

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

S. Walsh and Son Limited

East Tilbury Quarry
Princess Margaret Road
East Tilbury
Essex
RM18 8PH

Variation application number
EPR/SP3439LE/V005

Permit number
EPR/SP3439LE

East Tilbury Quarry

Permit number EPR/SP3439LE

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This variation is to extend the landfill by adding a further cell in phase 3 to the east of the site. There is no increase in the tonnage to be landfilled but there will be a decrease in the annual tonnage at the transfer station from 760,000 tonnes per year to 699,999 tonnes per year. Also a waste code is to be added for mixed construction and demolition waste (17 09 04) and this permit is to be updated to the modern template.

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description		Date	Comments
Permit EA/PPC/71266	determined	14/05/04	Original permit issued to Brett Aggregates Limited for an inert Landfill Site
Transfer EPR/SP3439LE	determined	12/03/08	Full transfer from Brett Aggregates Limited to S Walsh and Sons Limited
Application EPR/SP3439LE/V002 (variation and consolidation)	received	Duly made 09/02/09	Variation to include an inert waste transfer station facility
Variation EPR/SP3439LE	determined	30/06/09	Variation permit issued
Application EPR/SP3439LE/V003 (admin variation)		Date received 16/12/10	Variation to add a waste code and amend site plan
Variation EPR/SP3439LE	determined	28/02/11	Admin variation issued
Application EPR/SP3439LE/V004 (admin variation)		Date received 24/02/12	Application to add three waste codes to permit
Variation EPR/SP3439LE	determined	29/03/12	Admin variation issued
Application EPR/SP3439LE/V005	received	Duly made 30/10/13	Normal variation increase site boundary (new cell) and add waste type and reduce annual tonnage.
Application determined		18/12/13	Issued to S Walsh and Son Limited.

End of introductory note

Variation application number
EPR/SP3439LE

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/SP3439LE

issued to:
S. Walsh and Son Limited (“the operator”)

whose registered office is

East Horndon Hall Business Park
Tilbury Road
Brentwood
Essex
CM13 3LR

company registration number 01053148

to operate a regulated facility at

East Tilbury Quarry
Princess Margaret Road
East Tilbury
Essex
RM18 8PH

to the extent set out in the schedules.

The notice shall take effect from 18/12/2013

Name	Date
Philip Lamb	18/12/2013

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

The following conditions are deleted as a result of the application made by the operator

All conditions are deleted

Schedule 2 – conditions to be amended

None

Schedule 3 – conditions to be added

The following conditions as a result of the application made by the operator

New permit conditions attached.

Schedule 4 – plan

Plan attached

Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.
- 1.2.2 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
- (a) the costs of setting up and operating the landfill;
 - (b) the costs of the financial provision required by condition 1.2.1; and
 - (c) the estimated costs for the closure and aftercare of the landfill.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 (a) *For the following activities referenced in schedule 1, table S1.1 (A1 to A2)* The activities shall, subject to the conditions of this permit, be operated using the

techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

- (b) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.2 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 2 table S2.1 and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

2.4 Landfill Engineering

- 2.4.1 (a) *For the following activities referenced in schedule 1, table S1.1 (A1)* No construction of any new cell shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.4.2 *For the following activities referenced in schedule 1, table S1.1 (A1)* The construction of a new cell shall take place only in accordance with the approved construction proposals unless:
 - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.4.3 *For the following activities referenced in schedule 1, table S1.1 (A1)* The operator shall submit a CQA Validation Report to the Environment Agency as soon as practicable following the construction of the new cell.
- 2.4.4 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.4.5 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
 - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
 - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.4.6 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the landfill infrastructure.

- 2.4.7 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.4.4 and 2.4.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.4.8 For the purposes of conditions 2.4.1, 2.4.3 and 2.4.4, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.
- 2.4.9 Where the Environment Agency has required further information under condition 2.4.8(a), the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
 - (b) informed the operator that it requires further information.

2.5 Waste acceptance

- 2.5.1 *For the following activities referenced in schedule 1, table S1.1 (A1) Wastes shall only be accepted for disposal if:*
- (a) they are listed in schedule 2, and
 - (b) they are inert waste, and
 - (c) they are not liquid waste (including waste waters but excluding sludge), and
 - (d) all the relevant waste acceptance procedures have been completed, and
 - (e) they fulfil the relevant waste acceptance criteria, and
 - (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
 - (g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.
- 2.5.2 *For the following activities referenced in schedule 1, table S1.1 (A1 to A2) The operator shall visually inspect:*
- (a) without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill; and
 - (b) waste at the point of deposit;
 - (c) waste at the point of dispatch
- and shall satisfy itself that it conforms to the basic characterisation documentation submitted by the holder.
- 2.5.3 *For the following activities referenced in schedule 1, table S1.1 (A1 to A2) Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.*

