Environment Agency Permitting decisions

Bespoke Permit

We have decided to grant the permit for Lane Side Quarry Landfill Site operated by P Casey Enviro Limited.

The permit number is EPR/RP3332KY

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Structure of this document

- Annex 1 the decision checklist and Key Issues for the
- Annex 2 the consultation, web publicising and newspaper advertising responses
- Annex 3 for decision checklist for Inert & Excavation Waste Treatment and Transfer Station standard rules permit

Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and permit.

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	No claim for commercial or industrial confidentiality has been made.	✓
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation, web publicising and newspaper advertising	The consultation and newspaper advertising responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that the Applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓
The facility		
The regulated facility	The extent/nature of the facilities taking place at the site required clarification. The decisions on the facility were taken in accordance with RGN 2 [interpretation of installation and Schedule 1], For this we reviewed the activities against those listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities • Section 5.2 Part A(1) (a) - The disposal of waste in a landfill [non-hazardous] (D5 –Specially engineered landfill) • Section 5.3, Part A(1)(c)(i), Biological treatment • Storage and treatment of leachate in a facility with a capacity of >50 Tonnes/ day (D8 – Biological treatment of waste)	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Directly Associated Activities • Utilisation of landfill gas for energy recovery in a appliance <3 MW rated thermal input • Flaring of landfill gas for disposal in an appliance. • Water discharges to controlled waters. Discharges of site drainage from the landfill. • Storage of fuel for operation of plant and equipment. • Storage of other raw materials including lubricating oils and antifreeze. The site will also contain an inert and excavation waste transfer station. A standard rules permit type SR2008No11_ 75kte has been assessed for this purpose	
European Directives		
Applicable Directives	All applicable European Directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	A number of areas included in the application have been excluded from the geographical extent of the landfill on the basis that they were: • unnecessary to the waste treatment and landfilling activities • newly created habitats for great crested newts • in elevated positions facing residences & thus difficult to screen for noise if activities were carried out there. The route of Cockley Hill Beck and the wetlands that feed it are retained within the geographical extent of the facility. Our reasons for this are that it is possible that the beck is an integral component of the hydrology and hydrogeology beneath the proposed landfill / planned final restoration contours and is vulnerable to pollution, litter / dust / soil spillages. Its inclusion in the site enables us to set conditions for its protection within the permit. (see more in the Key Actions section below). The reduced installation boundary was agreed by the Operator who has provided a plan as part of their response to our Schedule 5 notice, which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the Operator is required to carry on the permitted activities within the site boundary. This boundary will also apply to the activities covered by the standard rules permit for inert and excavation waste transfer station. The proposed hard standing area with sealed drainage that this permit specifies for these activities is shown on the site plan in Schedule 7 of the permit.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Planning permission	We are satisfied that planning permission is in place and is appropriate for the relevant waste operations applied for. However, given the Environment Agency's requirement to maintain Cockley Hill Beck in its present course, the Applicant will need to discuss changing the final restoration contours with the local planning authority It is noted that the Applicant is still to fulfil planning conditions in regards to the Inert and Excavation Waste Transfer Station area, Landfill Gas Utilisation Plant and will not be able to be installed without this. Similarly no planning application for the Leachate Treatment Plant has been made and cannot be built without Kirklees Metropolitan Borough Council planning approval. The Environment Agency's scope is limited to assessing the impact on the environment of the processes of which these are essential parts. On the basis of sufficient evidence of environmental protection the Environment Agency has decided to include this activity within the permit. For more details, see 'Key Issues' section	✓
Site condition report	The Applicant has provided a description of the condition of the site in its Site Condition, Environmental Setting & Installation Design (ESID) and Hydrogeological Risk Assessment (HRA) reports. For more information please see the 'Key Issues' section below. A substantial amount of further information was received in response to our Schedule 5 notice. We consider the combined information from the original Application and the Schedule 5 response gives the Environment Agency sufficient confidence that secure landfill cells which comply with all legislative requirements will be successfully engineered However we are aware that the proposed filling of voids and sealing off of man-made coal shafts & addits beneath the site may alter groundwater levels and flows. For this reason have included a series of pre-operational measures to assess, monitor and report on such effects after these ground stabilisation works are complete. The Environment agency will decide whether approval to commence landfilling will be given upon the results of these measures. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	There are no officially designated sites of heritage, landscape or nature conservation, and/or protected species or habitat within the relevant distance criteria of the installation. For this reason we have not formally consulted in this regard on the application. The decision was taken in accordance with our guidance.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	The site itself has been a habitat for great crested newts and the Operator has, under licence from Natural England, been catching newts and transporting then to other sites / newly created ponds overlying the former Kirkheaton Brickworks landfill site. In this way presence of great crested newts in the areas directly around the installation boundary must remain a consideration for the operating conditions set in this permit. We have set a pre-operational condition that will require the operator to protect the water quality and manage litter / dust / soil spillages into Cockley Hill Beck (see more in the Key Actions section below). The conditions set in this permit will protect the surrounding areas from damage due to acidification, habitat loss, nutrient enrichment, physical damage, smothering and toxic contamination.	
Environmental Risk Assessment and operating techniques		
EIA	No EIA was submitted as part of this application. However, in assessing the application we have in effect considered the information relevant to the EIA Directive's requirements.	✓
Environmental risk	We reviewed the Operator's evidence and assessment of the environmental risk from the facility and requested further information via a Schedule 5 notice. Need for further work to understand the hydrogeology and existing gas arisings under the site The key uncertainties arise from the fractured and man-modified nature of the rock in the base of the quarry and how stabilisation of this to create the landfill sub-base will impact on groundwater levels and flows It is also necessary to establish the baseline composition of groundwater and to characterise existing gas (released from the coal seam that passes under part of the site and the former Kirkheaton Brickworks landfill deposits) The response to the Schedule 5 notice indicated most of that which could be derived without commencing physical excavations, but is insufficient for the Environment Agency to approve the commencement of landfilling activities. In this light the Environment Agency has set out a pre-operational programme of installation works, investigations and reports to establish: • A full set of Environment Agency guidance compliant* groundwater and gas monitoring boreholes that can first establish the post – ground stabilisation / pre-landfilling baseline situation, then be used to warn of leaks from the proposed new landfill. • Then use these to improve understanding the hydrology / nature of existing gases and inform a step by step development of stabilisation design and works – requiring Environment Agency approval at each stage.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	It is not until these pre-operational measures are complete that the artificial geological barrier can be installed and landfilling of non-hazardous waste be allowed at this installation. • boreholes will be spaced at 20m intervals at positions around the Landfill cell perimeter where residences are less than 150m away and in other places - at 50m intervals in accordance with Environment Agency Guidance LFTGN03 for the surrounding permeable rock matrix. *Groundwater Trigger Substances* Insufficient information to support proposals was included in the Application and further information and full chemical screening of the existing contaminants in groundwater was requested via the Schedule 5 notice. In their response chemical screening information from the relatively few monitoring boreholes has been provided together with a proposal for the trigger substances that might indicate leakage from the new landfill in the future – thus triggering action. The trigger substances have been identified as Cadmium, Toluene, Ammoniacal Nitrogen, Chloride, Nickel, Phenol These trigger substances are to be reviewed and confirmed following the installation of and re-sampling of existing groundwater from a full Environment Agency compliant set of boreholes to be installed as pre-operational condition 1 in this permit. *Emplacement of waste.* There was insufficient description of the phasing of the emplacement of waste in the Application With the relatively large height of the void available for landfill at this site there is potential to create large side faces of waste. Such lateral faces are susceptible to leakage of gas which in turn will cause odour problems for nearby residents. For this reason a request for further information was made via a Schedule 5 notice In the response to this notice the Applicant has now set out a description of how waste emplacement will be phased in order from west to east to minimise the size of lateral flank areas and to use temporary cover materials to minimise gas / odour leakage from them *Gas Collection* The Application envisaged that gas collection facilities would only be installed once final levels of waste were reached, which could be 3 years into landfilling and gave few details of the design of the system that would be used. In their Schedule 5 notice the Environment Agency asked for a system of temporary gas wells to be installed co-ordinated with the waste emplacement phasing to enable gas which may be seen as early as 6 months after the start of landfill to be drawn off and treated The Operator has responded to this request with a proposal for temporary horizontal gas wells which will be installed alongside waste deposition, offering an easier route for gas than leakage from side faces.	

