## AGENDA MANAGEMENT SHEET

Name of Committee Regulatory Committee

Date of Committee 3rd April 2007

Report Title Southam Quarry – Development of a

Facility for the Disposal of By-Pass Dust

**Summary**The application proposes the use and preparation of

land for disposal of by-pass dust and associated operations at Southam Quarry, Long Itchington.

This application was deferred at 27th February 2007 meeting of the Regulatory Committee in order to allow the applicant the opportunity to address the concerns raised by Natural England. The applicants have subsequently submitted additional supporting information. Natural England have now confirmed that the additional supporting information satisfactorily addresses their concerns. Therefore, they no longer

For further information please contact

Matthew Williams Planning Officer Tel. 01926 412822

matthewwilliams@warwickshire.gov.uk

raise objection to the proposed development.

Would the recommended decision be contrary to the Budget and Policy Framework?

Yes/No

**Background Papers** Submitted application, received 3/10/2006.

Letter from Ove Arup & Partners Ltd, dated 3/1/2007.

Letter from Cemex UK Cement Limited, dated

18/12/2006.

Letter from British Waterways, dated 10/10/2006. Letter from Warwickshire Wildlife Trust, dated

12/10/2006.

Email from Stratford on Avon District Council Environmental Health Officer, dated 27/10/2006.

Email from Southam Town Council, dated 27/10/2006. Letter from South Warwickshire Primary Care Trust,

30/10/2006.

Letter from Stockton Parish Council, dated

30/10/2006.



## Background Papers (continued)

Email from the Health and Safety Executive, dated 20/11/2006.

Letter from Long Itchington Parish Council, 7/10/2006. Letter from Stratford on Avon District Council, dated 30/11/2006.

Letters from Rugby Borough Council dated, 14/11/2006 and 6/12/2006.

Letters from the Environment Agency, dated 15/12/2006 and 11/1/2007.

Email from Libraries Adult Learning and Culture, 20/12/2006.

Email from Natural England, 21/12/2006.

Emails from Rugby Borough Council Environmental Health Officer, dated 2/1/2007 and 11/1/2007. Emails from Stratford on Avon District Council Environmental Health Officer, dated 9/1/2007 and 11/1/2007.

Seven letters and emails of representation from local residents and District Councillor Nigel Rock.

CONSULTATION ALREADY UNDERTAKEN:- Details to be specified		
Other Committees		
Local Member(s) (With brief comments, if appropriate)		Councillor J Appleton – see comments in paragraph 2.6. Councillor B Stevens – no objection.
Other Elected Members		
Cabinet Member (Reports to The Cabinet, to be cleared with appropriate Cabinet Member)		
Chief Executive		
Legal	X	L Arben, I Marriott – agreed.
Finance		
Other Chief Officers		
District Councils		Stratford on Avon District Council – See comments at paragraph 2.1. Rugby Borough Council – See comments in paragraph 2.2.
Health Authority		



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Police	
Other Bodies/Individuals	Long Itchington Parish Council, Stockton Parish Council, Southam Town Council, Environment Agency, Libraries, Adult Learning and Culture, Natural England, British Waterways, Warwickshire Wildlife Trust, South Warwickshire Primary Care Trust, Health and Safety Executive – see paragraph 2.
FINAL DECISION	YES/NO (If 'No' complete Suggested Next Steps)
SUGGESTED NEXT STEPS :	Details to be specified
Further consideration by this Committee	
To Council	
To Cabinet	
To an O & S Committee	
To an Area Committee	
Further Consultation	



## Regulatory Committee – 3rd April 2007

# Southam Quarry – Development of a Facility for the Disposal of By-Pass Dust

## Report of the Strategic Director for Environment and Economy

## Recommendation

That the Regulatory Committee authorises the grant of planning permission for the use and preparation of land for disposal of by-pass dust and associated operations at Southam Quarry, Long Itchington, subject to the signing of a Section 106 Agreement covering vehicle routing and the conditions and for the reasons contained in **Appendix B** of the report of the Strategic Director for Environment and Economy.

