INTRODUCTION TO BANKS MINING

The Banks Group is an established family business with a diverse range of energy and property projects including surface coal mines, onshore wind farms and commercial and residential property developments.

Our Development with Care Policy ensures that we conduct our business in a responsible manner, with consideration for the environment, for the local communities in which we operate and for our customers, employees and suppliers.

We aim to grow our business by continuously improving our environmental performance, by using safe, responsible and efficient business practices and by building and maintaining positive relationships with everyone with an interest in our business.

We aim to make a significant positive change to both the environment and local communities by delivering environmental, social and economic benefits and minimising any potential adverse impacts with our business.

Through the implementation of our Development with Care Policy we remain firmly committed to the development with care ensuring we develop high quality, sustainable projects and not only comply with, but strive to exceed regulatory requirements.
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Banks Environmental Policy

The Banks Group is an established family business that develops and operates energy and property projects. The aim of the Banks Group environmental policy is to support the continued development of our businesses whilst maintaining a high standard of environmental performance in line with our development with care approach.

We aim to make a significant positive change to both the environment and local communities by delivering environmental benefits and minimising any adverse impacts that could arise from our business activities.

We produce environmental management plans for each of our projects detailing how significant environmental issues, such as noise, waste management and emissions to water or air are controlled.

We are committed to continuing the achievement of the following environmental policy objectives throughout the design, development and operation of our projects and the operation of our business:

To assess the environmental performance of Banks Group projects through a programme of audits and monitoring.

To ensure continuous improvement of the environmental management system and maintain certification to the BS EN ISO 14001:2004 standard.

To ensure that Banks projects are designed, developed and operated incorporating measures to optimise benefits for the environment and our local communities and to avoid, reduce or control any adverse impacts that may be associated with our activities.

To strive to achieve standards above those required by environmental legislation and to achieve the environmental and sustainable objectives and actions set down in each project’s environmental management plan.

To ensure that energy and natural resources are used efficiently, to minimise wastes and to conduct our business in a safe, responsible and efficient way.

To communicate the requirements of this policy and to make sure that additional copies of the policy and individual project environmental management plans are made available to all employees, any suppliers and contractors whose actions could have a significant environmental impact and to the public or any other interested parties that request such information.

Chairman, Banks Group

Approved October 2013

Harry Banks, Chairman
Banks Group
1. Aims and scope of the Environmental Plan

This environmental management plan (EMP) sets the standards of environmental performance for the Highthorn Surface Mine. These standards will form the basis against which the site will be measured during environmental audits.

The document sets a number of objectives to ensure that the site is operated in an environmentally acceptable manner through managing the site’s significant environmental aspects.

A significant environmental aspect is any element of our activities, products and services that can interact with the environment, has the potential to have a significant environmental impact, including those for which we have an obligation to manage under environmental legislation. The operational products are coal and other minerals extracted and the services are the transportation of these products to the customer.

Each significant aspect has one or more objectives, which are followed by actions to ensure that the objectives are met through operational controls and compliance monitoring. A section on the relevant legislation follows, which details the environmental guidance and legislation relevant to that particular significant aspect.

The Banks Environmental Management System is certified to the BS EN ISO 14001 standard and is subject to regular internal and independent external audits to ensure that the site is conforming to the environmental standards in this document.

1.1 Management awareness

Objective one - To ensure that the Site Management is fully aware of the site environmental standards and is encouraged to be committed to complying with the standards

The site management consists of a site manager and a deputy site manager. Their awareness of the environmental standards set out in the EMP is critical to the successful working of the Highthorn site and the attitude that they take will be reflected in the overall conditions prevailing at the site. Site environmental audits help to educate and motivate site management to achieve high environmental standards and focus on areas that require improvement.

The site management are responsible for implementation of the environmental management plan.

ACTIONS

a) Environmental audits will be undertaken every three months to assess the site’s environmental performance against the actions identified in this EMP

b) Annual training on the specific environmental issues relating to the operation of the Highthorn site will be provided to site management and will take the form of a presentation on general environmental awareness and the requirements of this Environmental Management Plan.

1.2 Documentation and consent

Objective two - To ensure that the site management understands and maintains up-to-date copies of relevant documentation and consents

ACTIONS

a) The following documents are important to the environmental management of the Highthorn site. These are available on site and will be kept up-to-date.

- The Highthorn Environmental Management Plan
- Planning permission, planning conditions and associated documents
- Environment Agency & local authority discharge consents
- Local Authority Environmental Permit
- A daily log of process emissions and dust emissions from site activities
- Complaint and notifiable incident process
- Lagoons and ditches inspection forms
- Weekly site inspection forms
- Results of all site environmental monitoring
1.3 Complaint and notifiable incident procedure

**Objective three - To ensure that all environmental complaints and incidents that may occur on site are reported, investigated and appropriate action taken by following the complaint and notifiable incident procedure.**

The complaint and notifiable incident procedure sets out how any environmental complaint or incident of a notifiable nature that may arise from the site’s activities will be managed. Complaints can be received by the site or the company offices, and the complaint is investigated and any necessary corrective and/or preventative action is taken and recorded on the complaint register.

**ACTIONS**

1. Contact telephone numbers for the Banks Group including 24 hour number will be provided in writing to occupants of neighbouring premises and to the MPA’s before site operations commence.

2. All complaints and notifiable incidents will be logged on the complaint register to record the name, address, contact details of the complainant and the nature of the complaint including date and time of any alleged incident following the Banks Group complaints procedure.

3. All complaints and notifiable incidents will be reported to the relevant Site Manager and will be fully investigated, resolved and closed out.

4. Once a complaint has been investigated the complainant will be informed of the outcome and any action taken by telephone, email, letter or personal call.

5. A report of any complaints received will be presented to the Highthorn liaison committee with details of the complaint, how it was investigated and any actions taken to resolve the issue.

1.4 Compliance monitoring and reporting

**Objective four - To implement environmental monitoring and reporting techniques to check conformance with conditions attached to planning permissions, discharge consents and Local Authority Environmental Permits.**

The environmental monitoring techniques detailed in this plan are used to check that operational controls are effective and that the site is operating within the planning conditions, discharge consents and coal processing permits.

**ACTIONS**

1. Site noise, dust, vibration, water discharge, gas, groundwater and visual impact monitoring (including lighting) will be undertaken using the appropriate suitably calibrated equipment to ensure that the site operations are operating within the planning conditions, consents and permits.

2. In the event of results showing a breach of these standards a full investigation and appropriate corrective and/or preventative action will be taken to bring the levels in line with the standards specified.

3. The environmental monitoring results will be presented at the site liaison committee meetings.

1.5 Communication & Liaison with local residents

**Objective five - To ensure that members of the local community, along with local officials, are continually and regularly informed on the site activities and are able to openly comment on the site’s environmental performance via easily contactable individuals.**

Establishing and maintaining links with both local authorities and individual residents that are within close proximity to the operation is an important aspect throughout the projects life. Direct contact is actively maintained with local residents through members of the Environmental and Community teams in order to address any issues that may arise in regards to any aspect of the operation. Liaison committees will allow
for communication with local authorities to be maintained.

**ACTIONS**

a) A liaison committee will be set up consisting of representatives from the local authorities, local businesses and residents.

b) The liaison committees will meet regularly at timeframe to be agreed by the committee, suggested to be three or four times each year.

c) The Highthorn EMP will be available to local residents and available to download from the company web site.

d) Contact details of relevant members of staff will be notified to local interested parties.

e) Regular contact with residents by members of the Environmental and Community teams.

b) The actions in this EMP and their effective implementation will be checked during regular environmental audits of the site.

c) The Mineral Planning Authorities, Environmental Health Department, representatives from the local community and liaison committee members will be invited to attend and assist with the audits.

d) The results of the audit and any non conformances along with the action required will be recorded.

e) Any non conformance identified will be issued to the relevant person/s to take the corrective/preventative action detailed.

f) The audit results will be reported at the site liaison committee.

### 1.6 Environmental audits

**Objective six - To ensure that the site is regularly audited against this EMP and that the local community, planning authority and interested parties are invited to carry out a programme of environmental audits to monitor the achievement of the environmental objectives at the surface mine**

Environmental audits are fundamental to ensuring that the actions for each objective contained within this EMP are implemented and maintained on the surface mine. Audits will be carried out at a frequency of once per quarter during the site operational phase. Any interested local residents will be welcome to attend an audit. The Environmental Coordinator will monitor the progress of action points and once action has been taken it will be checked and if satisfactory the non-conformance will then be closed out. If there are any outstanding action points at the next audit, these will be priority items to check.