Aspect considered	Justification / Detail	Criteria met
		Yes
	We are satisfied with this concept but needs further information of how temporary gas flowlines to extract the gas will be run. This information will be obtained by the operator presenting details to the Environment Agency's compliance team as part of CQA procedures before construction Once the site has been filled a permanent gas collection system will be installed to replace the temporary flowlines. Sufficient detail of how this final gas collection system will be laid out and engineered to allow us to consider permitting this installation has now been provided *Leachate Management* Leachate created when rain water infiltrates through the waste and to a much lesser extent through seepage once the landfill section is capped is to be monitored by two chambers in each cell and pumped out such that its level is no higher than 1m above the base liner of the cells (Best / standard practice at landfills). This level is 4-5m above current measurements of groundwater under the landfill, which is to be checked /reported again using new monitoring boreholes after the landfill sub base is established Leachate is to be treated on site and discharged to sewer to a discharge consent standard set by Yorkshire Water, the sewerage undertaker The design of the Leachate Treatment Plant (LTP) shown in the Application is short on a number of aspects. For this reason the Environment Agency has set 'pre-operational measures for future development' in regards to: • Proposing compliance substances and parameters; • Confirming the design based on actual types of waste seen once landfilling has commenced; • Ensuring the treatment tanks are covered to allow capture and treatment of any odour emissions • Stripping of methane to avoid build up / transmission in the sewer (DSER regulations); • Space & provision for up-rating to cope with variation of leachate composition through the landfill and after care periods. *Treatment of Landfill Gas (LFG)* The Operator is proposing both Landfill Gas Engines to generate electricity from landfill gas and a back up flare. The Applicant Operator has used a standard industry program called GasSim to predict the volume and composition of gas that will arise from the wastes they propose to landfill. The simulation also assesses the impact of the emissions from 3 no. 300kW landfill gas engines and a flare capable of burning 1000m3/hr of landfill gas in the surrounding areas, using the method set out in the Environment Agency's H1 guidance.	

