident / Incident Spillages	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens		
Spillage during transfer, sorting, crushing and		Inspect and validate all in- coming wastes.			
compaction of wastes.		Remove hazardous liquids from wastes prior to processing.			
	-	Train the staff			
Spillage during delivery of		Supervise fuel deliveries.			
oil or fuel.	Contamination of	Use drip trays and spill materials.	Follow the spill		
Spillages during refuelling of plant and equipment.	land, drains, groundwater and watercourses.	Plant and equipment will be refuelled in designated areas with impervious surface and will use drip trays and spill materials.	response procedure. It describes what to do in the event of a spill and where the kit is kept.		
Slow seepage of liquids from imported contaminated materials.		Incoming materials that are contaminated e.g cutting oil or tramp fluid on swarf, will only be stored on			
Slow seepage can be less noticeable than 'spills'.		impervious surfaces that are drained to an oil interceptor			
(Others: Please specify)	-				
Overfilling		Γ			
Overfilling of oil / fuel tanks during delivery.	Contamination of land, drains, groundwater and watercourses.	Stock level control checks, supervised delivery and high level alarms.	Spill response procedure as described above.		

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens							
(Others: Please specify)										
Failure of Plant or Equipment										
Leakages; due to faulty pipe work, valves, over- pressure, blockages,		Daily visual inspection and completion of weekly inspection checklist record.								
corrosion, severe weather, ground movement etc.		Preventative maintenance regime.								
		Any underground pipes and tanks will be tested for integrity.								
	Contamination of land, drains, groundwater and	Insulation and protection of pipe work.	Spill response procedure as described above.							
Puncture; of vessels and tanks etc due to impact – such as fork lift trucks.	watercourses	Tanks and vessels generally located within / on secondary containment facilities.								
		Storage locations of drums and non-permanent vessels protected by use of barriers or fencing.								
		Movement of drums and containers using safe techniques.								
(Others: Please specify)										
Fire]									
Fire	Smoke and pollution, Firewater causes contamination of land, groundwater and watercourses.	Separation of incompatible materials and of combustible materials and ignition sources. Incorporation of fire breaks into site layout and containment of fire water.	Fire procedure describing what to do in the event of a fire, including details about fire alarms, exit routes and muster points, responsible personnel such as a fire warden							
		No smoking policy.	and the location and use of emergency fire							
		Maintain tidy site and minimize stockpile of combustible materials.	equipment such as extinguishers, hoses, sand bags and drain							
		Fire training and emergency drills.	covers.							
Cross contamination	1	ſ	ſ							
Due to transfer and mixing of incompatible materials,	Explosion, smoke and pollution of	Maintenance of up to date drainage plan.	Fire procedure as described above.							
drainage cross connections etc.	air, Contamination of	Maintenance of inventory of substances with material								

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
	land, drains, groundwater and watercourses.	property details. Procedure for contractors to work on site including induction training and permit to work.	
(Others: Please specify)		Fail-safe filling systems.	
Flood			
Due to ingress of watercourse floodwater, blocked drains, burst water main, use of fire water.	Contamination of raw materials, buildings, land, drainage system, groundwater and watercourses with fire and flood water.	Maintenance of drains. Fitting of flap / non return valves on drains. Safe location for storage of hazardous materials.	Flood procedure describing what to do in the event of a flood warning such as installation of barge boards, use of sand bags, movement or protection of sensitive materials.
(Others: Please specify)			
Failure of Services	J		
Due to failure of supply; water, electricity, gas supply and of sewerage system. Due to utility supply being struck and broken / cut.	Flooding, explosion with subsequent contamination of land, drains, groundwater and watercourses.	Provision of standby facilities. Maintenance of up to date plans showing location of utility services. Procedure for contractors to work on site including induction training and permit to work.	Utility supply failure procedure describing what to in the event of services supply failure such as manual shut down of process valves, start up of emergency generator, use of standby materials etc. Flood and fire procedure as described
(Others: Please specify)			above.
Failure of Containment		<u> </u>	
Failure of containment facilities due to land movement, impact,	Contamination of land, drains, groundwater and	Provision of secondary containment for hazardous liquids.	Spill response procedure as described above.