**ACTIONS**

a) Before an audit the following documents will be consulted in order to check conformance:

- Local Authority Environmental Permit for operation of the coal handling and processing facility
- Planning Permission and conditions
- Soil Handling Strategy
- Any ecological mitigation measures for the site

- Results of environmental monitoring
- Records of previous environmental audits, non-conformance notices, complaints and environmental incidents
2. Air quality

2.1 Prevention of fugitive dust emissions

Objective seven - To prevent dust emissions from site operations.

2.1.1 Maintenance of haul roads using graders and water bowser

Dust raised from a dry un-surfaced road is considerably more than that emitted from a paved road. The amount of dust raised depends on the number of vehicles, the vehicle weight and speed, silt content and particle size of the road surface, the number of wheels, moisture content of the road surface and the orientation of the vehicles exhaust.

ACTIONS

a) The movement of mobile plant will be restricted to clearly identified internal haul roads.

b) Haul roads will be well maintained using a grader to provide a smooth surface without fine material.

c) The site will be provided with at least two water bowser that will routinely spray onto the surface of the haul roads, should conditions require this.

2.1.2 Maintenance of the access road

ACTIONS

a) The access road will be provided with a tarmac or concrete surface and will be cleaned and brushed to ensure that mud and dust deposits do not accumulate.

b) To ensure that dust and debris is minimised on the road between the wheel wash and the site entrance and on the highway, the drivers of all HGVs will be instructed to use a wheel wash that is provided in the Highthorn compound area before leaving the site.

c) Speed restrictions will be imposed upon HGVs to avoid movement of any deposited materials upon the road and to reduce wear and tear of the road.

d) Regular inspections of the condition of the access road will occur, with action taken to address any potholes or damage to the road surface.

2.1.3 Water supply

ACTIONS

a) Water storage and treatment lagoons will be constructed to treat and store water falling on the site as rain and ground water pumped from the working void.

b) The water lagoons will be sufficiently large to supply water required during drought conditions.

c) A fast filling system will be used to refill the water bowser maximising the time that the units are operational.

Ample water supplies are held on site in water storage lagoons

2.1.4 Dust suppression additives

Dust wetting agents can be mixed with the water applied to haul roads during hot, dry weather conditions to increase the duration that the road surface remains damp. Dust binding agents are diluted with water and can be applied to long term stockpiles or areas of the site, which are without vegetation and not disturbed by mobile plant. The binding agent can be applied after grading has occurred and sprayed on the smooth surface that this produces. This forms a film that prevents dust emissions by wind erosion on these non vegetated, undisturbed areas of land.

ACTIONS

a) Dust binding and wetting agents will be used as appropriate on site.

b) The use of motor graders on any parts of the site treated with wetting agents will also be minimised to optimise the effectiveness of the agent.
c) If there are any visible dust emissions occurring from the tipping or handling of the overburden material affecting surrounding residential premises (such as during dry windy weather or when tipping dry, dusty material) this operation will be suspended in that location until suitable wind and weather conditions prevail and effective dust control measures are in place.

d) Seeding of perimeter mounds or those close to sensitive premises will occur as soon as reasonably practicable taking into account the soil and climatic conditions and the time of year. (Profiling the mounds will help to reduce wind erosion by reducing surface roughness. Seeding with grass will seal the surface to prevent erosion by rain and reduce fugitive emissions of dust from the soil mounds.)

e) If weather conditions are not suitable for seeding, the mounds will be sprayed with a binding agent to seal the surface as a temporary measure to prevent wind erosion until conditions are suitable for seeding.

2.1.5 Overburden and soil mound construction control measures

ACTIONS

a) Each water bowser will be fitted with a rain gun and will be used to spray mounds to prevent dust arising during their construction.

b) When tipping is carried out near to sensitive premises and conditions are so that could give rise to dust impacting the receptor(s) the rain gun of a mobile bowser will be employed as dump trucks tip any potentially dusty material.

c) If there are any visible dust emissions occurring from the tipping or handling of the overburden material affecting surrounding residential premises (such as during dry windy weather or when tipping dry, dusty material) this operation will be suspended in that location until suitable wind and weather conditions prevail and effective dust control measures are in place.

d) Seeding of perimeter mounds or those close to sensitive premises will occur as soon as reasonably practicable taking into account the soil and climatic conditions and the time of year. (Profiling the mounds will help to reduce wind erosion by reducing surface roughness. Seeding with grass will seal the surface to prevent erosion by rain and reduce fugitive emissions of dust from the soil mounds.)

e) If weather conditions are not suitable for seeding, the mounds will be sprayed with a binding agent to seal the surface as a temporary measure to prevent wind erosion until conditions are suitable for seeding.

2.1.6 Drilling and blasting dust control measures

ACTIONS

a) All drilling rigs used will have dust suppression systems fitted which injects water into the hole.

b) Drill returns treated with water will be used to cover the surface connectors to minimise air over-pressure.

c) To prevent the venting of blast holes either suitable drill returns or angular stemming material will be used.
d) The blast zone will be kept damp by the application of water from the rain gun on the water bowser prior to each blast to control any fugitive dust emissions that could arise from the surface during detonation.

2.1.7 Coal processing and transport control measures

The processing of coal involves stockpiling coal by seam then passing the product through a crushing and screening plant to reduce the size and blend the various coal seams excavated within the site. This process is subject to stringent conditions set down in the Local Authority Environmental Permit. The precautions to control dust from this source are detailed in the Secretary of State's Guidance (PG3/5(04) - Coal, Coke, Coal Product and Petroleum Coke Processes.

Additional measures contained in this guidance that are not mentioned elsewhere in this EMP include the following actions:

**ACTIONS**

a) No residual coal will be crushed by the tracks of the mass excavators during the loading of coal within the mining void.

b) Coal stockpiles will be profiled, consolidated and clearly delineated to prevent vehicles other than wheeled loading shovels from running over the edges and crushing coal.

c) Dust suppression will be provided in the form of a water irrigation system over conveyor belts on the coal processing plant.

d) The conveyor belts return section will be kept clean using a fixed scraper.

e) Transfer points on crushing and screening plant will be enclosed.

f) Drop chutes will be attached to minimise exposed free fall of coal passing through the plant.

g) Items of plant used on the site will not be fitted with downward facing exhausts to minimise dust rising by exhaust gases.

h) A daily visual inspection shall be conducted by the site manager who will keep a daily log of all process operations and site activities and note any malfunctions which could lead to abnormal emissions from the coal process and stocking area.

i) If any emissions are likely to have an effect on the local community, the site manager will notify the regulatory authority and the MPA.

j) A site speed limit of 20 mph will be set to minimise the potential for dust generation.

k) Coal stocking and processing shall only occur in the area designated in the Local authority Environmental Permit unless otherwise agreed with the Local Authority.
2.1.8 Restoration control measures

Where restoration works are being carried out the land is covered with subsoil and topsoil which is ripped, stone-picked, cultivated and seeded with grass or a crop to seal the surface. Restoration work can give rise to dust emissions during dry weather conditions.

ACTIONS

a) A water storage lagoon or tank will remain on site to provide water for the applicable dust suppression techniques mentioned above throughout restoration operations.

2.1.9 Meteorological equipment

The action of the wind on dry stockpiles, bunds, overburden mounds and land may also give rise to windborne dust emissions. Wind erosion is dependent upon a number of factors including wind speed, particle size, moisture content, the areas of the exposed surface and the surface roughness. The threshold wind speed required for particles to become airborne without disturbance from vehicles or machinery will depend on these factors but is generally around 5m/s.

ACTIONS

a) A weather station will be installed at the site office to record wind speed, direction, rainfall, temperature and barometric pressure.

b) Records of the prevailing weather conditions will be recorded in the Site Log Book of visual emissions when undertaking the visual dust assessment. This log shall include the average wind speed, wind direction and an observation of the weather conditions.

c) The local weather forecast will be checked to assess the risk of fugitive dust emissions from the site and to target where and when increased dust control measures are required.