Aspect considered	Justification / Detail	Criteria met
		Yes
	The results from their detailed dispersion show that for H2S, NOx, SO2 the Predicted Environmental Concentrations (PEC's) at the site boundary and closest receptors are well within the Air Quality Standards for these pollutants. The results from the GasSim model are in the same order as Environment Agency experience of other landfill gas engines and flares of these sizes, indicating that this standard approach to landfill gas treatment can be considered BAT for this site. However the analysis presented in the application uses predicted waste receipts / conservative estimates of gas arisings and a more exact picture actual waste intake and gas arisings will emerge as the site starts operation. For this reason a pre – operation measure for future development has been included in this permit requiring a full Environmental Risk Assessments of the worst case emissions when waste intake and gas quantities are confirmed. The study shall use the Emission Limit Values the worst allowed emissions for H2S, Sulphur Dioxide, Oxides of Nitrogen, Carbon Monoxide, VOC's from LFG engines and flare using Environment Agency H1 methodology. Where H1 method shows pollutant contributions to be significant - dispersion modelling taking account of local atmospheric, weather and topology shall be undertaken. The Operator shall provide a written report of analysis and proposals for the Gas Utilisation Plant / flare. It is not until the Environment Agency has approved these can the Gas Utilisation plant / flare be implemented. Restrictions of wastes types and operation techniques set out in the Application & confirmed in the Permit will play a further day to day role in the reduction of environmental risk.	
Operating techniques	We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes. The key measures proposed by the Operator (with the relevant Environment Agency guidance that it has been checked against shown in brackets) include: *The Operational Procedures-* • application volume 1 section 2; describe administrative & day to day aspects to maintain the site, receive & handle waste and avoid nuisance & health effects. • Response to Schedule 5 requests 1.2.1, 2.2.4 (checked against EPR 1.00 How to comply with your Environmental Permit - Landfill EPR 5.02)	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Engineering of the landfill: • ESID -application volume 2 section 2 clauses 2.2 to 2.6 • Stability Risk Assessment – application volume 3 section 1. • Hydrogeological Risk Assessment (HRA)- Application Volume 2 section 3 Chapters 3, 9 &10 • Response to Schedule 5 requests 1.2.2, 2.2.2, 2.2.3, 2.2.6, 2.2.7, 2.2.3, 2.2.8, 2.3.1, 2.3.2, 2.3.4, 2.3.5 (checked against EA guidance LFTGN01) *Managing Landfill gas:* • Landfill Gas Risk Assessment - Application Volume 3 section 2 Chapters 4 • Response to Schedule 5 requests 2.2.5, 3.2.1, 3.2.2 (overruled by LFTGN03 borehole spacings in permit pre-operational measure 1) (checked against EA guidance LFTGN03) *Monitoring*: • Application volume 1 section 5, • HRA - Application Volume 2 section 3 Chapters 9 &10 (checked against EA guidance LFTGN02) (EA guidance LFTGN07), (EA guidance M2-Monitoring stack emissions to air) The proposed techniques/ emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. We consider that the emission limits included in the permit reflect the BAT for the installation	
The permit conditions		
Use of conditions other than those from the template	Based on the information in the application, and the sensitivity to the impact on surface water expressed by local residents, we consider that we need to impose a condition further to those in our permit template, which was developed in consultation with industry having regard to the relevant legislation: Although covered by the general permit condition 3.2, we have decided that as Cockley Hill Beck would be a particular effective pathway of pollution from the site to residences and Ox Field Beck beyond the site boundary that this justifies a specific condition 2.3.2 in its regard in the operating techniques section of the permit. A pre-operational measure has been included in the permit for the operator to produce a report describing how the section of Cockley Hill Beck and wetlands that feed it will be protected from contamination /blockage e.g. by litter/ dust & soil from landfilling activities . Once approved by the Environment Agency these proposals shall be implemented	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Raw materials	Having reviewed the extent of environmental risk that would result from the range of raw materials that would be stored and used across the site by the operator and its proposed suppliers, we have not specified any limits and controls on the use of raw materials and fuels.	✓
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility. The European Waste Codes (EWC) presented in the application have been carefully checked against the standard set allowed to be landfilled into Non-Hazardous Waste Sites. Those not complying with this check and not otherwise described in further detail has been excluded from the scope of the permit, namely: • 16 01 03 - whole and shredded tyres are banned from landfills unless they are bicycle tyres or tyres with diameter above 1400mm. • 16 01 06 -pre-treatment excludes this code, • 16 01 16 risk of explosion and pre-treatment exclude this code • 18 01 07 industry agreement with clinical waste group excludes this code • All 99 codes are excluded except 20 01 99 as per response to Schedule 5 request 1.2.1. Also with a general ban on liquids to landfill Condition 2.7.1 (e) of the permit all references to liquid made in EWC description has been removed to avoid possible confusion. ***Wastes for restoration*** Further information on the source, dustiness and propensity to cause odour for following wastes are required before the Environment Agency will approve their use for restoration on the site: • 01 04 10 dusty and powdery wastes other than those mentioned in 01 04 07 • 01 04 11 wastes from potash and rock salt processing other than those mentioned in 01 04 07 • 01 04 13 wastes from stone cutting and sawing other than those mentioned in 01 04 07 • 02 01 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing • 02 01 03 plant-tissue waste • 02 01 07 wastes from forestry • 03 03 01 waste bark and wood A 'Pre-operational measures for future development' has been included in regards to these codes. We made these decisions with respect to Environment Agency document 'Waste Acceptance at landfills' Version 1, November 2010 and our waste acceptance criteria.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Pre-operational measures	Based on the information in the application, we consider that we need to impose pre-operational measures. Pre-operation measure 1 requires the operator to: - Supplement information provided in both the application and response to our Schedule 5 notice on the modifications needed to existing boreholes to ensure they comply with minimum Environment Agency standards for the monitoring of both groundwater and gas - Increase the monitoring coverage to match Environment Agency standards by the installation of additionally suitably designed boreholes. Pre-operation measure 2 requires the operator to: - use the full set of boreholes installed in pre-operation measure 1 to undertake a full coordinated study of groundwater levels / composition to help inform the design of the ground stabilisation / subgrade under the landfill and identify whether this changes their view of the trigger levels / controls that will be used in subsequent landfilling operations Pre-operation measure 3: - Because the size and nature of voids and fractures will not be understood in detail until actual ground investigation and excavations start this pre-operation measure requires the operator to undertake the design and construction of the ground stabilisation and sub-grade beneath the landfill as a series of steps requiring Environment Agency approval at each defined stage. Pre-operation measure 4 requires the operator to: - Carry out further monitoring to identify the effect that the filling of fractures and voids carried out in pre-operation measure 3 has had on groundwater levels and flows under the landfill cells. Pre-operation measure 5 requires the operator to provide a specific supplement to their 'Nuisance and Health Risk Assessment' on protective measure for Cockley Hill Beck on the basis that: - The Beck will be both down-gradient and down wind of the landfilling activities under the most common wind conditions, thus making it particularly susceptable to litter and dust from these activities. - Local residents have expressed sensitivity in regards to the effect of proposed operations on surface water and the Beck flows out of the site close to some of them. Pre-operation measures have also been set for future development that have been included in the permit. Pre-operation measures for Future Development 1 & 2 require: - That the leachate treatment plant design takes account of the nature of leachate observed and is presented to the Environment Agency for approval before installation.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Pre-operation measure for Future Development 3 requires: - that the environmental impact assessment for the gas flare and engines are revisited once details of the equipment are available. Pre-operation measure for Future Development 4 requires: - futher information on the source / details of waste types that EA experience have propensity for dustiness and odour before these waste types will be allowed to be used for restoration on the site.	
Improvement conditions	Based on the information on the application, we consider that we need to impose an ongoing improvement condition that, once the required number of gas monitoring boreholes have been installed under pre-operational measure 1, an exercise is carried out: - First to establish identifiable characteristics of gas from existing sources (coal deposits and former Kirkheaton Brickworks landfill) - Then a full years monitoring of the full set of boreholes and reported to the Environment Agency. This data will set a baseline condition (including natural seasonal variations) for the site and enable the operator to finalise gas action levels / compositions from which the operators can determine whether the engineering of the new landfill cells are providing the containment that they should.	✓
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the Application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.	✓
Emission limits	We have decided that emission limits should be set for the parameters listed in the permit. **Table S3.1 Leachate Level** Set in accordance with LFTGN02 Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water **Table S3.2 Point source emissions to air – emission limits and monitoring requirements** These monitoring requirements and emission limits have been imposed in accordance with the Environment Agency's guidance: • Guidance on Treatment Technologies for Landfill Gas Engines (LFTGN06) Guidance for enclosed Landfill Gas Flares (LFTGN05) **Table S3.3 Point source emissions to sewer** Limits will be set where necessary in accordance with pre-operational condition 6, Table S1.4B	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Table S3.4 Trigger Levels for emissions to ground water and monitoring requirements The interim trigger levels included in this table are based on the Operators proposals in their Application and response to Schedule5 request 2.3.5. The interim trigger levels are to be reviewed as part of Pre-operational measure 2 We confirm this approach is in accordance with the Environment Agency's guidance LFTGN02 'Guidance on Monitoring Landfill Leachate, Groundwater and Surface Water. **Table S3.5 Landfill gas in external monitoring boreholes- limits and monitoring requirements** Interim emission limits have been included in this table based on experience from non-hazardous landfill sites. The background and action levels for both Methane and Carbon Dioxide are to be confirmed in accordance with improvement condition 1 (table S1.3 on the permit) . The emission limits will be set in accordance with the Environment Agency's LFTGN03 'Guidance on the Management of Landfill Gas' Reviewing advice from the consultant authors of the ICOP (Industry code of practice) for Perimeter soil gas emission monitoring we have not been able to apply its strategy because of the close proximity of other sources of gas (Coal seams and the historic Kirkheaton Brickworks Lanfill) which will tend to change over time and confound the results from these boreholes. In line with the Environment Agency's position statement in regards to this ICOP we will be asking the operator to assess both Methane and Carbon Dioxide background to set action levels. These should be regularly re-appraised according to ongoing monitoring data in line with current Environment Agency guidance. **Table S3.11 Particulate Matter in Ambient Air – Limits and monitoring requirements** Local residents have indicated this as a issue to which they are sensitive. For this reason we have decided to require dust levels to be monitored from permit issue onwards but however to restrict monitoring to deposited particulate only. The limit set is standard for a non-hazardous landfill, such as that proposed at Lane Side Quarry and is in accordance with the Environment Agency's Technical Guidance Document (Monitoring) M17, March 2004	

