Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended)

APPLICATION FOR A PERMIT to operate an installation under Regulation 7 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended)

To: SOUTH NORTHAMPTONSHIRE COUNCIL

A1.1 Name of the installation:
FORMER ASTWICK QUARRY - RECYCLING FACILITY

A1.2 Please give the address of the site of the installation
ASTWICK QUARRY
CROUGHTON
NORTHANTS.

Postcode: SP563 338

A1.3 Existing authorisations
Please give details of any existing LAPC or IPC authorisation for the installation, including reference number(s):

A2.1 The Operator – Please provide the full name of company or corporate body
Trading/business name (if different):
CHURCHILL WASTE MANAGEMENT LTD.

Registered Office address:
WINTERHILLS
SILVERSTONE
NORTHANTS

Postcode: NN12 8UG

Principal Office address (if different):


Company registration number: 3189956.

A2.2 Holding Companies
Is the operator a subsidiary of a holding company within the meaning of Section 736 of the Companies Act 1985?

No

Yes name of ultimate holding company:

Application Reference: 03/01
B1.1 Installation table for new permit application

<table>
<thead>
<tr>
<th>COLUMN 1a</th>
<th>COLUMN 2a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities in the Stationary Technical Unit</td>
<td>Schedule 1 Reference</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLUMN 1b</th>
<th>COLUMN 2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly Associated Activities</td>
<td>Schedule 1 References</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B1.2 Why is the application being made?

☑️ The installation is new.

☐ It is an existing Part B process authorised under the Environmental Protection Act 1990 for which a substantial change is proposed and an LA-IPPC A2 permit is required.

B1.3 Site maps

Please provide:

- A suitable map showing the location of the installation clearly defining the extent of the installations in red.


- A suitable plan showing the layout of activities on the site, including bulk storage of materials, waste storage areas and any external emission points to atmosphere.


B2 The installation

Please provide written information about the aspects of your installation listed below. We need this information to determine whether you will operate the installation in a way in which all the environmental requirements of the PPC Regulations are met.

B2.1 Describe the proposed installation and activities and identify the foreseeable emissions to air, water and land from each stage of the process (this will include any foreseeable emissions during start up, shut down and any breakdown/abnormal operation).

The use of process flow diagrams may aid to simplify the operations.

Doc. Reference: 5
B3.3 Provide an assessment of whether the installation is likely to have a significant effect on such sites and, if it is, provide an assessment of the implications of the installation for that site, for the purposes of the Conservation (Natural Habitats etc.) Regulations 1994.

Doc. Reference:

B4 Environmental Statements

B4.1 Has an environmental impact assessment been carried out under The Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999, or for any other reason with respect to the installation.

No ☒

Yes ☐ Please supply a copy of the environmental impact assessment and details of any decision made.

Doc. Reference: 3

B5 Additional Information

Please supply any additional information you would like us to take account of when considering this application.


C1 Fees and Charges

The enclosed charging scheme leaflet gives details of how to calculate the application fee. Your application cannot be processed unless the application fee is correct and enclosed.

C1.1 Please state the amount enclosed as an application fee for this installation:

£1303.00

Cheques should be made payable to: South Northamptonshire Council.

We will confirm receipt of this fee when we write to you acknowledging your application.

C1.2 Please give any company purchase order number or other reference you wish to be used in relation to this fee.

C2 Annual Charges

If we grant you a permit, you will be required to pay an annual subsistence charge, failure to do so will result in the revocation of your permit and you will not be able to operate your installation.

C2.1 Please provide details of the address you wish invoices to be sent to and details of someone we may contact about fees and charges within your finance section.

Churchill Waste Management Ltd
Winterhills
Silverstone, Northants

Postcode: NN2 8UA  Telephone: 01327 857246

Application Reference: 03/01
C5 Declaration

C5.1 Signature of current operator(s)

I/We certify that the information in this application is correct. I/We apply for a permit in respect of the particulars described in this application (including supporting documentation) I/we have supplied.

Please note that each individual operator must sign the declaration themselves, even if an agent is acting on their behalf.

Installation name: ASTWICK QUARRY, CROUGHTON

Signature: [Signature]

Name: GRAHAM CHURCHILL

Position: M.D.

Date: 20/10/03

Signature: [Signature]

Name: 

Position: 

Date: 

Where more than one person is defined as the operator, all should sign. Where a company or other body corporate – an authorised person should sign and provide evidence of authority from the board of the company of body corporate.