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
corrosion etc.	watercourses.	Inspection of primary and secondary containment facilities.	
		Integrity testing of tanks and bunds & pressure loss alarms.	
(Others: Please specify)			
Vandalism	J		
Unauthorised entry and tampering or malicious damage to property, plant and equipment.	Contamination of land, drains, groundwater and watercourses.	Secure gate and secure wall. Site locked when un- manned, tanks and valves locked when not in use out of hours. Plant and equipment locked in secure storage out of hours. Community Cameras	Spill response procedure as described above.

FIRE PROCEDURE

IMMEDIATE ACTION

Without risk to personal safety:

Inform the Site Manager immediately, who can assess the situation and arrange for the Emergency Services if necessary.

Ensure that all operations cease and mobile plant is moved out of the emergency area where possible.

Where possible, attempt to contain/extinguish the fire by use of water from the site tanker.

DO NOT RISK PERSONAL INJURY IN AN ATTEMPT TO CONTROL THE FIRE

The senior person on site is to liaise with the Emergency Services on their arrival, inform them about the fire and what action has been taken.

It is the responsibility of the Site Manager or his nominated deputy to remain with the Senior Fire Officer at all times.

3. Maintenance Checklist

(General Waste Sector Site) Use as many forms as required (the examples may or may not be applicable for your site – amend as appropriate)

Item requiring maintenance			How o e app		? ate bo	ox)	Where are		
		Week	Month	Year	250 Hours	5 years	maintenance instructions?	Who is responsible?	
Check drains and drainage channels for blockages.		V							
Clean up spills on surfaced areas or tank bunds									
Check state of fences and gates – (to avoid vandals or children getting in and, for example, letting liquids out of a tank).		•							
Visually check the un- surfaced areas to ensure that there are no spills. Clean up if necessary.		~							
Inspect the bunds for potential leaks, cracks, holes etc.				>					
Dumpers					>				
Excavators					~				
Dozers					•				

3. Maintenance Record

You then need to keep a record that you have actually done these checks when they were supposed to be done. You could do this in a 5 year diary (easiest).

If you do them you should enter:

- The check or maintenance job done (e.g. *Checked interceptor*)
- Who did it (e.g. *Fred Smith*)
- The result (e.g. 40cm of oil was emptied)

Alternatively you could use these forms. You will have to keep a good supply of them, for each line on your inspection checklist.

(use as many forms as required)

Item: insp	ect fences	Due: weekly
Completed on	Completed by	Comments

<u>4. Training Checklist</u>

(General Waste Sector Site)

POSITION	SITE MANAGER	SITE SUPERVISOR	PLANT OPERATIVE
Legislation for Inert			
Landfill			
(COTC) CERTIFICATE OF TECHNICAL COMPETANCE	AT LEAST ONE PER TO SITE OPERATION	SON TO HOLD A COTC	LEVEL 4 RELEVANT
DUTY OF CARE	TO SHE OF ERAHOR		
PLANNING PERMISSION			
HAZARDOUS WASTE REGS			
WRAP/RECYCLING			
LANDFILL REGULATIONS			
			•
Procedures and Practices			
11000003			
WASTE ACCEPTANCE PROCEDURES			
ENVIRONMENTAL RISK ASSESSMENT			
TROMMEL OPERATION			
ROAD CLEANING OPERATION			
SORTING CRUSHING PROCEDURES			
INCIDENT AND EMERGENCY			
PROCEDURES			
SITE DIARY			
Environmental			
<u>Monitoring</u>			
DUST MONITORING			
ODOUR MONITORING			
MUD ON ROADS			
NOISE MONITORING			
LITTER MONITORING			
SITE INSPECTIONS			
Other Skills			
Other Skills			
DUMP TRUCK			
EXCAVATOR OPERATION			
TRACTOR OPERATION			
WHEELED LOADER OPERATION			
SKIP LORRY OPERATION			
GRAB HANDLER OPERATION			
FIRE SAFETY – EXTINGUISHER			
		·	

POSITION	SITE MANAGER	SITE SUPERVISOR	PLANT OPERATIVE
TRAINING			
FIRST AID			
SAFETY AWARENESS			
DRIVING LICENCE			
ROLL ON OFF OPERATION			

1 <u>KEY</u>

CORE SKILLS: Training / knowledge required prior to completion of probationary period.
Additional Training / knowledge required in order to fullfil all roles within the position.
Optional training for additional responsibilities not specific to position.