Aspect considered	Justification / Detail	Criteria met
		Yes
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. **Table S3.6 Landfill gas from capped surfaces** The requirements for monitoring landfill gas from capped surfaces with the average zone emission rates are standard for a non-hazardous landfill, such as that proposed at Lane Side Quarry. We made these decisions in accordance with the Environment Agency's LFTGN07 Guidance **Table S3.7 Landfill Gas – Other monitoring requirements** The monitoring regime is in accordance with the Environment Agency's LFTGN03, 'Guidance on the Management of Landfill Gas', LFTGN04 'Guidance for Monitoring trace Components in Landfill Gas, LFTGN05 'Guidance for enclosed Landfill Gas Flares' and M2 version 7 August 2010. **Table S3.8 Leachate – Other monitoring requirements** The monitoring regime is in accordance with the Environment Agency's LFTGN02 'Guidance on Monitoring Landfill Leachate, Groundwater and Surface Water'. **Table S3.9 Surface Water – Other monitoring requirements** The monitoring regime set is in accordance with the Environment Agency's LFTGN02 'Guidance on Monitoring Landfill Leachate, Groundwater and Surface Water'. **Table S3.10 Groundwater – Other monitoring requirements** The monitoring regime set is in accordance with the Environment Agency's LFTGN02 'Guidance on Monitoring Landfill Leachate, Groundwater and Surface Water'.	✓
Reporting	We have specified reporting in accordance with the monitoring specified for the site and the Environment Agency's Guidance .	✓
Operator Competence		
Environment Management System	There is no known reason to consider that the Operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme. Employees hold WAMITAB certificate in managing Landfill Hazardous Waste Level 4.	✓
Relevant Convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. Relevant convictions were found and declared in the application. A post conviction plan was submitted by the operator and assessed as satisfactory.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	The operator satisfies the criteria in RGN 5 on Operator Competence.	
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. Our decision will be taken in accordance with RGN 5 on Operator Competence. The financial provision arrangements offered by the operator do not yet meet our financial provisions criteria. For this reason condition 1.2.1 of the permit states that: "No activities authorised by this permit shall be commenced unless the operator has entered into an Agreement with the Environment Agency to secure financial provision for meeting the obligations under this permit and has provided the provision."	✓

Key Issues of the decision

High Public Interest

As the site is located close to residential properties and amenity spaces (cemetery and allotments) and the planning application for the site was strongly opposed by residents it was decided to treat this application as a high public interest (HPI) Site.

Planning permission for restoration by landfilling was issued by Kirklees Borough Council in year 2000, and a section 106 residents liaison group is in place. Some tipping of inert waste on the overall site has taken place under a waste exemption to restore an area on the east side around the former Kirkheaton Brickworks Landfill. However no waste has yet been placed in the area covered by the installation proposed in this application.

These inert waste operations have identified a number of factors to which the surrounding residents are sensitive. These include vehicle movements on highways, dust emissions, and surface water management.

WASTE CODES presented in the Application have been carefully checked against the standard set allowed into Non- Hazardous Waste Sites. Those not complying with this check and not otherwise described in further detail has been excluded from the scope of the permit.

Technical Challenges of the Site

The site's history of quarrying, mining, brickmaking and previous landfilling has left features that if landfilled over could constitute environmental risk and need to be addressed in the engineering of any landfill before it can go into operation, namely:

- The former Kirkheaton Brickworks Landfill in which household, industrial, commercial and other wastes by West Yorkshire Metropolitan County Council (WYMCC) during the 1970's and 1980's.
- Coal mining shafts / addits and fractured rock caused by quarrying which need physical investigation to establish the extent of stabilisation and sealing required.
- The uncertainty of the connectivity and relationship between Cockley Hill Beck and groundwater flows and how this will be affected by the sealing of the shafts, addits and fractured rock mentioned above.
- The identification that the site had become a habitat for great crested newts

The difference between the present Application and the previous Application (ref: BK4839IA), withdrawn in 2001, is that, rather than aiming to landfill over the whole site, this Application restricts the landfill to the old quarry area to the south of the site, west of Cockley Hill Beck. In this way there will be no surcharging of waste over the former landfill or over the route of Cockley Hill Beck.