For office use only

Received Officer Duty Made Officer Response Officer Permit Reference
27/10/03 AR 19/11/03 AR 19/11/03 AR 20/5/5 [Redacted]
12/11/03 AR

Application Reference: 03/01
Dear Mr Churchill

NOISE MONITORING – FORMER ASTWICK QUARRY, CROUGHTON

1. Introduction

Acoustics Noise and Vibration (ANV) have been appointed to carry out a noise monitoring exercise during the restoration of the former Astwick Quarry, Croughton.

Condition 19 of the Planning Consent for the site (ref. SN/99/560C), reproduced below, requires noise levels generated by site activities to be monitored periodically to ensure compliance with the noise limit.

19. i) The level of noise emitted from the use of plant and equipment at the site shall not exceed 54.0 dB (A) L_{Aeq} 1 hour between 07.30 hours to 17.00 hours Mondays to Fridays and 07.30 hours to 13.00 hours Saturdays as measured from the boundary of noise sensitive premises at The Bungalows, Astwick Cottages, and Astwick Barns, Croughton (These noise sensitive properties are marked on the attached plan).

ii) Except as may otherwise be agreed in writing by the County Planning Authority noise monitoring shall be carried out at 6 monthly intervals at times when the site is fully operational, beginning within one month of operation commencing. These results shall be maintained by the operator for the duration of the development and shall be submitted to the County Planning Authority within 7 days of the readings being taken.

A description of the noise units referred to is provided in the attachment to this letter report.
2. Noise Monitoring

A noise monitoring exercise was carried out on Wednesday 1 May 2003. During the exercise a Pegson crusher and Samsung SE130 excavator were fully operational. There were no loads delivered to the site during the monitoring period.

Measurements were made at the three monitoring positions, identified in the Planning Consent:

- Astwick Barns;
- The Bungalow; and
- Astwick Cottages.

The measurements were made freefield using a Rion NL-32 Class 1 Sound Level Meter, which was calibrated using a Rion NC-74 Class 1 Acoustic Calibrator. One measurement of 15 minute duration was made at each position, which is considered to be representative of an hourly period, as the site was operating throughout.

The weather conditions during the exercise were overcast with winds speeds averaging between 2 - 4 mm/s.

The results of the monitoring are presented below.

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Noise Level (dB)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astwick Barns</td>
<td>09:35 - 09:50</td>
<td>LAeq, LAeq,LAeq</td>
<td>Construction work at RAF Croughton was the principal influence on the measured noise levels. Road traffic audible throughout.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51.8, 69.6, 53.8</td>
<td>Site activities were generally inaudible. Larger material being placed into the crusher was just audible at times, although having no influence on the measured noise levels.</td>
</tr>
<tr>
<td>The Bungalow</td>
<td>09:57 - 10:12</td>
<td>53.0, 69.3, 56.0</td>
<td>Construction work at RAF Croughton was the principal influence on the measured noise levels. Road traffic also clearly audible throughout.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Site activities were generally inaudible. Larger material being placed into the crusher was just audible at times, although having no influence on the measured noise levels.</td>
</tr>
</tbody>
</table>

In addition to the noise monitoring carried out at the potentially affected dwellings, monitoring was also carried out on site closer to the plant, at two positions where the noise levels could be clearly monitored. One position was to the south towards the properties, approximately 50 metres from the plant on the opposite side of the bund to the plant. The second position was 10 metres from the plant to provide a confirmation of the source term noise levels which were used for the noise assessment to support the planning application. The monitoring locations are indicated on the attached figure.

3. Analysis of Results

Planning Condition 19 states a noise limit of 54 dB $L_{Aeq, 1 hour}$ for operations on the site, measured freefield at the boundary of the potentially most affected dwellings.

The noise monitoring carried out at Astwick Barns and The Bungalow indicated that the $L_{Aeq}$ noise level was below this limit. The principal influence on the measured levels was attributable to the construction activities at RAF Croughton. Noise generated by the operation of the crusher and excavator was generally not audible, which would indicate that the noise levels from the plant were at least 10 dB(A) below the measured $L_{Aeq}$ noise level. This suggests a level of below 42 dB $L_{Aeq}$ from the operation on site activities.
Noise levels at Astwick Cottages were principally influenced by road traffic, with $L_{Aeq}$ noise levels above the 54 dB $L_{Aeq}$ limit and were equivalent to the levels monitored prior to works commencing on site, where the baseline noise monitoring indicated daytime $L_{Aeq}$ noise levels of the order of 61 dB(A). Noise from the operation of plant on site was again generally inaudible, even during the quieter periods, where the background ($L_{A90}$) noise levels were of the order of 45 dB(A). This suggests that noise levels from on-site activities were substantially below the 54 dB(A) limit and below a level of 45 dB $L_{Aeq}$.