2.1.10 Additional measures

ACTIONS

a) If visible dust emissions are leaving the site, the site manager will immediately suspend any operations giving rise to the emissions until weather conditions change or effective dust control measures have been implemented which may include moving site activity to another part of the site where operations can proceed without giving rise to dust emissions.

b) During dry weather conditions haul roads will be dampened in the evening and before the start of work in the morning.

c) Dust wetting and binding agents will be used where additional dust mitigation is required during hot and dry weather conditions. The wetting agents will be mixed with water and applied to internal haul roads to increase the duration that the road surface remains damp. Dust binding agents will be mixed with water and applied to long term undisturbed stockpiles or areas of the site that are devoid of vegetation and not disturbed by mobile plant.

d) Subject to the permission of the various householders and in agreement with the MPA, background levels of deposited dust slides at representative receptor locations prior site operations commencing will be assessed. These slides will be analysed to determine the level of soiling and then archived. In the event that dust related complaints are received, these slides will be available for use as reference background conditions to assist with any investigations.

2.1.11 Dust monitoring

Compliance monitoring

The effectiveness of the dust control measures will be assessed through continuous monitoring of dust deposition at sensitive premises in the vicinity of the site.

ACTIONS

a) Continuous PM10 and deposited dust monitoring will commence at sensitive premises at least one month in advance of the earth moving activity.

2.1.11.1 Deposited dust monitoring

The methodology proposed for dust monitoring at sensitive residential premises around the site is the glass slide dust monitoring technique which imitates a glossy surface such as window sill or vehicle paintwork.
ACTIONS

a) Glass microscope slides will be located at or adjacent to the closest relevant sensitive locations to mining operations (subject to the permission of the various householders and in agreement with the MPA):

- Druridge Farm Cottages
- Hemscott Hill
- Blakemoor Farm
- Ellington Caravan Park
- Highthorn Properties
- Houndalee Cottages
- Stonecroft
- High Chibburn
- Chibburn Farm

b) The glass slides will be placed on a horizontal surface at least 1m above the ground and labelled at one end with a reference to the location and date of sampling.

c) The glass slides will be changed on a weekly basis, and then analysed by measuring the reduction in reflectance relative to a clean unexposed reference slide.

d) Results of glass slide dust monitoring will be reported to the MPA, liaison committee and occupants of local sensitive premises.

2.11.2 Particulate matter dust monitoring

Real-time particulate matter dust monitoring will also be undertaken around the site to compliment the above method of monitoring.

ACTIONS

a) Turnkey Topas dust monitors are set up to monitor at the three closest sensitive locations to mining operations from the locations below, subject to the permission of the various householders and agreement with the MPA (plus any additional locations if requested by the MPA):

- Druridge Farm Cottages
- Hemscott Hill
- Blakemoor Farm
- Highthorn Properties
- Houndalee Cottages
- Stonecroft

b) The Topas monitors will continuously and simultaneously measure the concentration of total suspended particulate, PM\textsubscript{10}, PM\textsubscript{2.5}, and PM\textsubscript{1} dust particles.

c) The Topas monitors will be set up in an open location at the sensitive premises one month before operations commence on site and at least two of the monitors will also be fitted with an anemometer and weather vane to record wind speed and direction. One of the Topas monitors will be fitted with a relative humidity gauge to help identify when misty conditions are likely to cause false alarms.

d) The Topas monitors will be fitted with a filter to ensure that in the event that any dust incident occurs that a sample of the dust can be recovered and sent for analysis to determine its nature and source.

e) Data from the Topas monitors give results of hourly and 24 hour PM\textsubscript{10}, PM\textsubscript{2.5}, PM\textsubscript{1} and TSP levels.

f) Where the data shows peaks in PM\textsubscript{10} investigation will occur. This will involve comparing the time of occurrence with the weather conditions, concentration of PM\textsubscript{2.5} and PM\textsubscript{1} dust particle, regional data and site activities that occurred at that time.

g) Results of all monitoring will be made available upon request to the MPA.

h) Each Topas dust monitor will be fitted with an alarm function so when an agreed trigger level is exceeded, then an email would be automatically sent to the Highthorn site management and Environmental Coordinator. All trigger incidents will be investigated to establish the cause of the trigger and findings will be recorded.

i) Upon receipt of an alarm message during site operations, the Environmental Coordinator will immediately interrogate the site weather station to establish the wind speed and direction. If misty conditions are confirmed (by a visual inspection or by a TSP/PM\textsubscript{10} ratio in excess of 50:1) or a source other than site activity such as a bonfire or local construction activity then an ‘All Clear’ message will be relayed to the site management.

j) If, there is visible evidence of dust leaving the site, or the TSP/PM\textsubscript{10} ratio is in excess of 2:1, then water bowers will be directed to the area. Any dust generating activities in the area will be immediately
suspended and all site activities, other than the deployment of water bowsers, will cease if the elevated dust levels persist.

k) Dust monitors shall be annually calibrated and maintained regularly to ensure that the air flow rate is set at the correct level and the filters are replaced as necessary.

Relevant legislation

It is a requirement under The Pollution Prevention and Control Act 1999 and Regulations 2000 (and amendments) to hold a permit to process coal. The ‘Best Available Techniques’ (BAT) are to be used to control emissions and achieve environmental protection and specific conditions are applicable to the loading, unloading, processing and transporting coal.

Process Guidance Note 3/5(04) Secretary of State’s Guidance for Coal, Coke, Coal Product and Petroleum Coke, provides guidance on the BATs for processing coal. The Highthorn Surface Mine’s permit for this process will detail the specific management that is to be used.


Under Part III of The Environmental Protection Act (EPA) 1990 levels of dust that are prejudicial to health or interfering with an individual’s right to use or enjoy their property is a Statutory Nuisance and therefore measures to prevent it becoming a nuisance should be taken.

Mineral Planning Statement 2 provides guidance in relation to minimising the environmental effects of mineral extraction. It specifically details operational control measures for minimising dust in Annex 1.

2.2 Fumes from blasting

Objective eight - To minimise the impact of fumes from blasting operations

All explosives produce gas, however much of this is non-toxic consisting of Nitrogen, carbon dioxide and water vapour. Small amounts of toxic gases are produced including nitrogen monoxide, nitrogen dioxide and carbon monoxide. Where emulsion is the explosive used on site the supplier will be instructed to ensure that the ratios of the mix used are such that the toxic gases are minimised.

2.2.1 Ammonium nitrate

Where Ammonium Nitrate and Fuel Oil (ANFO) is the explosive used for blasting on site;

ACTIONS

a) ANFO will not be used directly in any drilled holes containing water. A gas bag or similar device will be used to keep the ANFO out of the water.

Compliance monitoring

The above control measures will be checked through the environmental audit process and any non-conformance will be noted and rectified.

Relevant legislation

No guidelines exist for the control of fumes in open environments. General limits are given by the Health and Safety Executive and are updated annually. The implications are more relevant to the occupational health of employees rather than local residents.

2.3 Diesel emissions

Objective nine - To maintain operational plant and HGVs in good working order to minimise gas emissions to the atmosphere

All Banks HGV wagons are fitted with low emission Euro 5 engines which comply with European limits for exhaust emissions and a maintenance programme ensures that all plant is in good working order.

ACTIONS

a) A maintenance programme will identify plant due for maintenance, based on the number of hours it has been in operation.

b) Air filters are renewed after every 1,000 hours of use, unless otherwise indicated by an on board computer system.

c) Banks HGV’s will be regularly serviced and maintained and drivers will report any defects immediately to the Transport Manager to enable repairs to be carried out promptly.

Compliance monitoring

All of the above controls will be checked through the environmental audit process.

Relevant legislation

The Road Vehicle (Construction and Use) Regulations 2003 (as amended) require vehicles to be
manufactured to high standards and requires the owners and operators to maintain vehicles in such a way as to prevent excessive emissions or noise. Road vehicles are subject to regular scheduled and unscheduled tests and specific limits are defined for different vehicle types for exhaust gas concentrations of carbon monoxide and hydrocarbons. This legislation also makes it an offence to use a vehicle on the road if it is emitting smoke.

3. Noise

Objective ten - To use best practice to ensure that noise emissions are controlled to acceptable levels

Any acoustically insulated plant used on site will be checked regularly to ensure that exhaust silencers and acoustic insulating panels are fitted and in good working order. The completion of this is recorded on the weekly site inspection form. Also, at regular servicing intervals acoustic insulation is checked as part of a Plant maintenance service.