4. Training Record

Employee Name	Job Title

Training	Required	Date due	Date done	Passed as competent? yes/no	Reviewers Signature	Date for Refresher	Comments

5. Complaints Record

Who made the complaint? Name:	
Address	
C Phone No	
Date and time they made the complaint	
What happened, what was it about?	
Was anyone else aware of this – other neig	hbours or your staff? If so who?
Did the complaint relate to your site? If so, v	what happened? What wentwrong?
What have you done to make sure that it do	es not happen again?
	ironmental damage to land, water or protected ollution outside the site or spillage of polluting
liquids onto the ground, or at a site of specia	al scientific interest, or into a drain or a
watercourse? (If so, then complete an incic	lent form in Section 6)
If there was (or still is), then you must take steps to prevent further damage and	Who did you phone?
notify the NRW on 0300 065300 and any	At what time did you phone?
other relevant regulators ASAP.Have you done so? Yes / No	
You must also write or send an email to	Yes/No
confirm this to the local office (see your	What date did you contact?
accident management plan for the address) Have you done so?	,
Please print your name and sign:	

Continue overleaf or on a separate sheet if you do not have enough room. Keep the completed form in the file to discuss with the NRW when they visit.

6. Accident (and Incident) Record

Record of accidents, incidents or near misses

Date and time of the incident				
What happened, what was it about?				
Was anyone else aware of this – other witnesse	Was anyone else aware of this – other witnesses? If so who?			
What caused it?				
What have you done to make sure that it does not happen again?				
Was there any significant pollution or environmental damage to land, water or protected areas – for example: dust, odour or noise pollution outside the site or spillage of polluting liquids onto the ground, or at a site of special scientific interest, or into a drain or a watercourse? If sowhat?				
Is there a continuing threat? Yes / No If there was (or still is), then you must take steps to prevent further damage and notify the NRW on 0300 065300 and any other relevant regulators ASAP. Have you done so? Yes / No	Who did you phone? At what time did you phone?			
You must also write or send an email to confirm this to the local office (see your accident management plan for the address) Have you done so?	Yes/No What date did you contact?			
Please print your name and sign				

Continue overleaf or on a separate sheet if you do not have enough room. Keep the completed form in the file to discuss with the NRW when they visit.

RAW AND AUXILIARY MATERIALS SELECTION AND MINIMISATION ASSESSMENT

1. Identification of Materials

- 1.1 All materials supplied for use at the site are delivered against an invoice or some other delivery docket. Appropriate records of such deliveries are to be kept. Additionally waste materials that may have a secondary use will be directed from the weighbridge to the materials recycling facility wherever possible.
- 1.2 The principal bought-in material is fuel oil for the site plant and machinery. This is supplemented with hydraulic oils, lubricating oils, coolants and antifreeze and grease.
- 1.3 The chemical composition of such materials is readily available.
- 1.4 At times, insecticides and vermin control bait will be purchased for use or brought to site by Contractors. Proprietary brands are to be used and their chemical composition will be readily available from statutory labelling on the containers. Product data sheets are to be retained on site where available. Ideally these products will have formal approval for use by DEFRA.
- 1.5 The Office at the site operates as any other administrative centre and uses paper, envelopes, printer and toner cartridges, correction fluid, etc. Normal, good housekeeping is expected to reduce their consumption.
- 1.6 Water is supplied for operational site management (laying dust, washing down plant and equipment, as a coolant in plant and machinery, etc), collected as surface water runoff.
- 1.7 Where safe and practicable, water for such use is to be drawn from surface water impoundments.
- 1.8 The Office has mains electric to the office.