- 2.5.4 *For the following activities referenced in schedule 1, table S1.1 (A1 to A2)* The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.5.5 The total quantity of waste that shall be deposited in the landfill shall be limited by the pre-settlement levels shown on drawing Cross Sections P4068/01/D04 dated 31st March 2013.
- 2.5.6 The quantity of waste that is deposited in the landfill in any year shall not exceed the limits in schedule 1 table S1.3.
- 2.5.7 *For the following activities referenced in schedule 1, table S1.1 (A1 to A2)* The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or recovery and of the identity of the producer, or in the case of multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

2.6 Pre-operational conditions

- 2.6.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4A have been completed.

2.7 Closure and aftercare

- 2.7.1 *For the following activities referenced in schedule 1, table S1.1 (A1)* The operator shall maintain a closure and aftercare management plan.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land.
- 3.1.2 The limits for groundwater quality specified in schedule 3, table S3.1 shall not be exceeded.
- 3.1.3 The limits for landfill gas arising from the facility set out in schedule 3, table S3.3 shall not be exceeded.
- 3.1.4 The limits for surface water specified in schedule 3, table S3.5 shall not be exceeded.
- 3.1.5 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
 - (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Noise and vibration

- 3.3.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Monitoring

- 3.4.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions for the parameters specified in the following tables in schedule 3 to this permit:
- (a) Groundwater specified in table S3.1 and S3.2;
 - (b) Landfill gas specified in table S3.3;
 - (c) Surface water specified in table S3.4; and S3.5

3.4.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.4.3 *For the following activities referenced in schedule 1, table S1.1 (A1)* A topographical survey of the site referenced to Ordnance Datum shall be carried out:

- (a) annually, or prior to the disposal of waste in any new cell or new development area of the landfill whichever is the shorter period, and
- (b) following closure of the landfill or part of the landfill.

The topographical survey shall be used to produce a plan of a scale adequate to show the surveyed features of the site.

4 Information

4.1 Records

4.1.1

- (i) the results of groundwater monitoring;
 - (ii) landfill gas monitoring;
 - (iii) waste types and quantities;
 - (iv) the specification and as built drawings of the basal and sidewall engineering systems
- (a) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
- (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this installation and any agreed amendments thereto;

- (b) the topographical surveys required by condition 3.4.3 other than those submitted as part of a CQA validation report;
 - (c) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
 - (d) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
 - (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey;
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities

	Description of specified activity and WFD Annex I and II operations	Limits of activities
A1	D1: Deposit into or on to land	The deposit of inert waste into or onto land. Receipt, handling, storage and disposal of inert wastes, consisting of the types and quantities specified in table S2.1.
A2	D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection on the site where it was produced)	Treatment consisting only of manual sorting, separation, screening or crushing of inert waste into different components for disposal (no more than 50 tonnes per day) or recovery.
	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced.	Waste shall be stored and treated on a hard standing or on an impermeable surface with a sealed drainage system
	D14: Repackaging prior to submission to any of the operations numbered D1 to D13.	
	D9: Physico-chemical treatment not Specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12	
	R3: Recycling/recalamation of organic Substances which are not used as Solvents	
	R5: Recycling/reclamation of other Inorganic materials	

Table S1.2 Operating techniques

Description	Parts	Date Received
Application	Operating Techniques section 3a of the application in response to section 3a – technical standards, Part C4 of the application form.	12/09/13

Table S1.3 Annual waste input limits

Category	Limit Tonnes/ Year
Inert Waste	699,999 tonnes Transfer Station
	300,000 tonnes Inert Landfill

Table S1.4A Pre-operational measures

Reference	Pre-operational measures
1	The operator shall submit a review of all available groundwater quality baseline data in writing for Environment Agency approval, and make recommendations for compliance limits at boreholes BH37, BH38, BH39 and BH40. The review shall include at least a year's worth of background data for boreholes BH37, BH38, BH39 and BH40 in accordance with the parameters and frequencies specified in table S3.2.