Broadband reversing alarms will be used on mobile plant to ensure that reversing alarms are unobtrusive at surrounding sensitive premises.

Exceptional and short term operations referred to below consist of stripping and replacement of soils, soil and baffle mound construction and removal, permanent landform construction, construction and removal of the outer faces of the overburden mound and the construction of the site access road.

ACTIONS

a) The large dump trucks will be fitted with Banks designed acoustic insulation.

b) Pumps, generators and lighting sets will be placed at locations on site where they will not be audible at the nearest noise sensitive premises and where necessary will be acoustically insulated.

c) Mobile plant will not be operated outside the permitted hours of operation stated in the planning permission, unless there is prior approval from the Minerals Planning Authority.

d) All mobile site plant will be fitted with a working, automatic broadband noise reversing alarm.

e) Any items of plant with defective acoustic insulation or exhaust silencers will not be used and will the defect reported to Banks Plant Department for immediate investigation and remediation.

f) All Banks road HGV tractor and trailer units will be fitted with air suspension and rubber bushes will be fitted to the trailer bodies and chassis to minimise noise from this source.

g) All Banks HGV’s will be fitted with disc brakes to enhance braking efficiency and minimise brake squeal.

Compliance monitoring

Noise monitoring will occur at the nearest noise sensitive receptors when conditions are calm or when the wind is blowing from the site towards the noise sensitive receptor at <5m/s average wind speed.

ACTIONS

a) Noise monitoring will be carried out by trained personnel (who either hold an IOA certificate of competence or have been fully trained by a person holding a IOA Diploma in Acoustics and Noise Control) to check that the planning condition limits are being achieved.

(All noise levels are 1 hour Leq free field)

<table>
<thead>
<tr>
<th>Noise Sensitive Receptor</th>
<th>Exceptional</th>
<th>Short term</th>
<th>Normal</th>
<th>Evening 19:00 hrs – 22:00 hrs</th>
<th>All other times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Druridge Farm Cottages</td>
<td>70</td>
<td>55</td>
<td>51</td>
<td>48</td>
<td>42</td>
</tr>
<tr>
<td>Hemscott Hill</td>
<td>70</td>
<td>55</td>
<td>49</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>Blakemoor Farm</td>
<td>70</td>
<td>55</td>
<td>48</td>
<td>47</td>
<td>42</td>
</tr>
<tr>
<td>Kennels Cottage</td>
<td>70</td>
<td>55</td>
<td>51</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Warkworth Lane Cottage</td>
<td>70</td>
<td>55</td>
<td>55</td>
<td>55</td>
<td>42</td>
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<tr>
<td>Highthorn</td>
<td>70</td>
<td>55</td>
<td>55</td>
<td>51</td>
<td>42</td>
</tr>
</tbody>
</table>
b) Exceptional operations referred to in the above table consists of the stripping and replacement of soils, soils and baffle mound construction and removal, permanent landform construction, construction and removal of the outer faces of the overburden mound and construction of the site access road.

c) The total period of exceptional operations that result in higher than normal noise levels (as shown in the above table) will not exceed 44 days in any calendar year at any individual noise sensitive receptor.

d) Noise monitoring will be carried out in accordance with British Standards (BS4142) at or adjacent to the following locations (subject to permission from the various householders) namely:

<table>
<thead>
<tr>
<th>Location</th>
<th>Distance</th>
<th>Distance</th>
<th>Distance</th>
<th>Distance</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
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e) Noise will be monitored for 15 minutes at each location at least once per calendar month during daytime working hours (07:00 to 19:00 hours) and evening hours (19:00 to 22:00 hours) unless prevailing weather conditions prevent this and only if the site is working during these hours. Planned attended monitoring shall take into account exceptional operations and potential impact on monitoring locations listed above. No monitoring shall take place during meal breaks or periods of plant breakdown.

f) Any complaints alleging disturbance from noise will be fully investigated, resolved and closed out.

g) In the event that the measured site noise level exceeds the planning condition limits for noise there will be an immediate investigation and suitable action taken on site to reduce site generated noise levels to within the planning limits. This will include suspension of those operations giving rise to an increase in noise until a quieter method of working has been established. The Minerals Planning Authority shall be informed should this occur.

h) The results of noise monitoring shall be made available to the Minerals Planning Authority upon request within 5 working days.

**Relevant legislation**

Under the Environmental Protection Act (EPA) 1990 levels of noise that are prejudicial to health or interfering with an individual’s right to use or enjoy their property is a Statutory Nuisance therefore ‘Best Practicable Means’ (BPM) should be taken to prevent/abate any noise nuisance.

Planning Practice Guidance (available online) – minerals section.


The Planning Conditions in the permissions for the site will provide defined noise levels for specific operations at sensitive properties around the Highthorn site.
4. Blasting vibration and air overpressure

**Objective eleven - To ensure that best practice is used to control noise, vibration and air overpressure associated with blasting operations**

**ACTIONS**

a) A fully trained explosives supervisor will be appointed.

b) A set of shot firing rules will be drawn up and agreed with the MPA before any blasting commences outlining the detailed operating procedures that will be followed to ensure that shot firing operations on site take place without endangering the workforce or public.

c) Sufficient angular stemming material or suitable drill returns will be placed above the explosive within each hole to confine the explosive force and minimise environmental disturbance caused by venting.

d) The detonators will be connected in a predetermined sequence to ensure that only one charge is detonated at any one time and a Nonel or similar type initiation system will be used.

e) The detonation delay sequence shall be designed so as to ensure that firing of the holes is in the direction of free faces so as to minimise vibration effects.

f) Appropriate blasting techniques shall be adopted at all times and instantaneous charge levels selected such that the predicted peak particle velocity shall not exceed the planning conditions.

g) Blast areas will be accurately surveyed, drilled and recorded to maintain the designed blast pattern.

h) The burden, spacing, hole diameter and size of the maximum instantaneous charge will be designed to minimise environmental effects.

i) All surface detonators will be covered.

j) There will be no surface lines of detonating cord.

k) Blasting will only take place between the hours of 1000 and 1600 Monday to Friday and will not take place during hours of darkness, restricted daylight or any time on Saturdays, Sundays or Bank Holidays and the Mineral Planning Authority shall be notified of the time of blasting.

l) Blasting will not occur more than four times in any one day and shall then only be undertaken within a period of +/- 5 minutes of the times agreed with the MPA.

m) Neighbouring properties will be given a notice explaining that blasting will be occurring via an information letter prior to blasting operations commencing on site.

n) Audible warnings by means of a siren will be given before blasting operations commence and neighbouring properties shall have been informed of the type of warning that will occur.

o) Red flags, to give a visual warning, will be placed around the site boundary at locations as agreed with the MPA before any blasting commences.

p) Any charges that misfire or blasts which cannot be detonated within the prescribed period for safety reasons may be detonated as soon as possible after the specified period if required for safety purposes.

q) If blasting takes place outside these hours, in the case of emergency, full written details of the circumstances and the times of blasting shall be submitted to the Minerals Planning Authority.

**Compliance Monitoring**

**ACTIONS**

a) Ground borne vibration and air overpressure will be monitored during each blast at three of the nine locations on the list below (*The three locations will be whichever of the properties are the closest to the blast area. Plus any additional location if requested by the MPA, together with the provision of additional periodic monitoring if requested by the MPA at other locations which, from time to time, are considered necessary*).

Druridge Farm Cottages  
Hemscott Hill  
Blakemoor Farm  
Highthorn Properties  
Teviot Cottage  
Houndalee Cottages  
Stonecroft  
High Chibburn  
Chibburn Farm

b) Blast vibration monitoring shall be undertaken in accordance with BS 7385: Part 1: 1990 *Evaluation and measurement for vibration in buildings, Part 1: Guide for measurement of vibrations and evaluation of their effects on buildings*.

c) Ground borne vibration will be measured using seismographs configured to record peak particle velocity (PPV) from a tri-axial transducer. The transducer shall be located at ground level in the vicinity of the sensitive property.

d) The peak particle velocity resulting from blasting within the site shall at no time exceed 12 mm/sec at vibration sensitive premises. 95% of all blasts recorded shall not exceed 6 mm/sec peak particle velocity over a three month period.
e) All results will be compared against the predicted vibration levels and the planning condition stated in part.

f) In the event that the planning conditions are exceeded, the MPA will be notified, further investigation will be progressed and the design of subsequent blasts amended to ensure conformance.

g) Regular monitoring much closer to the blast zone will be undertaken to improve the accuracy of the regression curve to ensure that the blast design plans comply with the blast vibration limits set in the planning condition.

h) The results of vibration monitoring shall be made available to the Minerals Planning Authority upon request within 48 hours.