2. Fate of Materials

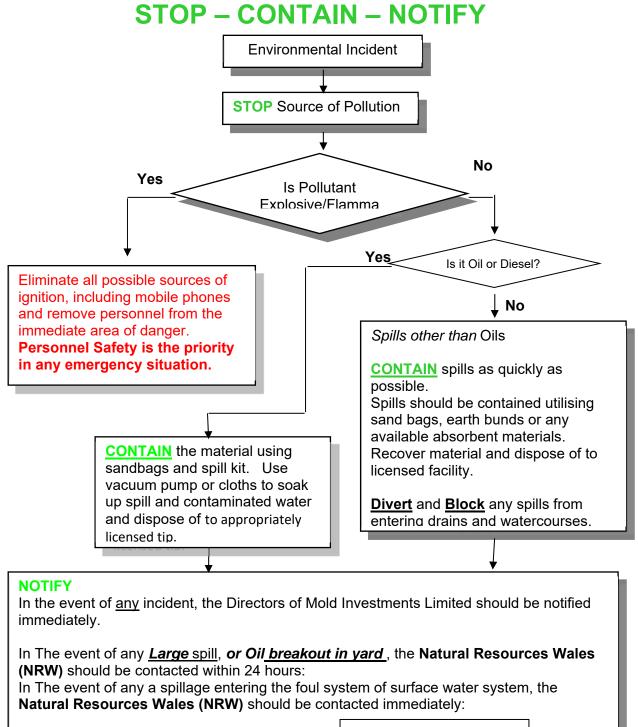
- 2.1 Fuel oil is burnt in the various internal combustion engines and, essentially, all is then emitted to the atmosphere as carbon dioxide and water in the exhaust.
- 2.2 Lubricating and hydraulic oils are used in topping-up and in programmed replacement. Oils that are drained out of plant and machinery are to be safely recovered and disposed off-site.
- 2.3 Grease is lost during wear and ultimately falls to the ground.
- 2.4 Chemicals used for insect and vermin control will all be used as 'product' and its fate will be into the body of the waste mass itself.

3. Other Considerations

- 3.1 There are no practical alternatives to the fuel, hydraulic and lubricating oils and grease used on the site plant and machinery.
- 3.2 Only preparations approved for use by any appropriate Regulations are to be used either by site personnel or Contractors. These, of course, may change during the life of the site with more 'environmentally friendly' preparations coming to market: in which case, consideration is to be given to using such preparations, having regard to their effectiveness.
- 3.3 The Company expects and requires its management, staff and site operatives only to purchase and use raw and auxiliary materials as are sufficient for the duty or purpose envisaged. Care and attention during removal from containers, avoidance of spillages and correct dosing are expected to minimise their consumption.

APPENDIX B: SPILLAGE PROCEDURE

Environmental Incident Response Procedure



During Office Hours (local office) on:

0300 065 300

0300 065 300

OR Environment Agency (EA) 24 Hour Emergency Hotline

Chadwich Lane Quarry Ltd EMS Documents 2022

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APPENXDIX C: SITE DIARY ELECTRONIC

Inspection of:		RESULT OF INSPECTION	INITIALS
FENCES & GATES	0.K	 NOT O.K (note reasons & actions required below) 	
ROAD SURFACE	0.K	NOT O.K (note reasons & actions required below)	
DUST SUPPRESSION	0.K	 NOT O.K (note reasons & actions required below) 	
HOUSEKEEPING	0.K	 NOT O.K (note reasons & actions required below) 	
DUST CONTROL	0.K	NOT O.K (note reasons & actions required below)	

INFORMATI	ON TO BE RECORDED		
TCM attendance at site	Name:	Time on	Time off
	Name:	Time on	Time off
SAMPLING / MONITORING EXERCISES		RESULTS OR R	EFERENCE TO RESULTS
Wind Direction			

Maintenance of Plant and Equipment	Comments	
Road Sweeper Visit	I Yes	🛛 No

	NRW Visit To Site. No	Δ Yes Δ	Actions Required	∆ Yes	ΔNo
NRW Officer: Name		Signature			

Incidents / Events / Complaints / Non-Conformances /Actions Required

(N.B. Give a reference to any reports external to the diary)

Use overleaf if further	space is required	

SIGNATURE OF TCM (AFTER COMPLETION AND REVIEW).....