Schedule 2 - List of permitted wastes

Table S2.1 Permitted waste types (Transfer Station)

Waste code	Description
Permitted waste types and quantities	
Maximum quantity	The total quantity of waste accepted at the site shall be less than 699,999 tonnes per year.
Waste code	Description
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	Wood, glass and plastics
17 02 02	glass
17 03	Bituminous mixtures, coal tar and tarred products
17 03 02	Bituminous mixtures, other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 09	Other construction and demolition wastes
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03.
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	waste from the mechanical treatment of waste(for example sorting, crushing, compacting pelletising) not otherwise specified
19 12 05	glass
19 12 09	minerals (for example sand, stones)
19 12 12	Soil substitutes other than that containing dangerous substances only
19 13	waste from soil and groundwater remediation

Table S2.1 Permitted waste types (Transfer Station)

Waste code	Description
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	Garden and park waste(including cemetery waste)
20 02 02	soil and stones

Table S2.2 Permitted waste types (Landfill)

Waste code	Description
Permitted waste types and quantities	
Maximum quantity	The total quantity of waste accepted at the site shall be less 300,000 tonnes per year.
Waste code	Description
10	WASTES FROM THERMAL PROCESSES
10 11	Wastes from manufacture of glass and glass products
10 11 03	Waste glass-based fibrous materials
15	Waste Packaging, Absorbants, Wiping Cloth, Filter Materials and Protective Clothing not otherwise specified
15 01	Glass Packaging
15 01 07	Glass Packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	Concrete (selected C&D waste only ^[a])
17 01 02	Bricks (selected C&D waste only ^[a])
17 01 03	Tiles and ceramics (selected C&D waste only ^[a])
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 (selected C&D waste only ^[a])
17 02	Wood, glass and plastics
17 02 02	glass
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat; excluding soil

Table S2.2 Permitted waste types (Landfill)

Waste code	Description
	and stones from contaminated sites)
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	waste from the mechanical treatment of waste(for example sorting, crushing, compacting pelletising) not otherwise specified
19 12 05	glass
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 02	Glass (separately collected glass only)
20 02	Garden and park waste(including cemetery waste)
20 02 02	soil and stones (only from garden and parks waste; excluding top soil, peat)

^[a] Selected construction and demolition waste (C&D waste): with low contents of other types of materials (like metals, plastic, organics, wood, rubber, etc). The origin of the waste must be known.

No C&D waste from constructions polluted with inorganic or organic dangerous substances, e.g. because of production processes in the construction, soil pollution, storage and usage of pesticides or other dangerous substances, etc., unless it is made clear that the demolished construction was not significantly polluted.

No C&D waste from constructions treated, covered or painted with materials containing dangerous substances in significant amounts

Waste must be tested where there is suspicion of contamination or doubt that the waste meets the definition of inert waste or the limit values.

Schedule 3 – Emissions and monitoring

Table S3.1 Trigger levels for emissions into groundwater and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Monitoring frequency	Monitoring standard or method
BH 17, BH37, BH38, BH39 and BH40 as on drawing number M07.124(n) 01 dated October 2012	Nickel	0.2 mg/l	Quarterly	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water
	Fluoride	10 mg/l		
	Phenol	0.3 mg/l		

Table S3.2 Groundwater monitoring requirements

Emission point ref. & location	Parameter	Monitoring frequency	Monitoring standard or method
BH17, BH20, BH25, BH37, BH38, BH39 and BH40 as on drawing number M07.124(n) 01 dated October 2012	pH, electrical conductivity, temperature, dissolved oxygen, ammoniacal nitrogen, chloride, sulphate and total organic carbon, ground water level.	Monthly	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water

BH17, BH20, BH25, BH37, BH38, BH39 and BH40 as on drawing number M07.124(n) 01 dated October 2012	As monthly plus fluoride, alkalinity, total oxidized nitrogen, phenols, sodium, potassium, calcium, magnesium, iron, manganese, cadmium, chromium, copper, nickel, lead, zinc, arsenic and antimony	Quarterly	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water
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Table S3.3 Landfill gas monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units)	Monitoring frequency	Monitoring standard or method
Landfill gas monitoring boreholes BH20, BH21, BH22, BH23, BH24, BH37, BH38, BH39 and BH40 on drawing number M07.124(n) 01 dated October 2012.	Methane	1.1 %v/v	Monthly	In accordance with Agency guidance LFTGN03 'Guidance on the Management of Landfill Gas' or as otherwise agreed with the Agency
	Carbon Dioxide		Monthly	

Table S3.4 Surface water – other monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
St Clares sewer upstream/downstream of the site	Temperature, DO, pH, EC, TSS, NH4-N, BOD, Cl sulphate, nickel fluoride	Quarterly	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water
Gobions sewer upstream/downstream of the site			
Void discharge			
St Clares sewer upstream/downstream of the site	As quarterly plus phenols	Annually	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water
Gobions sewer upstream/downstream of the site			
Void discharge			