**Relevant legislation**

Blasting operations are controlled by legislation contained within the Quarries Regulations 1999. Part V of these regulations incorporating Regulations 24 through to 29 details the legal and practical duties of the various personnel involved in the blasting process. The regulations also outline the specifications to be prepared in advance of operations taking place and the methodologies to be followed.

Under The Environmental Protection Act (EPA) 1990 levels of vibration that are prejudicial to health or interfering with an individual’s right to use or enjoy their property are a Statutory Nuisance and therefore the ‘Best Practicable Means’ should be used to prevent vibration becoming a nuisance.


The planning conditions for blasting at the Highthorn site.

5. External appearance

**Objective twelve -** To ensure that the external appearance of the Highthorn site creates a favourable image and to minimise visual impact on the surrounding area

5.1 Landscaped Soil Mounds

**ACTIONS**

a) The slope of baffle mounds will be constructed to a gradient specified in the soil handling strategy to prevent slippage/slumping.

b) Soil mounds will be constructed to the approved heights and agreed positions.

c) The outer faces will be trimmed and profiled with the backactor during construction.

d) Soil mounds will be seeded with grass at the earliest practicable opportunity.

e) Soil mounds will be maintained to ensure effective grass seed germination and any areas eroded by rain will be trimmed and re-seeded. Grass on perimeter soil mounds visible from outside the site, will be cut regularly or grazed and kept free of weeds.

f) Wherever possible parking areas for site plant during break times will be located where they are not visible outside the site.

![Stimming will be used to maintain the perimeter soil mounds](image)
5.2 Site offices and cabins

Objective thirteen - To ensure that all employees and visitors are welcomed to a safe and clean site

ACTIONS

a) The site offices and cabins will be located in the compound and screened from external view.

b) The site office will be identified with a sign providing instructions on how the manager and his deputy may be contacted if the office is unattended.

c) The site offices will be clean, tidy and free from excessive mud or dust on floor.

d) Lavatories, washing and shower facilities will be maintained in a clean and hygienic condition suitable for visitors.

f) Grass verges of the access road and highway in the immediate vicinity of the site will be maintained and protected from damage by vehicles and kept free of litter.

g) Concrete kerbs will be maintained and kept free of dust, dirt or mud.

5.3 External lighting

Objective fourteen - To ensure that the working area is well illuminated by lighting that is well managed and is not intrusive outside the site boundary

Fixed lighting will be designed to avoid view of the source from an outside receptor, with cowls used to control upward light to ensure the site lighting is suitable for an E2 Environmental Zone. Lighting within the excavation area will be incorporated into a bench within the void so as not to be visible outside of the site boundary. Any mobile columns used around the excavation area will also be contained within the void as it progresses. Lighting will be appropriate for use to ensure safe working practices.

ACTIONS

a) The working area will be well illuminated by lighting which will not be intrusive outside the site boundary.

b) All lighting will be downward facing, or have a cowl fitted to control upward light and / or glare.

c) All floodlights will be switched off during daylight hours.

d) All lighting will be switched off once the shift ends in the working area other than those needed for security reasons and essential maintenance.

Compliance monitoring

The above control measures will be checked through the environmental audit process and any non-conformance will be noted and rectified.

A visual monitoring survey will be carried out by taking photographs of the site from fixed points and comparing them with the predicted views of the site prepared for the Planning Application and the design controls recorded above. Deviations from the construction designs of any mound, landform or lighting model will be rectified to ensure that the design controls and predicted views included in the planning application are achieved.

ACTIONS

a) Quarterly visual monitoring surveys will be undertaken, weather permitting.

b) Results will be compared to the predicted views and any non conformance will be investigated and actioned to comply with the approved design.
Relevant legislation

Planning conditions require the site to be developed in accordance with agreed plans.

The Statutory Nuisance (Appeals) (Amendment) (England) Regulations 2006 have added light to the list of environmental aspects that can be classed as statutory nuisances under The Environment Protection Act 1990. If light is occurring at levels that are prejudicial to health or interfering with an individual’s right to use or enjoy their property it is a statutory nuisance. Therefore Best Practicable Means must be taken to prevent/abate the site from causing a light nuisance at surrounding sensitive premises.

Example of site lighting

6. Water

6.1 Surface water management

Objective fifteen - To responsibly manage the rate of flow of water on site so that it flows into the water treatment system and only leaves the site through the consented discharge point after treatment

6.1.1 Surface Water Discharge Points

ACTIONS

a) The site will only discharge all excess surface water via the surface water discharge point specified by the Local Authority and the Environment Agency discharge consent.

b) Perimeter ditches will collect any rainwater and runoff from the site and direct it to the water treatment system.

c) Discharge from the lagoons will be in a controlled manner according to the permitted discharge rate as agreed and licensed by the Environment Agency.

d) Periodic clearance of the discharge point may be required to avoid blockage occurring from sandy deposits. Clearance will occur with suitable plant and in agreement with the local landowner, LPA and the Environment Agency.

Water is discharged along ditches to a water treatment lagoon

6.1.2 Lagoon storage capacity

ACTIONS

a) The lagoons will have adequate water storage capacity to contain and treat surface runoff before it leaves the site. The design of the lagoons will ensure the discharge point is above high tide level.

b) The lagoons shall be cleared of mud and silt to maintain their capacity as necessary.

6.1.3 Drainage and water treatment lagoons

ACTIONS

a) The site drainage, water treatment areas and permitted discharge point will be inspected each week and recorded on the Banks Lagoons and Ditches Inspection Report.

b) All ditches will be maintained free of any obstruction to the flow of water.

c) All ditches will be maintained free from excessive erosion and where necessary remedied by lining with plastic sheeting, netting, stones or placing turf along the banks and channel of the ditch.

d) All existing land drains will be identified and disconnected from watercourses.

e) The perimeter ditches will be laid and maintained to ensure that water drains effectively into the lagoons.
6.4 Restoration drainage

When the site enters the restoration phase the sites restoration plan shall be implemented. This includes drainage measures to ensure that once restored the land will have an effective drainage system in place.

**ACTIONS**

a) Following the completion of each phase of restoration, surface drainage works (including watercourses, field boundary ditches, and surface grips) will be installed, as soon as practicable, to intercept run-off, prevent erosion, and avoid flooding of the land.

e) The inlet into the lagoon systems will be provided with a baffle box to ensure adequate mixture of the flocculent with the water.

f) Water leaving the treatment lagoons will be visually checked on a daily basis to make sure it is clear and contains no visible oil or grease.

g) A means to measure the flow rate of the discharging water will be fitted and maintained on site.

h) Water treatment lagoons will be adequately fenced and provided with signs warning of deep water and lifebelts.

i) All drainage from sinks, showers and lavatories will be connected to a septic tank or mains drainage. Septic tanks will be connected to a soakaway below ground and will not discharge to any open ditches.

**Compliance monitoring**

All the above operational controls for surface water management and water quality will be checked through the environmental audit system.

Results of the weekly sampling and testing of the surface water discharges will be compared with the water quality parameters set in the Environment Agency and LA discharge consents. Any non-conformances will be noted and action taken to minimise the potential for recurrence.

**ACTIONS**

a) Samples of discharged water will be taken at least once each week and tested for parameters specified in the Environment Agency discharge consent for the site.

b) Records shall be kept of the flow rate and the water quality testing and results will be compared to the EA and LA consent conditions. Where consent levels are exceeded, water discharge will be immediately suspended and investigation will be undertaken. Water treatment measures will be applied and a further water sample will be taken and tested to ensure conformance with the consent limits before discharge recommences.

**Relevant legislation**

Water Resources Act (WRA) 1991 protects natural water resources and discharges to controlled waters. Under this act it is an offence to cause or knowingly permit any poisonous, noxious or polluting matter, solid waste or trade effluent to enter any controlled waters, except in accordance with a discharge consent issued by the Environment Agency. Therefore precautions are necessary to make sure the consent is adhered to. The discharge consent is likely to detail the permitted discharge, type, quantity, flow rate and other restrictions.
The Water Resources Act 1991 requires Banks to obtain an abstraction licence for abstracting water from a borehole. This will contain certain conditions such as the quantity of water that is permitted for abstraction. Provisions made under the Water Act 2003 are likely to come into force in the near future requiring quarry operators to obtain an abstraction licence for the dewatering of a quarry void.