APPENDIX B:

Waste Acceptance Criteria

CHADWICH LANE QUARRY LANDFILL

Environmental Permit Application

Waste Acceptance Procedure

Prepared for: Chadwich Lane Quarry Ltd

Ref: WAP/CLQ/1.00/2022 Version No: 1 November 2022

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APPENDICES

Waste Types Waste Characterisation Check Form Random Site Testing Form Load Rejection Form

1.0 Introduction

1.1 Report Context

Chadwich Lane Quarry Ltd instructed Enviroarm Limited (EL) to prepare a Waste Acceptance Procedure (WAP) as part of an Environmental Permit (EP) application for Chadwich Lane Quarry Landfill in Madeley Heath, Bromsgrove, Worcestershire under the Environmental Permitting (England and Wales) Regulations 2016.

The purpose of the WAP is to ensure that the site only accepts waste that is:

- Suitable for the activity;
- Is allowed by the EP; and
- Is appropriately considered by the environmental risk

assessment. The WAP will also assist with:

- Ensuring the activities do not cause pollution;
- Assist in the waste sourcing decision making process; and
- Prevent the receipt of non-permitted wastes.

2.0 Landfill Waste Acceptance Procedure Overview

This WAP has been prepared with reference to the following guidance for waste acceptance at landfills:

- DEFRA: Environmental Permitting: Environmental Permitting Core Guidance, March 2008;
- Environment Agency (EA) (2008) Environmental Permitting Regulatory Guidance Series No. LFD1. Understanding the Landfill Directive for Environmental Permitting; and

2.1.1 Landfill Directive

The Landfill Directive places controls on all landfill site's accepting waste. These controls also include the requirements for WAP and waste acceptance criteria (WAC), that were previously agreed by the Council of the European Union¹.

Before a type of waste can be accepted at a landfill site, the landfill operator must be satisfied that the waste meets their permit conditions, the WAP's and WAC. If a waste producer decides to deposit at a landfill, they must also follow these procedures, or the operator can refuse to accept the waste.

2.1.2 Chadwich Lane Quarry Landfill Classification

The site will accept non-hazardous waste into a fully lined and engineered landfill site, split into the following types of waste;

Inert waste;

The list of wastes for acceptance at the landfill are included as Appendix 02-1 of this WAP.

¹ Detailed in Council Decision 2003/33/EC.

3.0 Landfill Waste Acceptance Procedure

3.1 Level 1: Basic Characterisation

Level 1 basic characterisation of wastes constitutes a thorough determination, according to standardised analysis and behaviour testing methods, of the short and long term leaching behaviour and or characteristic properties of waste.

As a minimum, the following information about the characteristics of each waste stream will be obtained prior to receiving the waste at the site:

- a) The full address where the waste was produced the source and origin of the waste;
- b) The identity of the producer;
- c) State that the waste cannot be recycled;
- d) State why the waste cannot be treated;
- e) SIC Code for the process that produced the waste;
- f) The physical appearance of the waste including colour, texture and smell;
- g) Its European Waste Catalogue (EWC) code;
- h) Where a weighbridge isn't used, a metric conversion factor for volume (cubic metres) to weight (tonnes) for each waste stream; and
- i) The quantity of waste to be imported.
- j) Testing of the waste
- k) EWC Code for the waste
- I) Landfill class is inert
- m) Confirm that the waste it not banned from landfill

Basic characterisation will focus on identifying key variables, of which there are two types:

- Those parameters which dictate that a waste will always be directed to a particular class of landfill; and
- Those parameters which vary in a waste stream such that the waste is sometimes suitable for one class of landfill, and sometimes another.

Basic characterisation will normally be required where:

- Wastes need to be analysed for a limited number of key variables, which may vary close to the landfill class limit values or the presence/absence of which affect the class of landfill; and
- A complete determination of composition and leaching is required, particularly if the waste is either a one-off, is from a very variable process, or has not undergone basic characterisation before.

In the event that there is suspicion of contamination, the waste will be tested.

3.2 Level 2: Compliance Testing

Level 2 compliance testing of waste is required for waste that is 'regularly arising'. Periodic checks on the waste will be carried out to ensure that the properties originally accepted on site have not changed.