Limiting the Installation Area

The Application did still include the full area of their ownership within the installation boundary which in theory could mean that activities associated with landfilling / waste transfer could occur across the whole site in the future? The Environment Agency saw this as unnecessary and have excluded a number of areas that are not needed for operations, namely:

- The former Kirkheaton Brickworks Landfill which is now fully restored to levels set by planning and incorporates newly created replacement habitats for the great crested newt population.
- An area on the east and south from the proposed waste transfer station.

Cockley Hill Beck

The application also included proposals for the relocation of Cockley Hill Beck to a new route north and west of the landfill on the basis of that the final restoration contours agreed with planners require the infilling of this area.

The Environment Agency have refused to agree relocation of this beck under this permit as it is very possible that Cockley Hill Beck is an integral component of the hydrology and hydrogeology beneath the proposed landfill / planned final restoration contours. Given that the filling / sealing of shafts & addits beneath the landfill may alter groundwater flows (see below), there is insufficient evidence to the contrary at present. Also no information on the habitats / biodiversity of the existing stream that would be lost or may need to be relocated has been provided.

In light of this we have required that Cockley Hill Beck and the wetlands in the north east section of the site that feed into it to be included in the Installation boundary. We have included a pre-operational condition for the Operator to produce a report describing how the section of Cockley Hill Beck and wetlands that feed it, will be protected from contamination /blockage e.g. by litter/ dust & soil from landfilling activities .

The alternative route proposed in the Application is to become a drainage ditch that will divert water that would otherwise flow over the landfill from the fields above, thus reducing the quantity of water that would have opportunity to infiltrate the landfill cells from above and therefore help to reduce the quantity of leachate.

Uncertainties in Hydrology / Hydrogeology

The site of the landfill cells has coal mining shafts / addits and fractured rock / voids that need to be physically investigated to fully understand their extent, then stabilised and sealed before the artificial geological liner is installed.

As these voids currently provide passageways for groundwater flows, their sealing is likely to change the hydrology of the site. Therefore the Environment Agency has included pre-operational measures set out in Table S1.4A to carry out additional ground, hydrogeological, stability, gas risk investigations and adjust the design of its ground stabilisation programme prior to construction of the artificial geological barrier.

Written reports shall be submitted to the Environment Agency for approval at each stage of investigation and design. Once approved the stabilisation / geological barrier work is to be undertaken under CQA procedures as detailed in section 2.6 of the permit.

The Permit includes a further pre-operational measure to monitor groundwater levels / quality for 3 months after completion of stabilisation / geological barrier work. It is only when any resulting hydrogeological changes and the continuing suitability of the site for landfilling are assured, that landfilling with non-hazardous waste will be allowed to commence.

Monitoring of groundwater

Following our Schedule 5 request for further information - 3 additional groundwater monitoring boreholes to the south of the proposed landfill cells are included. We have also required full chemical screening to be carried out on the groundwater.. This has allowed the operator to identify trigger substances and levels above which would indicate a problem with the new landfill.

Landfill gas monitoring

As there are existing coal measures at and around the site plus the existing Kirkheaton Brickworks landfill - there are already sources of gas. The presence of these will make monitoring of gas leakage from the landfill more difficult unless the operator is able to differentiate between gases from the different sources.

Our Schedule 5 request asked the Applicant to take measurements and propose analytical methods to characterise gases from existing sources,. The operator has suggested a candidate approach as a result.

Gas monitoring system required-

For every landfill a ring of boreholes is required around the area permitted for landfill. The perimeter landfill gas boreholes are regularly monitored to detect any leak of landfill gas into the surrounding rock strata. The design and spacing of these gas monitoring boreholes is set out by the Environment Agency Guidance note LFTGN03.

Inspection of the borehole and trial pit records for this site show that the geology around the site comprises strata of mudstone, sandstone and siltstone.

For such a permeable rock matrix the maximum spacing between boreholes allowed by LFTGN03 is 20 metres where residences are within 150 metres of the edge of the landfill and 50 metres otherwise. Further all perimeter landfill gas monitoring boreholes need to be set greater than 20 metres back from the edge of the landfill. Applying these rules around the perimeter of the proposed development means that a minimum of 32 gas monitoring boreholes are needed. If the 6 existing boreholes BH3, BH4, BH5, BH6, BH7, BH15 plus the 3 new groundwater monitoring boreholes can also be utilised for this duty a further 21will need to be constructed.

This represents an increase of 18 gas monitoring boreholes more than the 4 proposed by the applicant's response to our Schedule 5 request on this matter. Further we have asked the operator to submit borehole drilling logs for new boreholes to us and have specified that where these drilling logs indicate discrete geological horizons and the possibility of multiple gas transmission pathways (from the new landfill, from former landfill or from coal measures underlying the site) into the shaft, a suitable arrangement of nested pipes sampling gas from different depths shall be put in place.

By sampling from different pipes in the nest the operator will be able to identify the source(s) of the gas being detected.

The design of these arrangements shall be submitted to the Environment Agency for approval before they are installed.

OPERATIONAL ISSUES

Emplacement of Waste & Odour Control

A particular focus is to protect nearby residences from odour and dust from the landfill. Around 30 properties are within 150m of the edge of the landfill / treatment area and around 240 residences of Kirkheaton are within 500m to the west.

The key to minimising odour issues is to minimising exposed flank areas, maximise gas capture which may be necessary as early as 6 months from the start of landfilling. Collection of landfill gas is achieved by timely provision of temporary gas wells which represent a preferential flow route compared with other fugitive routes through the waste mass - then its transmission through a robustly engineered gas collection and condensate knock out system, prior to treatment by flare or landfill gas engine.

With the relatively large height of the void available for landfill at this site there is potential to create large side faces of waste. Such lateral faces are susceptible to leakage of gas which in turn will cause odour problems for nearby residents.

The Environment Agency has required the Operator to phase waste emplacement in a way that will minimise the size of lateral flank areas. and to use temporary cover materials placed upon them to minimise gas leakage and odour from them.

Also in our Schedule 5 notice the Environment Agency asked for a system of temporary gas wells co-ordinated with the waste emplacement phasing to be installed . These will enable gas which may be seen as early as 6 months after the start of landfill to be drawn off and treated. As a result the Operator is to install temporary horizontal gas wells alongside waste deposition, for gas to preferentially flow to treatment than to leak from side faces.