Application No: S965/06CM028

Received by County: 3/10/2006

Advertised Date: 13/10/2006

Applicant: Cemex UK Cement Ltd, Rugby Cement Works, Lawford Road,

Rugby

Agent: Mr James Thomas Hammond, Ove Arup & Partners Ltd,

4 Pierhead Street, Capital Waterside, Cardiff, CF10 4QP

The Proposal: Use and preparation of land for disposal of by-pass dust and

associated operations.

Site & Location: 9.9 ha of land at Southam Quarry, Long Itchington,

Southam.[Grid ref: 281.649].

See plan in **Appendix A.** 

## 1. Application Details

1.1 This application seeks permission for the development of a new landfill at Southam Quarry to provide a long term facility for the disposal of cement kiln by-pass dust (BPD). BPD is a production waste derived from the manufacture of cement at the applicants Rugby Cement Works.



- 1.2 The 9.9 hectare application site occupies part of the void created by previous mineral extraction. The landfill would have a capacity of 340,000m<sup>3</sup> providing void space sufficient for 25 years at present tipping rates.
- 1.3 The landfill would be a fully engineered facility. The site would be lined with clay derived from the Quarry. Once operational BPD would be tipped in 1 metre layers to a depth of approximately 7.5 metres. Landfilling operations would take place in a series of four phases/cells.
- 1.4 Prior to transportation BPD undergoes a process known as 'nodualisation' whereby the material is formed into granules by mixing with water in a special facility at the Rugby Works.
- 1.5 The current rate of landfilling generates up to nine loads of BPD per day. However, this number is variable and is forecast to decline gradually over the lifetime of the site as recycling methods for BPD improve. Vehicles used to transport the BPD are lorries that transport clay between Southam Quarry and the Rugby Works that would otherwise make the return journey empty. Vehicles are sheeted.
- 1.6 Access to the site would be via the existing Southam Quarry (former Cement Works Access) off A423 Southam Road. A concrete access road would be provided from the existing access road to the landfill.
- 1.7 Upon completion of landfilling within each cell the surface would be capped with 0.5 metres of clay derived from the Quarry and a polyethylene (plastic) membrane. Soils would then be placed on the capped areas and largely allowed to regenerate naturally. Seed will be harvested from species rich semi-improved grassland elsewhere within the Quarry and used to encourage suitable habitats for invertebrates.

## 2. Consultations

- 2.1 **Stratford on Avon District Council** no objection to the proposed development. However, the concerns of District Councillor Nigel Rock are highlighted together with his request that should the County Planning Authority be minded to grant permission, consideration is given to control and/or monitor emissions. The Environmental Health Officer has no objection in principle to the development. However, recommends that any planning permission granted be made subject to conditions requiring that dust deposition be monitored on an ongoing basis on and off the site.
- 2.2 Rugby Borough Council (RBC) comment that whilst they would have preferred for more detailed air quality monitoring and assessment to have been completed before the planning permission is granted, RBC does accept that the relative risk from approval is low and, therefore, approval with conditions is acceptable.
- 2.3 **Southam Town Council** no objection, but clarification is needed for 'associated operations' and also the contents of dust.

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- 2.4 **Stockton Parish Council** has come to the conclusion that this is essentially an extension of an operation that has and is being carried out, and therefore the Parish Council has no further comments on the matter.
- 2.5 **Long Itchington Parish Council** a number of Councillors have visited the above site on several occasions and have had the process explained to them in some detail. The Council understands that the material is inert and non-toxic and that the exercise will not release any dust into the surrounding atmosphere. Furthermore, sensors surround the site and the results are monitored and reported to the Environment Agency. Finally, Cement Kiln Dust (CKD) will be brought onto the site in clay lorries (which would otherwise be empty) returning from the Rugby site- in other words, there will be no increase in traffic on or off the site as a result of this process. Within the limits of this knowledge and the information provided, therefore, the Council has no objections to this application.
- 2.6 Councillor J Appleton no objection to the continuation of by-pass dust disposal in nodularised form at Southam Quarry as long as the environmental controls applicable at the time are satisfied. I would feel more comfortable with a time limit which linked the use of the site for this purpose to extraction proposals and the needs of the Cemex Works at Rugby. Granting disposal rights in perpetuity seems both unnecessary and unwise. Any permission granted should be limited to BPD only preventing the disposal of other hazardous wastes in the future.
- 2.7 **Councillor B Stevens –** no objection.
- 2.8 **Environment Agency (EA)** no objection to the proposed development, as submitted, but comments:-

The proposed development will allow an increase in capacity for the landfill at Southam Quarry. The main fill materials for the quarry will be nodulised by-pass dust from the Cemex Cement Factory at Rugby.