Level 2 compliance testing constitutes periodical testing by standardised analysis and behaviour testing methods to determine whether the waste complies with the results of the basic characterisation, the acceptance criteria for the landfill class and the installation specific conditions of the permit. This test will focus on key variables and behaviour identified by basic characterisation and will be carried out at least

once a year for each waste stream.

The relevant parameters to be checked will be determined from the results of the basic characterisation. The parameters, and reasons for their selection, will be documented, and the results of the tests will be maintained at the installation.

The requirements for Level 1 and Level 2 testing will depend upon the type of waste. For wastes that are regularly generated in the same process, where the input materials, and the process are well defined, and changes to the process are notified to the landfill operator, initial analyses may show that there is little variability in the waste, and there may be no further requirement for characterisation testing. Further deliveries may then only be subject to compliance testing. For wastes that are not regularly generated in the same process and installation, each batch may require the basic characterisation testing and consequently no compliance testing is needed.

3.3 Level 3: On-site Verification

Level 3 on-site verification of waste is to ensure each delivery of waste is the expected waste and that it has not been contaminated in storage or transport to the site.

A visual inspection to satisfy the Level 3 on-site verification requirements will be carried out on all waste deposited at the site. Preliminary verification, including checking of the paperwork, and a visual inspection if possible, will take place before vehicles carrying the waste can proceed to the disposal area.

The visual inspection will have two purposes:

- To confirm that the waste is permitted for disposal at the site; and
- To confirm the waste is as described in the accompanying documentation.

3.4 WTN Procedure

3.4.1 Weighbridge

A weighbridge is not provided at Chadwich Lane Quarry Landfill.

3.4.2 Waste Identification/Verification

The site operator will identify the type of waste from the following information:

- Duty of Care transfer note; or
- Verbal confirmation from the driver.

Where possible, the site operator will undertake a preliminary visual examination of the waste.

3.4.3 Waste Quantity

The waste quantity will be based on the HGV type and back.

3.4.4 Ticket Issue

The transaction will be regarded as complete when the site operator obtains the driver's signature on the weighbridge ticket.

Manual tickets will be available at the weighbridge, for manually recording waste receipts.

3.4.5 Duty of Care Waste Transfer Notes (WTN)

The Environmental Protection (Duty of Care) Regulations 1991 (as amended) impose requirements to complete transfer notes recording details of waste transfers, and to keep the transfer notes and make copies available to the EA on request. The Regulations place these responsibilities on the person who

provides and the person who receives the waste.

Although the layout and information contained on WTNs can vary widely, the following items must be stated on or attached to the transfer note:

Description of Waste

The description of the waste must include some or all the following:

- EWC code;
- The type of premise or business from which the waste comes;
- The name of the substance or substances;
- The process, which produced the substance;
- A chemical and physical analysis; and
- Any special problems.

Quantity of Waste

The amount in weight or volume, and how it is packaged.

Current Holder of the Waste

The current holder of the waste must be one of the following:

- Producer of the waste-name and full address;
- A waste Collection Authority-Authority's name;
- A registered waste carrier-registration number and issuing authority; and
- Exempt from registration-state reason.

Details of the Transfer

The details of the transfer must include all of the following, and will be filled in by the manager or weighbridge operator:

• Full address of landfill site;

- Date and time of transfer (between dates may be shown for multiple loads); and
- Signature and full name in block capitals of current holder and person receiving waste, and the name of the company they represent.

The site operator will check that any transfer notes arriving at the site are filled out correctly. Transfer notes can either relate to a one-off transaction or can be long term 'season tickets' which can remain valid for up to a year. The Site Manager or a delegated representative will check the status of long-term season tickets regularly, and customers advised of any pending renewal requirements. The results of such audits, together with action taken shall be recorded in the site log.

3.5 Quarantine and Rejection Procedures

The objectives of the quarantine and rejection procedures are to ensure that all non-conforming waste is removed from site and that the waste producer and carrier are informed so that appropriate action can be taken to prevent recurrence.