Annex 2: Consultation, web publicising and newspaper advertising responses

The tables below are summaries of responses that we have received to consultation, web publication and newspaper advertising and the way in which we have taken these into account in the determination process.

The following consultees were consulted:

Kirklees Metropolitan Borough Council – Planning
Kirklees Metropolitan Borough Council – Environmental Health
Kirklees Primary Care Trust
Yorkshire Water
Food Standards Agency
HSE

Response received from
Kirklees Metropolitan Borough Council - Planning – by letter 7 January 2009
Brief summary of issues raised
1) Care should be taken in framing the conditions which are attached to the permit to ensure that the site can be landfilled and subsequently restored according to planning permission / subsequently approved schemes. The restoration contours used in the application are those formally approved. There have been further submissions. 2) Conditions are placed in planning to provide details of Landfill Gas Control Plant, Waste Treatment &Transfer Area (Location, Size & Layout Details) – this condition has not yet been discharged. 3) Leachate Treatment Plant was not included in planning application & so will require a further specific planning application. 4) Kirklees Council believe that the annual throughput of 300,000 tonnes p.a. is too high. 5) The Property under construction at Cockley Hill Farm should be included as a receptor 6) Reference to planning decisions on Dust & Noise should be referred to / referenced. 7) Working Hours given in the application are incorrect – correct hours are: 07:00 to 18:00 Monday to Friday 07:30 to 13:00 Saturday
Summary of actions taken or show how this has been covered
1) Because of the technical challenges in landfilling more widely on the site (of putting further waste over the former Kirkheaton Brickworks Landfill and

over the route of Cockley Hill Beck) the applicant has opted to restrict the installation area of this permit.

We do note that in order to reach the restoration contours the applicant would need to reroute Cockley Hill Beck, but because it is possible that this stream plays a crucial role in the hydrogeology of the site such a relocation may not be feasible.

As insufficient evidence has been presented in this Application that the relocation of the stream would have no negative effect on the stability of landfill cells or the hydrogeology we have, at this juncture, asked for Cockley Hill Beck to be preserved in its current route and be monitored under this permit.

Looking further to the future, the completion of pre-operation conditions 1 - 4 in the permit will give a clearer view of the hydrogeology and the role that the stream will play, once the sub-base of the landfill has been stabilised.

If by further tests, the stream can be shown to be perched / unconnected to the groundwater in all conditions and that the habitats and biodiversity it contains can be replaced elsewhere - the relocation can be reconsidered, paving the way towards the approved restoration contours.

2) *Landfill Gas Utilisation Plant*,
The Landfill Gas Utilisation Plant is an essential part of the operation being applied for at this site and the Environment Agency has sufficient evidence based on predicted pattern of waste intake / gas quantity and composition submitted in the application to include this activity within the permit.
A closer understanding of waste intake and gas arisings will develop as the installation becomes operational. On this basis a 'pre-operational measure for future development' to undertake an H1 environmental risk assessment and present a written report, on the emissions of Landfill gas flare and engines and their detailed proposals on the plant required, is included in the permit.

This condition means that the operator will not be permitted to installation / operate the Landfill Gas Utilisation Plant until this report and the detailed plant proposals are approved by the Environment Agency.

Waste Treatment &Transfer Area
Sufficient information has been provided to issue a standard rules permit (SR2008No11) for an inert and excavation waste treatment and transfer station on the site. As this is an integral part of the proposed development the SR2008No11 are to be conditions of this permit. Whilst the application identifies a permanent area of sealed hard standing for this activity next to the gas utilisation plant, there are no environmental barriers and indeed may be environmental benefit to carrying out the activity under SR2008No11 conditions more widely in other areas temporarily prepared for this purpose on the site. The route of Cockley Hill Beck and wetland areas feeding it do however need to be excluded on environmental grounds.
Hence a separate sub-boundary within the installation boundary where inert / construction waste treatment and transfer activities could be considered is shown in Schedule 7 of the Permit.

We note that the Kirklees Metropolitan Borough Council may wish to set restrictions on these activities when they consider the details to be forwarded to them under the planning conditions.

3) We have suggested that the applicant move the proposed Leachate Treatment Plant as far from residences as they can to minimise odour and noise impact on these residents.

Leachate treatment is an integral part of the operation being applied for at this site. The Environment Agency has sufficient evidence based on predicted pattern of waste intake / leachate quantity and composition submitted in the application to identify that techniques available to the applicant will be able to deliver the treatment and level of protection of the environment. On this basis this activity is included within the permit.

However the level of equipment described in the application and shown on the applicant's drawing 99120/143A falls short of that which the Environment Agency would consider the ' Best Available Technique' (BAT).

A closer understanding of waste intake and leachate arisings will develop as the installation becomes operational. On this basis a 'pre-operational measure for future development' to provide the Environment Agency with a detailed design of the leachate treatment plant is required by the permit. This requires the operator to demonstrate that their design of the leachate treatment plant incorporates:

- Minimisation of odour
- Methane levels in line with DSER regulations
- Provision for further air diffusers in storage /treament tanks
- Space within the bund for a futher leachate storage / treatment tank
- Sampling points for untreated and treated Leachate

This condition means that the operator will not be permitted to install / operate the Leachate Treatment Plant, and instead will need to tanker leachate away for external treatment until the detailed plant proposals are approved by the Environment Agency.

4) The Environment Agency is content that 300,000 tonnes of waste per year can be managed within the site whilst ensuring protection the environment by the operating techniques that we would set out in the permit.
Not putting a restriction on this will benefit local waste producing companies by allowing the operator to fully serve their landfilling requirements. This does not mean that this annual quantity will be seen in practice.
Filling the landfill at the full rate that the market demands will also have benefits to the local community by reducing the number of years of landfilling operations.
Whilst, with the controls set out in the permit, the propensity to create odour dust, vermin and other effects on the Environment will not be increased by

allowing the full rate requested, we do note that this will incur more frequent vehicle movements on local roads. Any restrictions on vehicle movements & size of vehicles is a matter for the Planning authority to decide.
5) This property has been taken into account

6) Planning decisions on dust & noise have been noted. The permit requires the operator to undertake appropriate Environment Agency monitoring standards and procedures. Please not that the Environment Agency assesses noise on its impact rather than absolute measurements alone.