Table S3.5 Trigger levels for emissions into surfacewater and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
St Clares sewer downstream of the site	Nickel	0.2 mg/l	Spot Sample	Quarterly	In accordance with Agency document LFTGN 02 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water
	Fluoride	15 mg/l			
	Phenol	0.3 mg/l			
Gobions sewer downstream of the site	Nickel	0.2 mg/l			
	Fluoride	15 mg/l			
	Phenol	0.3 mg/l			

Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Groundwater Parameters as required by condition 3.4.1	BH17, BH20, BH25, BH37, BH38, BH39 and BH40	Quarterly	1 January, 1 April, 1 July, 1 October
Landfill gas monitoring Parameters as required by condition 3.4.1	BH20, BH21, BH22, BH23, BH24, BH37, BH38, BH39 and BH40	Quarterly	1 January, 1 April, 1 July, 1 October
Surface water Parameters as required by condition 3.4.1	St Clares sewer upstream/downstream of the site Gobions sewer upstream/downstream of the site	Quarterly Annually	1 January, 1 April, 1 July, 1 October

Table S4.2 Reporting forms

Media/parameter	Reporting Format	Date of Form
Controlled water	Form water 1 or other reporting format to be agreed in writing with the Environment Agency	DD/MM/YY
Groundwater	Form groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	DD/MM/YY
Landfill gas	Form Gas 1 or other reporting format to be agreed in writing with the Environment Agency	DD/MM/YY
Waste Return	Waste Return Form RATS2E	DD/MM/YY
Landfill topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	DD/MM/YY

Schedule 5 - Notification

This page outlines the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	EPR/SP3439LE/V005
Name of operator	S Walsh and Son Limited
Location of Facility	East Tilbury Quarry, Princess Margaret Road, East Tilbury, Essex, RM18 8PH.
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and Time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B to be supplied as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

“*annually*” means once every year.

“*authorised officer*” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“*Construction Proposals*”;

- for new cells, means written information at a level of detail appropriate to the complexity and pollution risk, on stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the new cell.
- for landfill infrastructure, means the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the landfill infrastructure.

“*CQA Validation Report*” means the final “as built” construction and engineering details of the new cell or of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliance and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the new cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the construction proposals.

“*Landfill Infrastructure*” means any specified element of the:

- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;

within the Site.

“*Liquids*” means any liquid other than leachate within the landfill.

“*New Cell*” means any new cell, part of a cell or other similar new area of the Site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- sub-grade;
- artificially established geological barriers;
- cell or area surface water drainage system;

- side wall subgrade and containment systems;

for the new cell.

“*No impact*” means that the change made to the construction process will not alter the agreed design criteria, specification or performance in a way that has a negative effect.

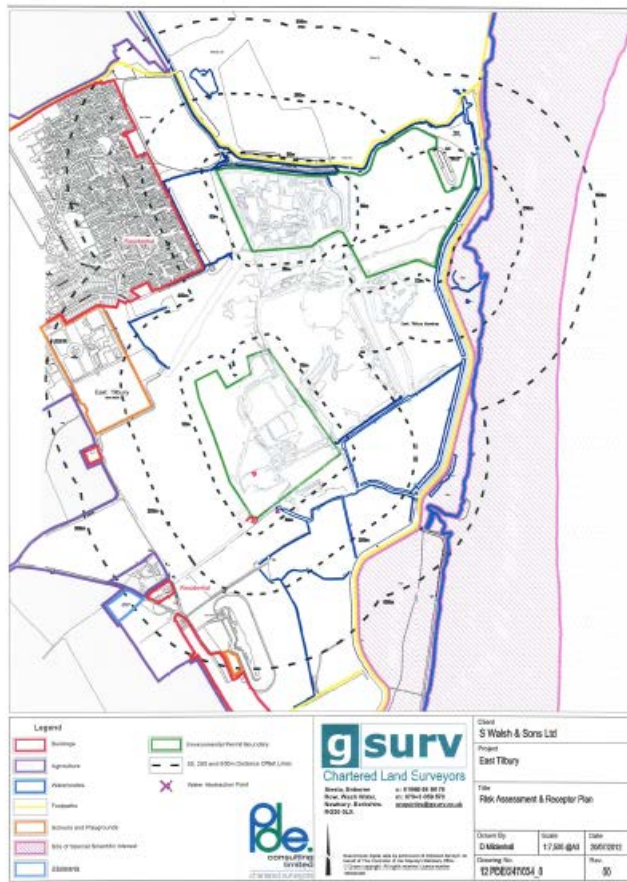
“*quarter*” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“*Waste code*” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

“*Waste Framework Directive*” or “*WFD*” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than the limit.

Schedule 7 - Site plan



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END OF PERMIT