The EA regulate the cement factory under the Integrated Pollution Prevention Control (IPPC) permit. This permit requires the factory to be operated using the Best Available Technology. The production of the by-pass dust must therefore also comply with Best Available Technology. In essence this means it must be produced in a manner which results in the best environmental outcomes possible.

The proposed development will be subject to the requirements of the Pollution Prevention Control (PPC) Regulations 2000, and the technical provisions of the Landfill Regulations 2002. To this end, a PPC permit application has recently been submitted to the Environment Agency Strategic Permitting Team for determination. A permit will only be granted when the Environment Agency is satisfied that all these regulatory provisions are met.

The proposed development is located on a Minor Aquifer and reasonably close to water bodies. The proposed development is in a relatively low risk



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- hydrological setting and the landfill would be engineered for stability and the containment of leachate.
- 2.9 **South Warwickshire Primary Care Trust** as long as the installation complies with domestic and European legislation, and is operated in accordance with current controls, the extension should not produce any significant changes in noise or air quality affecting people in the vicinity of the site.
- 2.10 **Health and Safety Executive** have not identified any potential conflict with health and safety legislation and does not wish to make any comment in respect of the application.
- 2.11 **British Waterways** no comment to make.
- 2.12 Warwickshire Wildlife Trust although the Trust is concerned that habitat of county value will inevitably be destroyed by the proposed operations, no objection is made to the planning application on the understanding that mitigation measures outlined within the Environmental Statement will be fully implemented.
- 2.13 Libraries, Adult Learning and Culture no comments received.
- 2.14 **Natural England** no objection, subject to the imposition of a condition requiring mitigation measures in respect of Great Crested Newts to be undertaken in accordance with the agreed method statement.

## 3. Representations

- 3.1 Seven letters and emails of representation have been received from local residents and District Councillor Nigel Rock.
- 3.2 Residents objections include:-
  - (i) Increased dust one family indicate that increased dust levels would have a particularly adverse impact on their children who suffer from eczema; prevailing wind would result in any dust to be deposited on Stockton Village; one resident considers that dust not always nodualised adequately resulting in dust emissions from site.
  - (ii) Increased noise.
  - (iii) Higher level of vehicle numbers in the immediate area which are already considered to be at an unacceptable level from Cemex alone.
  - (iv) Adverse impact upon agreed restoration of the site for nature conservation/ecological value how would a nature reserve be possible once the hole is full of dust, materials and other pollutants?
  - (v) Water contamination the material is alkaline and therefore unless it is suitably treated is harmful to water sources. For this reason it is understood that the dust cannot be deposited in the old disused quarries

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in Rugby, adjacent to the new cement works. As the geology of Rugby and Southam is very similar there can be no technical reason why the dust cannot be deposited and treated in Rugby. This would also save haulage costs and damage to the counties roads by yet more fully laden HGV's.

- (vi) Cynics would say that Cemex feel that they would get less problems from a small village community compared to a more vocal large town.
- (vii) Is the application retrospective?
- 3.3 District Councillor Rock comments that, the site for the disposal of CKD lies up wind from my Ward, so there may be significant concern for Stockton, even though it is accepted that housing is some distance away. It is further accepted that the material solidifies after a time, but how does the actual deposition of dust in the proposed process avoid whirling away? There has been observed loss of material during transportation, how can this be avoided? Why is transport from Rugby preferred to deposition at the source site? The repository is somewhat nearer to Stockton and less deep in the Quarry than before. Does the measurement by Frisbee accurately reflect the emission of by-pass dust rather than the clay which they are positioned to measure? He points out that clay is an inert substance and the threat there is PM10 – in the case of CKD/BPD, this of itself is a hazardous material due to its alkaline nature. The Frisbee measures an average over time and would not detect a short term excursion of emissions of particulates of all types. In assessing the application, Officers should consider what monitoring can be put in place to control failure of any control as well as provide a history. Without such controls the application is not acceptable.