7. Mine gas

**Objective seventeen** -- To establish effective monitoring regimes and if necessary precautionary measures to safely control any migration of mine gas that may arise from old workings

Excavation of old workings will allow any mine gases to rapidly dissipate into the atmosphere, however, potentially hazardous accumulations may still occur in any areas of the site which are enclosed or poorly ventilated. Particular attention is required during or following any 'sharp' falls in barometric pressure as this might lead to an increase in gas concentrations. Relevant information on barometric pressure will be available from the onsite Meteorological monitoring station.

Oxygen Deficiency and Carbon Monoxide monitors will be installed at agreed locations. The risk is thought to be low but nevertheless there is a possibility that there may be changes in the hydrogeological and mine gas regimes during the proposed development works.

**ACTIONS**

a) Risk assessments will be undertaken and site staff will be informed of the potential risks and mitigation measures required.

b) Personnel will be prohibited from entering old workings voids, drift or shaft openings within the excavation walls and are required to exercise extreme care during any treatment works which may be undertaken.

**Compliance monitoring**

**ACTIONS**

a) Oxygen Deficiency and Carbon Monoxide monitors will be installed at the following locations (subject to permission) before site operations commence:

TBC

b) In the event that monitoring results suggest the escape of mine gases at sensitive locations or a complaint is received, immediate agreed action will be taken and contact will be made with the occupier of that location, local Environmental Health Officer, MPA and the Coal Authority to agree further appropriate action required.

(This may consist of an initial survey of the property or properties using suitable mine gas monitoring equipment. Further action may then be taken based upon the findings of this investigation.)

c) 24 hour site emergency contact telephone numbers will be provided to the Mineral Planning Authority before operations commence.

d) Records of stythe gas monitoring shall be maintained on the site and made available for inspection by the MPA at all reasonable times.

**Relevant legislation**

Under the Environment Protection Act 1990 levels of mine gas that are prejudicial to health or interfering with an individual’s right to use or enjoy their property is a Statutory Nuisance and therefore measures to prevent it becoming a nuisance should be taken. Where the potential for gas migration has been identified it is subject to an agreed monitoring regime with the local authority and is a condition of the Coal Authority licence.

8. Perimeter fencing and security

**Objective eighteen** - To ensure that the site is safely and securely fenced to discourage unauthorised access to the working area

8.1 Perimeter fencing

**ACTIONS**

a) The perimeter of the site will be fenced and marked with warning signs adjacent to public access areas such as footpaths and tracks to discourage unauthorised access.

b) Any stiles and gates provided on diverted footpaths will be kept in good condition.
c) The site perimeter fence will be inspected once per week to check for damage and will be recorded on the weekly inspection form.

d) All fencing between any development areas and adjoining agricultural land will be maintained in a stock proof condition.

8.2 Road access point

ACTIONS

a) The site entrances will be provided with the following which will be maintained in a sound and clean condition:

- A lockable gate in good condition.
- A sign stating the name of site and the operator, address. a contact name and 24 hour telephone number and Mineral Planning Authority telephone number.
- A sign on the road either side of the entrance warning of site access.

b) The access roads and highway will be a constructed hard surface and maintained in good repair and free from excessive cracks, unevenness, raised trenches or potholes.

8.3 Compound condition

The site car park will be physically separated from areas where mobile plant or HGV’s are operated or parked, by landscaped mounds or boulders.

ACTIONS

a) The car park will be suitably dressed with stone for car parking purposes.

b) Visitor car parking will be provided adjacent to the site offices.

c) All site vehicles will be prohibited from entering the site car park to prevent contaminating the surface of the car park with mud. A separate area will be provided for parking site vehicles.

d) Coal processing, coal stocking and plant maintenance areas will be physically separated from the office and car parking areas.

e) The office compound and car park will be located near to the site entrance to avoid driving through working areas on entering site.

f) The office compound area will be well illuminated and lighting will not be intrusive outside the site boundary.

g) Site security staff will patrol the site when the site is not operational.

h) All security staff shall be provided with emergency and out of hours contact details.

8.4 Hours of operation

ACTIONS

a) The site will only operate, including HGV’s leaving or entering the site, within the following hours unless operations outlined in part b are in operation:

0700 to 2200 Monday-Friday
0700 to 1300 on Saturdays

b) In addition to the above hours of operation the following operations shall be permitted during the times stated:

(i) 24 hours, 7 days per week for continuous site drainage operations;

(ii) The ability to carry out essential plant maintenance 24 hours, 7 days a week.

Compliance monitoring

All of the above operational controls will be checked through the environmental audit system.

Relevant legislation

Quarries Regulations 1999 require the provision of barriers suitable to discourage trespass into the site.

Highthorn planning conditions
9. Oil, fuel and chemicals

Objective nineteen - To minimise the risk associated with storage, use and disposal of oils and chemicals

ACTIONS

a) An inventory of all environmentally significant oils, fuel and chemicals used will be kept on site and shall record the maximum amount, type and hazard associated with the substance.

b) The Emergency Spillage Procedure will set out the procedure to be followed in the event of any accidental spillage.

c) Oil shall be stored in a container which is of sufficient strength and structural integrity to ensure that it is unlikely to burst or leak in its ordinary use.

d) All deliveries of oil to the site will be supervised to ensure that storage tanks are not overfilled.

e) Stationary fuel and oil tanks will have an impermeable bund of at least 110% capacity of tank, with all pipes and hoses contained within the bund.

f) The bunded tank will be checked weekly for accumulated rainwater and litter. Surface oil will be mopped up with oil absorbent pads prior to litter and rainwater being removed. This will be recorded on the weekly inspection form.

g) Lubricating oil will be stored in containerised and bunded tanks. Where more than one tank over 200 litres capacity is stored in the same bund, the bund will be capable of containing 110% of the maximum capacity of the largest container or 25% of the aggregate capacity, whichever is the greater.

h) Flexible delivery pipes from the fuel/oil bowers will be fitted with manually operated pumps or a valve at the delivery end that closes automatically when not in use.

i) All oil storage will be located not less than 10 metres from any ditch, water treatment lagoon, watercourse, river or pond with a bund protecting adjacent ditches.

j) Waste oil will be drained into the waste oil drainage tanks, sealed and transported to the waste.

k) Waste oil storage tanks will be labelled and double skinned.

l) All accidental spillages will be immediately cleaned up in accordance with emergency spillage procedures.

m) Absorbent materials, booms and mop up sheets will be provided in a labelled, waterproof container and available for use in the event of accidental spillage.

Compliance monitoring

All the above controls will be monitored as part of the environmental audit procedure.

Relevant legislation

The Control of Pollution (Oil storage) Regulations 2001 contains specific requirements for the safe storage of oil in any tank or container of greater capacity than 200 litres. The containers must be robust and in good condition and must be situated within adequate secondary containment to prevent the release of any oil that has escaped from its container and positioned to minimise the risk of impact.

Waste Management licensing regulations 1994 (and amendments) continue to regulate waste oil as this is exempt from The Control of Pollution (Oil storage) Regulations 2001.
Oil Spillage Supplies

The Water Resources Act 1991 states that preventative action to minimise the risk of accidental spillage of a polluting substance being discharged into controlled waters must be taken.

The Environmental Protection Act 1990 places the duty of care on anyone who is holding waste to ensure that the waste is securely stored and cannot escape from a person's control. This is therefore relevant to the storage of waste oil.

10. Waste management

**Objective twenty - To minimise the impact of waste generated by the site**

The site will be registered as a producer of hazardous waste with the Environment Agency.