3.5.1 Non-Conforming Waste

Wastes that are identified at the site office as non-conforming will be held in the waste reception area for inspection. If the inspection confirms that the waste is non-conforming, the waste carrier and/or producer, and internal company line management, will be informed. The vehicle will be invited to remain on site until an agreed course of action has been determined between all relevant parties.

3.5.2 Waste Authorisation

The site operator will consult the Site Manager (or Deputy) where the waste does not conform to the information stored on the computer.

The Site Manager will determine if the waste is acceptable for disposal under the terms of the permit, and whether all necessary pre-treatment and characterisation testing has been satisfied. If there is any doubt, the waste will not be accepted, and the weighbridge operator will advise the driver accordingly. Alternatively, if the Site Manager agrees to accept the waste, the weighbridge operator will arrange for the load to be observed during discharge at the tipping area.

3.5.3 Waste Rejection at the Weighbridge

Incoming waste will be rejected at the weighbridge for a number of reasons including:

- Incomplete or unsatisfactory documentation;
- Physical appearance not fitting description on transfer note;
- Burst sacks or inadequately contained load;
- Presence of free liquid in the waste above the prescribed limits;
- Waste not adequately pre-conditioned; and
- Adverse weather conditions at tipping face.

The Site Manager (or Deputy) will be informed of any waste that is rejected at the weighbridge due to inaccurate documentation. They will then communicate with the customer, advising that the load has been rejected and the reasons why. The details will be entered on the waste rejection form.

If the site is unable to accept certain waste streams due to adverse weather conditions, customers will be notified by telephone or e-mail giving the period of closure, providing as much notice as possible.

3.5.4 Rejection at the Operational Area

A final visual inspection during placement of all loads will be carried out by a site operator, who will identify non- conforming within a waste deposit.

If non-conforming material is identified, the following action will be taken:

- The Site Manager (or Deputy) will be informed immediately by radio or telephone;
- Other waste and vehicles will be directed to another location on the working area, to ensure the suspect waste remains exposed;
- The Site Manager (or Deputy) will examine the WTN and any other documentation which provides details on the process or premises that produced the waste, to enable an appropriate assessment to be undertaken on inspection;
- The Site Manager (or Deputy) will inspect the non-conforming waste taking all necessary safety precautions;
- If the Site Manager (or Deputy) is satisfied that the description of the waste was appropriate, that there has been no contravention of the permit, or breach of contract, they will authorise the continuation of disposal; and
- The details of the incident will be recorded in the site log.

If the Site Manager (or Deputy) is not satisfied that the material conforms to the above requirements, the following action will be taken:

- The driver of the vehicle will be alerted, and the waste will be reloaded onto the vehicle where
 possible. The vehicle will then be redirected to the site entrance, issued with relevant paperwork
 and asked to leave the site;
- If the vehicle has left the operational area, the competent person will attempt to intercept the vehicle before leaving the site so that the waste can be re loaded, and relevant paperwork issued;
- If the vehicle has left the site before the presence of unauthorised waste is identified, the waste will be isolated or moved to a temporary 'quarantine' storage ;
 - The waste carrier will then be contacted and asked to remove the waste from site. If the carrier is
 unable to remove the waste, it will be consigned to an alternative suitably authorised facility by
 a registered waste carrier. A duty of care WTN will be completed for all such transactions. In the
 event it is necessary to sample such waste to identify a suitable treatment facility, the necessary
 sampling will be carried out. The waste will be stored in the quarantine area until a suitable
 alternative facility has been identified; and
 - A skip will be maintained close to the operational area. This skip will be used for the storage of isolated contaminants identified within loads of waste which would not warrant rejection of the load. These minor inclusions will be removed from the load and placed in the skip prior to offsite removal.

3.5.5 Non-Conforming Waste Record

For all non-conforming waste, an incident report will be raised which will be cross referenced in the site log. This will include the following details:

- Date and time;
- Producer details;
- Carrier details;

- Duty of Care transfer note reference number;
- Description of waste;
- Volume of waste;
- EWC code;
- Non-conforming waste;
- Samples taken;
- Details of communication with NRW (time, name of officer); and
- Actions agreed and taken.