## 4. Observations

## **Site History**

- 4.1 The application site occupies part of the void created by past mineral extraction at Southam Quarry. Limestone and clay has been extracted at Southam since the early 1800's. This was initially used for the production of agricultural lime and then from the 1840's for the production of Portland Cement. Southam Cement Works was established on site around this time and continued production until its closure in 1999. In more recent years the Quarry provided limestone and clay for both the Southam and Rugby Cement Works. The site continues to be a source of limestone and clay to the Rugby Works. Mineral extraction is currently taking place within the northward/Spiers Farm extension which was granted planning permission in 2005. Mineral extraction is also permitted on land known as Griffins Farm which is located to the south of the A426 Rugby Road/application site. Approximately 30+ years of permitted mineral reserves remain at Southam Quarry.
- 4.2 Landfilling of production waste arising from the former Southam Cement Works is known to have taken place at Southam Quarry since the 1960's. Since 2001 BPD arising from the Rugby Cement Works has been deposited in an engineered clay cell at Southam Quarry. This has taken place under the

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provisions of a series of temporary planning permissions. The temporary planning permission was most recently renewed at 23rd January 2007 meeting of the Regulatory Committee. Permission was granted to allow the existing temporary facility to remain in operation until 31st December 2007 whilst this current application is determined, An application for a Pollution Prevention Control (PPC) Permit is made to the Environment Agency and, subject to permission being granted for both, the facility is engineered prior to accepting waste.

## Site and Surroundings

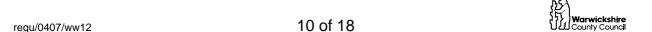
- 4.3 The application site is located within the void created by previous mineral workings at Southam Quarry. The 10 hectare site occupies a relatively shallow part of the void lying between the active workings to the north-east (Spiers Farm) and a deeper worked out area to the south west.
- 4.4 The south-eastern boundary of the application site immediately abuts the A426 Rugby Road beyond which lies agricultural land which has planning permission for future mineral extraction (Griffins Farm). The site is adjoined on all other boundaries by land that has been subject to previous and current mineral working.
- 4.5 The former cement works is situated to the north of the application site. The existing BPD disposal cell is located to the west of the application site on the western side of the quarry void adjacent to the A423 Southam Road.
- 4.6 The perimeter of the quarry void is demarcated by a wooded fringe which restricts views into the site. A block of woodland lies between the application site and the former cement works.
- 4.7 The application site itself has been subject to the extraction of limestone and clay and the tipping of overburden/spoils from elsewhere within the Quarry over the past 50-60 years. This has resulted in a somewhat irregular landform, very much appearing as a disturbed landscape. The site has been naturally colonised by grasses and scrub and contains areas of wetland and standing water. The base of the site lies above that of the adjacent larger deeper void.
- 4.8 A number of sporadic isolated properties and farms are located around the application site. The nearest, Griffins Farm, is located approximately 100 metres to the south. The settlements of Southam, Stockton, Long Itchington and Model Village effectively surround the Quarry and application site. The closest, Southam, is located 500 metres to the south-west of the application site. Model Village is located opposite the entrance to the former Cement Works which would also be used to gain access to the application site.

#### **Policy**

4.9 The West Midlands Regional Spatial Strategy seeks to encourage and promote waste reduction and the reuse of materials and products. Policy WD1 (Targets for Waste Management in the Region) seeks to reduce the proportion of industrial and commercial waste which is disposed of to landfill to at the most