**ACTIONS**

a) Enclosed waste storage containers will be provided at Highthorn for waste storage.

b) Waste containers will be located at least 10 metres away from any ditch or water course.

c) Waste containers will be labelled for different types of Hazardous waste such as 'used oil filters' and 'Oil absorbents' and for 'Non-Hazardous' waste in order to keep these waste types separate and manageable.

d) Only waste carriers registered with the Environment Agency will be used to remove the waste off site (Evidence of their licences or exemptions will be retained in the Procurement Department).

e) All hazardous waste removed from site will have a correctly filled in Hazardous Waste Consignment Note accompanying it (The Consignee's copy will be retained in the Procurement Department for three years).

f) All non-hazardous waste (controlled waste) removed from site will have a correctly filled in Duty of Care Waste Transfer Note accompanying it. These will be retained in the Procurement Department for two years.

g) The Waste Management Facilities to which the waste is sent will be licensed to receive such waste.

h) Return Duty of Care and Hazardous Waste Consignment Notes shall be requested from the Waste Management Facility that the waste was sent to and shall be retained, in order to confirm that the waste was received.

i) A labelled, double-skinned waste oil drainage tank will be provided for the collection of waste engine, hydraulic and transmission oils.
j) All fences will be inspected at least once per week for windblown litter which will be removed. This will be recorded on the Banks weekly inspection form.

k) Bonfires and the burning of waste in the open are prohibited.

Compliance monitoring

Environmental Audits will include checks on all the above areas to ensure compliance with these controls.

Relevant legislation

The Hazardous Waste Regulations 2005 requires all substances listed in The List of Wastes (England) Regulations 2005 to be kept separate from other wastes, require all substances that are listed as hazardous in to be kept separate from other wastes in a manner that prevents pollution and require a producer of hazardous waste to be registered as such with the Environment Agency. All hazardous waste must be removed from site by a registered waste carrier for recycling or disposal at a hazardous waste management site. A Hazardous Waste Consignment Note is required for transfers of hazardous waste off site. These consignment notes must be retained for 3 years.

Controlled waste is subject to the duty of care requirements of The Environmental Protection Act 1990. This imparts a legal responsibility for the storage, handling and disposal of waste. There is a responsibility to ensure that the waste does not escape from a person's control, that it is transferred to an authorised person, that a Duty of Care Waste Transfer Note is correctly completed for waste leaving the site and that the waste is legally disposed. The transfer notes must be retained for 2 years.

The exemption that quarries and mines previously had under Section 75 of The Environment Protection Act 1990 has now been revoked by The Waste Management (England and Wales) Regulations 2006 and therefore mines and quarries waste is now subject to the Duty of Care requirements.

Under Part III of The Environmental Protection Act (EPA) 1990 deposits and accumulations that are prejudicial to health or interfering with an individual's right to use or enjoy their property is a Statutory Nuisance and therefore measures to prevent litter becoming a nuisance should be taken.

The Clean Air Act 1993 prohibits dark smoke from being emitted from industrial premises and therefore prevents the burning of waste on site.

Also see Oils, Fuels and Chemicals regarding waste oil.

11. HGV movements

11.1 Wheel wash facilities

Objective twenty one - To ensure that the site operates in a manner that results in internal and external surfaced roads being of an acceptable cleanliness

A wheel wash will be used at all times
ACTIONS

a) An automatic wheel wash will be provided to clean the wheels and underside of all laden coal and clay lorries before they exit the site.

b) The automatic wheel wash will operate for a minimum of one minute to clean the wheels and underside of HGV’s.

c) The wheel wash spray nozzles will be maintained in good condition and will be directed at removing debris from tyre treads.

d) Signs will be erected directing all HGV’s to use the wheel wash before leaving the site.

e) The area surrounding and immediately after the wheel wash will be maintained in good repair and kept free of slurry, mud or dirt to prevent recontamination of wheels.

f) The road between the wheel wash facility and the access onto the highway will be surfaced with tarmac or concrete to provide a hard surface that is clean and free of ruts or potholes.

g) Clean water will be provided to the wheel wash sprays to rinse vehicles.

h) Waste water from the wheel wash will pass through silt traps and settling ponds before discharge.

i) The access road will be provided with a hard surface and kept clean to prevent any contamination washed from the wheels being carried onto the highway.

j) In the event that any site material is carried on to the highway a road brush will be deployed immediately to remove the deposit.

11.2 Traffic management

Objective twenty two - To minimise the impact of Transport operations on other road users and the occupants of sensitive premises along the route to and from the site

ACTIONS

a) The following signs will be in place to instruct all HGV drivers entering and leaving the site.

- 10mph Speed limit
- The route to be taken within the site
- All loads must be sheeted
- All vehicles must pass through wheel wash/clean wheels
- All drivers to report to Weighbridge

b) All HGV drivers will be issued with a copy of the Banks Control of Vehicle Movements manual setting out the route and other site specific requirements for transport operations.

c) All Banks Brothers Transport drivers will wear a Banks uniform

d) All Banks HGV’s will be fitted with mobile phones.

e) Banks fleet identification numbers will be clearly visible on both sides of the side of the cab (TV no.) and the rear of the trailer (TT no.).

f) All lorries will have an upward facing exhaust.

g) All HGV’s will be regularly serviced and maintained to VOSA standards.

h) Traffic signs to warn motorists about turning lorries and the presence of the site entrance will be in place as required by the Mineral Planning Authority.

i) HGV’s leaving the site will be weighed over the weighbridge to ensure that their vehicle is not overloaded.

j) All loaded HGV’s will be sheeted before leaving the site.

k) The times, number of arrivals and departures, the destination and weight limits of HGV’s will be recorded on site and managed to comply with the planning conditions. A maximum of 150 mineral laden wagons are permitted to leave the site per day.

l) All lorries will have clean wheels and undersides before leaving the site. The overall condition of lorries will also be clean.

m) All HGV’s will not be permitted to convoy, with a minimum separation distance between HGV’s from the site of 200 metres being maintained whilst on the haulage route to avoid convoys. This distance will be relatively greater than 200 metres during the majority of travel, with the 200 metres representing a minimum distance that will prevail in exceptional circumstances.
n) Loaded lorries of coal or fireclay shall only leave the site during the following times: 0700 to 1900 Monday – Friday and 0700 to 1300 on Saturdays.

Compliance monitoring

Environmental Audits will include checks on all the above areas to ensure compliance with these controls.

Relevant legislation

Planning Conditions are likely to include vehicle movement routes, limits on numbers of wagons and hours of transportation.

A number of the above measures are also likely to be conditions of the site’s Pollution Prevention and Control permit to process coal as this includes transporting coal.

The Road Vehicle (Construction and Use) Regulations 1986 (as amended) see ‘Diesel Emissions’ section for details.

The Highways Act 1980 requires a site operator to do such works as are necessary to prevent soil from being carried onto the street. If anything is deposited on a highway which is a public nuisance, The Highways Authority may, by way of a notice, require a person who deposited it there to remove it immediately.

12. Landscaping works

Objective twenty three – To Progressively restore the site to provide a landscape upon restoration which is attractive, accessible and diverse

Restoration will be designed to complement existing landscape and habitats found at Druridge Bay and the surrounding areas and is to include new habitats, areas of ecological interest and visitor facilities. Opportunities to progressively restore the site during operations have been maximised. Benefits are designed to be delivered alongside the site operations according to Banks’ ‘restoration first’ principles.

12.1 General

Landscaping and restoration works will be operated in accordance with an agreed programme.

A site specific Biodiversity Action Plan will be prepared to feed into, and shape the restoration proposals, enabling the large areas of progressive restoration to be beneficially managed for target species.

The provision of wildlife corridors and linking wetlands will enhance the ability of wildlife to move through the landscape.

ACTIONS

a) Following cessation of mineral extraction, overburden will be replaced to such levels so that, following the replacement of subsoil and topsoil, and allowing for any settlement, the contours of the restored land will conform with the approved restoration plan.

b) Grading and levelling will be conducted upon the final layer of overburden to minimise the risk of ponding or erosion.

c) The MPA will be given the opportunity, with reasonable notice, to inspect the surface prior to further restoration work being carried out.

d) During the whole restoration period, plans for the purpose of recording successive areas of overburden, subsoil and topsoil replacement approved by the MPA will be kept on site.

12.2 Tree and Hedgerow Translocation, Planting and Protection

Trees to be retained on or around the site boundary will have a post and wire fence installed around the root protection area. This area will be maintained free from all site machinery during the course of the development. The tree protection fencing will be implemented for each phase of the development prior to any works for that phase being carried out. The tree protection fencing will be inspected and maintained along with the site boundary fence.