7) These have been noted

Response received from
Kirklees Metropolitan Borough Council – Environmental Health – by letter 12th January 2009
Brief summary of issues raised
No Comments
Summary of actions taken or show how this has been covered
No action required.

Response received from
Health Protection Agency by letter – 18th May 2010 NHS Kirklees (identical letter) – 19th May 2010
Brief summary of issues raised
Concern that application does not give enough information for them to assess potential aspects on residential properties / public health: 1) Point & Fugitive source emissions to air 2) Aqueous emission that may arise from leachate plant 3) Odour 4) Risk of onsite accidents & fires 5) Bioaerosol generation associated with decomposition of waste types to be accepted at the site 6) Noise emissions from mobile and fixed plant 7) Potential nuisance from birds, vermin
Summary of actions taken or show how this has been covered
These have been identified, appropriate prevention/mitigation identified / enacted. 1) *Point source emissions to air* will be emitted from the proposed flare & gas engines. Predicted emissions from the forward view of waste intakes and gas arising from decomposition has been subjected to detailed dispersion modelling. This has shown that for H2S NOx and SO2 the predicted environmental concentrations at the site boundary and closest receptors will be well within the air quality standards for these pollutants.

Further to this work a 'pre-operational measure for future development' is included the permit to revisit the full risk assessment (using the Environment Agency's H1 methodology) and further detailed modelling once landfill activities commence and understanding of actual waste intakes, gas arisings develop and models /sizes of flare & gas engines are known including Carbon Monoxide (CO) & VOC's at the emission limits allowed from these gas engines.

It is not until the Environment Agency has approved the output of this work that the Gas utilisation can be installed.

We are ensuring that *Fugitive emissions to air* during operation will be minimised by:

- Waste transport, handling, tipping techniques
- Ensuring that landfill is performed in distinct phases that will minimise the working area of waste and side flanks that are more porous to gas emissions, using temporary cover on these areas
- Timely installation of temporary horizontal gas wells to draw off gases for treatment as soon as it is likely to be produced
- Engineering standards and regular monitoring of landfill gas and leachate systems

Further emissions through the temporarily and permanently capped zones of the landfill will be checked at least annually using a flux box to meet the Environment Agency's standards set in the permit.

2) We have checked that aqueous emissions of leachate are to be controlled by management of the level of leachate within the landfill cells, the engineering and maintenance of the leachate pumping and treatment system, enclosed treatment and discharge to sewer.
3) The Environment Agency has specified that a regularly reviewed and updated odour management plan, with EA approval with each change is to be maintained. Based on the latest Environment Agency guidance this ensure the operator provides a systematic management of odour:
    - *Identifying Odour risk* – possible sources, pathways & receptors who may be affected under normal, abnormal & accident conditions.
    - *Setting out control and mitigation measures* eg identifying & providing special treatments of potentially high odour wastes, reducing exposed working areas , taking account of wind directions & weather conditions in the possible transport of odour
    - *Monitoring & feedback* into a *continually improved plan*
4) We have checked that assessment of accident risks are adequately set out in the operating techniques contained in the application and are referenced in the permit. Fires are to be prevented by identification and appropriate handling of wastes and control of gas extract pressures, thus avoiding ingress of air into the waste mass.
5) We have checked that compaction and covering of waste will take place directly after tipping to prevent emergence of bio aerosols

6&7) We have checked that the nuisance and Health Risk Assessment section of the application identifies hazards and receptors for Noise & vibration, dust litter, pests & mud on the road and that best practice techniques are evident. In line with our Noise guidance (H3) if noise issues become a problem, the Environment Agency will set a condition to provide a continuously improved Noise Management plan operated along the same line as for Odour described above.

Response received from
Ann Jones, 78 Cockley Hill Lane – by letter 10th February 2010
Brief summary of issues raised
1) More pests, vermin, scavenging birds 2) Odour 3) Increase in HGV lorries – Although Cockley Hill Lane has a weight restriction this is often ignored. Passing HGV's vibrate her house & there is evidence that this is causing cracks.
Summary of actions taken or show how this has been covered
1) See the response to the Health Protection Agency above. We have checked that the application identifies hazards and receptors and that best practice techniques are evident for controlling pests and vermin in the application. 2) The Environment Agency has specified that a regularly reviewed and updated odour management plan, with EA approval with each change is to be maintained. See the response to the Health Protection Agency above. 3) The number and size of lorries allowed on Cockley Hill Lane is a matter that should be referred to Kirklees Metropolitan Borough Council.

Response received from
Mrs Susann Bowyer, 1 Orchard Road, Kirkheaton – by letter 22/01/10
Brief summary of issues raised
1)Asked for clarification of monitoring responsibilities between Environment Agency and Kirklees Council. 2) Concern that Kirklees Council has given permission for 200 wagon trips per day and if the site has insufficient reception / waiting areas that this may cause backing up of traffic at peak times. 3) Concern that litter will blow against & over the perimeter fecnce as it did during operation of Kirkheaton Brickworks Landfill in the 1970's. 4) Keeping odour to a minimum 5) Keeping Vermin to an acceptable level 6) Noise Level control 7) How often the Environment Agency will be physically be monitoring the site and whether these will be scheduled or unannounced 8) Ensuring that prohibited wastes are not dumped inadvertently or deliberately
Summary of actions taken or show how this has been covered
1) The Environment Agency's monitoring responsibilities are the emissions / pollution from processes undertaken in the installation whilst those of Kirklees

Metropolitan Borough Council cover traffic issues and statuatory nuisance (eg alarms, barking dogs on the site)
2) This traffic issue is a matter for Kirklees Metropolitan Borough Council
3) Standards currently enforced on landfills far exceed those of the 1970's. The Environment Agency will be monitoring the site to minimise such litter pollution and require the operator to clean up where this does occur.
4) The Environment Agency has specified that a regularly reviewed and updated odour management plan, with EA approval with each change is to be maintained. See the response to the Health Protection Agency above.
5) See the response to the Health Protection Agency above. We have checked that the application identifies hazards and receptors and that best practice techniques are evident for controlling pests and vermin in the application.