The on-site noise monitoring provides additional support to the low noise levels monitored at the dwellings. The measurements made at a distance of 50m from the plant were only 4 dB(A) above the limit and calculating these back to a position where the limit could be achieved, would be at a distance of approximately 80 metres from the plant, substantially closer than location of the properties.

The measurements made adjacent to the plant, indicated a noise level of 82.6 dB(A). The calculated noise levels made to support the planning application used a source term noise level of 83.1 dB(A), which is very close to the actual measured level. The original calculations suggested that noise levels from the operation of the crusher would be between 39 – 41 dB $L_{Aeq}$, which are consistent with the current measurements and observations made at the dwellings.

4. Summary

A noise monitoring exercise has been carried out at the former Astwick Quarry during a period whilst crushing was being carried out on site.

The measurements made at the locations identified in the Planning Consent, indicated that noise from operations on site were generally inaudible, above the noise generated by road traffic and construction activities at RAF Croughton. The loading of the crusher was occasionally just audible as larger pieces were dropped onto the screen, which generated instantaneous noise levels below 50 dB(A). Observations and analysis of the original calculated noise levels would indicate noise levels of the order of 40 dB $L_{Aeq}$ from the current activities on site, which is substantially below the 54 dB $L_{Aeq}$ Planning Consent limit.

With the current levels of noise generated by the site activities, it is considered that further noise monitoring is not required at this stage, unless wither the operations on site change or complaints are received from local residents.

We trust that this is satisfactory for your current requirements. Please do not hesitate to contact me should you have any comments or wish to discuss anything further at this stage.

Yours sincerely

Les Jephson

cc D K Symes – D K Symes Associates
Figure: Noise Monitoring Locations
Attachment: Noise Units

Decibels (dB)

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

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

A-Weighting

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

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

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

For many types of noise the Equivalent Continuous A-Weighted Sound Pressure Level (L_{Aeq,T}) is used as the basis of determining community response. The L_{Aeq,T} is defined as the A-weighted sound pressure level of the steady sound which contains the same acoustic energy as the noise being assessed over a specific time period, T.

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

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

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

Name and Address of Applicant
Churchill Waste Management Ltd
Winterhills
Silverstone
Towcester
Northants NN12 8UG

Name and address of agent (if any)
MG Layer
DK Symes Associates
39 Main Road
Middleton Cheyney
Banbury
Oxon OX17 2ND

Part I - Particulars of application

Date of Application
7th June 1999

Application No.:
SN/99/560C

Particulars and location of development
Reclamation of damaged land by importation and recycling of inert wastes.
Former Astwick Quarry, Croughton, Northants.

Part II - Particulars of decision:

The Northamptonshire County Council

Hereby give notice in pursuance of the provisions of the Town and Country Planning Act 1990 that permission has been granted for the carrying out of the development referred to in Part I hereof in accordance with the application and plans submitted subject to the following conditions:-

Commencement

1. The development must be begun not later than the expiration of 36 months beginning with the date of this permission.

Notification of Commencement

2. The County Planning Authority shall be given 7 days written notification of intention to commence development.

Area of Site

3. The development hereby permitted is restricted to the area outlined in red on submitted plan reference 94049/1b.

Note: This permission only relates to planning permission and does not include consent under the Building Regulations for which separate permission may be required.
B1.1. Raw materials are received on site, we remove soils from hardcore using a Power Screen. Crush hardcore, stockpile and remove from site.

B.2.1. The material will be sorted, with removal of hardcore to be crushed. Any dust arising will be watered through a sprinkler system. Stockpiles are kept behind designated bunded area. Unsuitable material goes into our site skip. Dust may arise from vehicle movements and while loading/unloading takes place.

B.2.2. Dust emissions could arise from the drop point on the conveyor, screening and the loading and unloading of lorries. We would apply water to the sprinkler on the conveyor and by a dust suppression unit on the haul roads.

B.2.3. To prevent dust emissions we would use a water suppression unit at the drop out point and the sprinkler system on the crusher.

B.2.4. In the event of unintentional release the operation would be stopped immediately until the problem is resolved.

B.2.5. Daily monitoring of the emissions would be made including visual assessments of wind direction and weather. All are recorded in the site diary along with anything unusual that happens.

B.2.6. All machinery will be maintained, inspected and washed down weekly or at earlier intervals if deemed necessary. The working area will also be cleaned weekly or earlier if necessary. Any break-downs will be dealt with quickly and efficiently by one of our qualified mechanics. All Operators will be trained to identify unreasonable emissions from any of the plant.

B.3.1. There would not be any significant effects on the local environment arising from this operation due to the location being so far away from the village. This is not an air quality area.

B.4.1. An Environmental Impact Assessment was not required for this operation due to the location. Information about local issues are available on request.