ACTIONS

a) An assessment will be undertaken to determine which, if any, existing trees and hedgerows on the site are suitable for translocation.

b) New hedgerows will be planted to define any restored fields. Detailed specifications will be prepared and agreed with the MPA prior to each phase of restoration commencing.

c) The planting of trees, as shown on the restoration plan, will be completed by the end of March in any year, if this is not done then this shall be completed in the next available planting season (i.e. November – March) in subsequent years.

d) Existing hedgerows and trees to be retained on site will be marked on a plan and will be given sufficient stand-off. They will also be protected by fencing or
stakes with bunting or hazard tape and identified with warning signs.

12.3 Agriculture and Aftercare

Agricultural areas will initially be restored to grassland but as aftercare works are completed the land will be available for arable use. A statutory 5-year aftercare period will apply to the restored site apart from the woodland areas that will receive a further 5 years aftercare.

12.4 Wetlands

**ACTIONS**

a) Throughout restoration and aftercare periods, appropriate drainage works shall be carried out to prevent the flooding of land within or outside the site or the erosion of silting up of existing channels within or outside the site – except where restoration provides for wetland or open water features.

An example of a Wetland

An appropriate wetland management regime including managing the wetlands as closed reed beds will be agreed and implemented. This will include monitoring of bird species and numbers.

**Relevant legislation**


13. Soil management

**Objective twenty four - To manage soil in a responsible way that protects it for restoration of the site**

**ACTIONS**

a) Soils will only be stripped and replaced during dry weather when the ground conditions are suitable.

b) The site will follow a site specific Soil Handling Strategy detailing soil movements and storage, which will be submitted to the Mineral Planning Authority.

c) Where progressive restoration occurs, replaced soils will be graded, stone picked and protected from unnecessary vehicle movement.

d) All top soils, sub soils and overburden will be stored separately and there will be a record of the quantities and locations of soils stripped from different parts of the site.

e) Soil stripping and soils handling operations, including soil storage, will be carried out in accordance with the approved Soil Strategy unless a variation from that has been agreed in writing beforehand with the Mineral Planning Authority.

f) Prior to commencement of soil stripping, the approved site perimeter ditches, settlement lagoons and other drainage facilities appropriate to the area to be stripped, will be completed.

g) Soil stripping, in each calendar year, will not commence on any phase until any standing crop or excess vegetation has been removed, and the MPA has been given 2 working days’ notice, with such works only proceeding subject to their approval.

h) All available topsoil as identified by the Soil Strategy will be stripped from any areas to be excavated, or used for the stationing of plant and buildings, the storage of subsoil and overburden, haul roads and other areas to be traversed by heavy machinery.

i) No plant or vehicle will cross any areas of unstripped topsoil except for the purpose of stripping operations.

j) The MPA will be given the opportunity, with reasonable notice, to verify that the full depth of topsoil has been satisfactorily stripped, prior to the commencement of subsoil stripping.

k) The stripping and movement of topsoil and subsoil shall only be carried out under sufficiently dry and friable conditions to avoid soil smearing and compaction and to ensure that all available soil
resources are recovered. Appropriate methods of soil stripping shall be separately agreed with the MPA for any permanently wet or waterlogged areas of the site.

m) No topsoil or subsoil shall be removed from the site. Topsoil’s and subsoil, which are not being used for progressive restoration, shall be stored according to their quality in separate mounds which do not overlap, with further storage provided for soil making materials.

n) Minimum stand-off distance of 2.0 metres will be maintained between soil storage mounds and the site perimeter boundary and/or the edge of site drainage ditches.

o) Once formed, all mounds in which soils are to be stored for more than 6 months, or over the winter period, will be grass seeded in accordance with a specification agreed beforehand with the MPA, and managed to minimise erosion and weed infestation, with excess herbage removed immediately prior to soil replacement.

p) Within three months of the topsoil, subsoil and soil making material mounds, the MPA shall be supplied with a plan indicating of the areas stripped of such materials, the location of each mound and balancing the quantities of materials stored with the proposed depth and texture of the soil profile to be replaced following restoration.

Compliance monitoring

The above measures will be routinely checked through the environmental audit process.

Relevant legislation

The Highthorn planning conditions are likely to include soil management requirements.

14. Wildlife

Objective twenty five - To minimise any temporary or permanent effects on areas of ecological interest and to enhance the ecological value of the Highthorn site

All onsite works will be undertaken in strict compliance with the site specific Biodiversity Action Plan (BAP).

14.1 General

ACTIONS

a) In areas of advanced tree planting or progressive restoration, saplings will be checked annually to ensure they are healthy, weed free, supported by stakes where necessary, protected by guards or fencing to deter damage from rabbits, deer or livestock.

b) Any areas of progressive restoration will be backfilled to final level and graded.

c) Ecological mitigation measures will be established for any identified protected species.

d) Development shall take place in accordance with the ecological mitigation strategy.

e) All areas of the site, including all topsoil, subsoil, soil making material and overburden mounds, shall be kept free from agriculturally noxious weeds (as defined by the Injurious Weeds Act 1959). To be accomplished by cutting, grazing or spraying, as necessary, to control plant growth and prevent the build-up of a seed bank of agricultural weeds, or their dispersal onto adjoining land.

f) Prior to the commencement of any soil stripping on site a scheme for the protection of all trees and hedgerows to be retained within the proposed site shall be submitted to and agreed in writing by the MPA.

14.2 Ornithology

ACTIONS

a) Vegetation removal shall only be undertaken between 1st March and the 1st September, unless a suitably qualified person has first confirmed that no nesting birds, their eggs, nests or young will be harmed.

b) Soil stripping to be undertaken between 1st March and 31st August will be preceded by a checking survey for nesting birds. The results of this survey will be provided to the Minerals Planning Authority prior to soil stripping taking place and work shall only be undertaken in a manner that avoids harm to any identified nesting birds.
14.3 Compliance monitoring

Any ecological mitigation measures required at the Highthorn site will be included in an ecological monitoring programme to measure their success.

Environmental Audits will include checks on all the above areas to ensure compliance with these controls.

Relevant legislation

The Wildlife and Countryside Act 1981 (as amended) allows for the designation of National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSIs).

The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act 1981 by creating it an offence to damage SSSIs and places statutory duty on public bodies to further the conservation and enhancement of SSSIs. Plant and animal species that are protected are listed in the Schedules of the Act. This Act also gives local authorities a statutory duty to have regard for the conservation of biodiversity; most have as a result produced Local Biodiversity Action Plans.


Council Directive on the Conservation of Wild Birds (79/409/EEC) (Bird Directive) requires protection of migratory species by designating Special Protection Areas (SPAs) for areas associated with the species including their breeding and wintering areas.

Planning Policy Guidance 9: Nature Conservation (to be replaced by Planning Policy Statement 9) states that where there is risk of damage to a designated site, the planning authority should consider the use of conditions or planning obligations in the interest of nature conservation.

The Hedgerow Regulations 1997 prevent the removal of most countryside hedgerows without submitting a hedgerow removal notice to the local planning authority first. The Regulations also set out criteria used by the local planning authority to determine which hedgerows are important.

Injurious Weeds Act 1959

15. Archaeology

Objective twenty six - To identify and protect or investigate and record any issues of historical importance

ACTIONS

a) Excavation and recording will be carried out in areas identified as archaeological remains during the site investigation.

b) Any archaeological monitoring required during soil stripping will be carried out by a suitably qualified field archaeologist.

c) The programme of monitoring will be agreed in advance with the MPA, based on the findings of previous archaeological site investigations.

d) The monitoring will be reported by the supervising archaeologist following completion of soil stripping.

e) The findings will be reported to the MPA and to the liaison committee.

Relevant legislation

Planning Policy Guidance 16 'Archaeology and planning and Minerals planning applications' provides guidance on considering archaeological interests.

The Highthorn planning conditions are likely to require investigation, protection and reporting of archaeological issues.
16. Reviews of the environmental management plan

This environmental management plan will be formally reviewed annually during the life of the Highthorn site. This process should take no longer than one month and will be carried out on or around the anniversary of the site start.

The methodology of monitoring, reporting and rectifying any environmental concerns and the specific operational conditions (i.e. noise levels at properties) will be reviewed and altered, if a change is required to meet required levels of environmental acceptability.

A revised environmental management plan will be issued following the review process and at other appropriate times following any amendments or new relevant environmental legislation. The revised plan and the standards set out therein will be in force until to the next review.

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Third Draft – August 2015
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