6) We have checked that the application identifies hazards and receptors for Noise & vibration and that best practice techniques are evident. In line with our Noise guidance (H3) if noise issues become a problem, the Environment Agency will set a condition to provide a continuously improved Noise Management plan. See response to the Health Protection Agency above

7) Intense monitoring and approval of pre-operation measures will first ensure that appropriate engineering standards are applied for the sub-base and liner of the landfill cells as set out.

Then during operation the level of monitoring will initially be set by the environmental compliance score (Operator Performance & Risk Appraisal-OPRA score) that the company has achieved at inspections on their Environment Agency regulated sites – the frequency then adjusted in accordance with compliance at this site as data becomes available.

Environment Agency monitoring of landfill sites is always a combination of scheduled & unscheduled visits (including odour sniff tests around the site) and response to incidents / complaints.

Response received from
Mrs Catherine A.L. Askey, 80 Cockley Hill Lane, Kirkheaton – by letter 21st February 2010
Brief summary of issues raised
1) Pests, vermin, scavenging birds 2) Odours 3) How the previous agreement that P Casey Enviro Limited made that lorries will only use the road from Colne Bridge up to the Grange Moor roundabout and not Cockley Hill Lane will be enforced.
Summary of actions taken or show how this has been covered
1) See the response to the Health Protection Agency above. We have checked that the application identifies hazards and receptors and that best practice techniques are evident for controlling pests, vermin and birds in the application. 2) The Environment Agency has specified that a regularly reviewed and updated odour management plan, with EA approval with each change is to be maintained. See the response to the Health Protection Agency above. 3) This traffic matter is best referred to Kirklees Metropolitan Borough Council

Response received from
Whinney Hall Farm, Cockley Hill Lane, Kirkheaton – by letter 17th February 2010
Brief summary of issues raised
1) More pests, vermin & scavenging birds 2) Strong odours 3) Increased HGV's
Summary of actions taken or show how this has been covered
1) See the response to the Health Protection Agency above. We have checked that the application identifies hazards and receptors and that best practice techniques are evident for controlling pests, vermin and birds in the application. 2) The Environment Agency has specified that a regularly reviewed and updated odour management plan, with EA approval with each change is to be maintained. See the response to the Health Protection Agency above. 3) This traffic issue is best referred to Kirklees Metropolitan Borough Council.

Response received from
Mr Keith Field, 35 Orchard Road, Kirkheaton – by letter 26th September 2010
Brief summary of issues raised
1) That the site is to receive not only commercial waste but also household waste 2) Smell 3) Wind blown litter 4) Disease 5) Vermin 6) Water Pollution 7) Protecting 8) Gases 9) Amphibians
Summary of actions taken or show how this has been covered
1) In practice, the environmental risks posed by household and commercial wastes are the same. For example, waste from a food manufacturer would be considered commercial waste and would present similar risks of odour, litter, pests, vermin and water pollution as a load of household waste. The draft permit includes a number of conditions to prevent harm to human health and the environment. P Casey Enviro Ltd stated their intention to accept household waste at a public meeting held at the United Reform Church in Kirkheaton on 3 July 2007. Since the public meeting held in 2007 a liaison group has been meeting approximately every 3 months to discuss the development of the site. We attend these meetings, along with P Casey Enviro Ltd, Kirklees Council officers and local residents. We formally consulted this group and the wider public at the permit application stage from the 19th January 2010 to the 16th February 2010. Our consultation on the application, including household wastes, was advertised in the Huddersfield Examiner. 2) To minimise the nuisance to residents around the site from smells, we have

installed an additional measure requiring a detailed odour management plan to be submitted to us and approved before waste disposal begins. A permanent condition in the Permit will require that this odour management plan to be reviewed and an improved plan approved by us in response to any complaints or problems identified.

3) The application includes the output report from a systematic risk assessment in regards to windblown litter and operational procedures include bagging / baling waste susceptible to being wind blown, restricting / closing the site when there are high winds, litter catching fences / nets down wind of working areas, temporary and daily cover placed over the waste at the end of the working day, plus litter picking in the event of escape / complaint. A condition in the permit requires such arrangements be reviewed and an improved plan approved by us in response to any complaints or problems identified.

4) Wastes will be contained within landfill cells, and covered daily, preventing exposure to any organic putrefying material. By specifying a limited set of wastes codes we control the types of materials that can be delivered to the site. No infectious material is to be accepted at the site.

5) The application includes the output report from a systematic risk assessment in regards to birds, vermin, insects and operational procedures include cover / good compaction of wastes, speedy burial of any putresible wastes, daily monitoring, bird scaring, culling, rodent bating, summer spraying of insects as required.

A condition in the permit requires such arrangements be reviewed and an improved plan approved by us in response to any complaints or problems identified.

6) The permit requires that the landfill is engineered to contain any polluting liquids that are produced as the waste degrades, preventing them from entering groundwater or surface water. The level of such leachate is controlled and excess pumped away via a leachate treatment plant prior to disposal to sewer and further treatment at a municipal treatment works.

7) We have also included a special condition in the permit that requires the operator to develop a plan to protect Cockley Hill Beck before they begin accepting waste.

8) There are also requirements to collect and treat gas that is produced by flare and landfill gas engine. Over and above that installed at other sites, additional horizontal gas collection wells are to be installed in response to our requirement reduce emissions from the flanks of landfill cells. (see response 1 to Health Protection Agency / NHS Kirlees above for more detail)

9) P Casey Enviro Ltd have been working for some years to relocate Great Crested Newts that inhabit the site. This process is authorised and monitored by Natural England. We have no role in controlling this activity.

Annex 3: Decision checklist for Inert & Excavation Waste Treatment and Transfer Station standard rules permit

This checklist should be read in conjunction with the Duly Making checklist the application and supporting information and permit.

Aspect	Justification / Detail	Criteria met Yes
Receipt of submission		
Standard rules criteria met	The application meets the criteria for the standard rules identified in Part B of the application form.	✓
Advertising		
Responses to web publicising	The responses to web publicising (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
Planning permission	We are satisfied that planning permission is in place and it is appropriate for the relevant waste operation(s) applied for.	✓
Operator competence		
Technical competence	Technical competency is required for activities permitted in the standard rule set. The operator is a member of an agreed scheme. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
Relevant Convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. Relevant convictions were found and declared in the application. A post conviction plan was submitted by the operator and assessed as satisfactory. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the standard rules. The decision was taken in accordance with RGN 5 on Operator Competence.	✓