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- 85% of 1998 levels by 2005. Policy WD3 (Criteria for the Location of Waste Management Facilities) seeks to restrict the granting of planning permission for new sites for landfill to proposals which are necessary to restore despoiled or degraded land, including mineral workings, or which are necessary to meet specific local circumstances.
- 4.10 Policy GD.1 of the Warwickshire Structure Plan 1996-2011 strives for, amongst other things, a pattern of development which nurtures Warwickshire's legacy of distinctive towns and villages, countryside, environmental wealth and heritage which continue to make it an attractive place in which to live work and visit. Policy GD.2 promotes waste recycling to reduce waste imports as well as locally generated waste which has currently to go to landfill. Policy ER.9 seeks a reduction in waste going to landfill in line with the Government's national policy.
- 4.11 Policy CTY.1 (Control over Development) of the Stratford on Avon District Local Plan Review 1996-2011 states that, all forms of development in the countryside, other than those in accordance with provisions elsewhere in the Local Plan, will generally be resisted in order to preserve its character and to ensure that resources are protected. Proposals for forms of development and activity in the countryside that are not covered elsewhere in the Plan will have to be fully justified and show that they would not be contrary to the overall strategy of the plan and that their impact on the character of the area would not be harmful.
- 4.12 Policy PR.1 (Landscape and Settlement Character) of the Stratford on Avon District Local Plan Review 1996-2011 states that all development should respect and, where possible, enhance the quality and character of the area. Proposals that would damage or destroy features which contribute to the distinctiveness of the local area will not be permitted unless significant public benefit would arise from the scheme.
- 4.13 Policy PR.8 (Pollution Control) states, that planning permission will not be granted for development which would give rise to air, noise, light and water pollution or soil contamination where the level of discharges or emissions is significant enough to cause harm to other land uses, health or the natural environment. The effectiveness of proposed mitigation measures will be fully taken into account.
- 4.14 The former Southam Cement Works Site is identified in the Stratford on Avon Local Plan as suitable for light and general industrial, leisure, tourism and recreation uses. The policy seeks a Masterplan to be prepared in conjunction with the owners of the site, local communities and other interested parties before the site is redeveloped.
- 4.15 Specific policies relating to waste management are found within the Waste Local Plan for Warwickshire. Policy 3 of the Waste Local Plan states that proposals for landfill will be approved where it would, amongst other things, provide replacement landfill capacity which if not met could have a serious effect on the environment and transport across the County or would secure restoration of a mineral working.



- 4.16 Policy 1 of the Waste Local Plan sets out the general environmental considerations against which all waste related proposals must accord. The policy makes it clear that permission will not be given where the proposal would have: a significant adverse visual impact taking account of the landscape context; a significant adverse impact by reason of odour, noise and dust; and, give rise to traffic that would adversely affect highway safety. The policy also states that the extent to which the proposal satisfies the proximity principle will be taken into consideration.
- 4.17 Mineral Planning Guidance Note 10: Provision of Raw Material for the Cement Industry states that, the cement industry is of major importance to the national economy as it supplies an essential product to the construction and civil engineering industries. However, Government recognises that cement production can have a significant environmental impact. The Guidance therefore recognises that the encouragement of cement production must therefore be balanced against important environmental and conservation interests.

## Classification of BPD

- 4.18 Concerns have been raised in the past regarding potential adverse impacts to health that the transport to and deposit of BPD at Southam Quarry may have. Whilst almost inert, the chemical properties of BPD derived from the Rugby Works result in it being classified as hazardous waste. In considering a previous application to amend the end date of the temporary planning permission the Regulatory Committee required the applicant to commission an independent study of the impacts and hazards associated with the development. The study and subsequent report, 'Nuisance and Human Health Risk Assessment – Southam Landfill', concluded that due to the low rate of use of the landfill, the design of the landfill and mitigation measures implemented at the site the landfilling of CKD poses only low risk of impact on potentially sensitive receptors in the vicinity of the landfill. The Environmental Health Department at Stratford on Avon District Council, the Environment Agency and South Warwickshire Primary Care Trust all broadly agreed with the findings of the report.
- 4.19 By-Pass Dust (BPD) has in the past also been referred to as Cement Kiln Dust (CKD). The terms BPD and CKD technically refer to waste materials derived from slightly different stages of the production process. The materials have slightly different properties, BPD having more free lime which results in the hazardous classification. However, in reality one or other term is used by different parties to refer to the production waste dust as a whole.

## **Pollution Prevention and Control (PPC) Permit**

4.20 Subject to securing planning permission for the deposit of BPD at Southam Quarry the operation would also need consent under the Pollution Prevention and Control (England and Wales) Regulations 2000. The Regulations set out the pollution control regime for potentially polluting activities. The applicant has submitted an application to the Environment Agency for a Pollution Prevention and Control (PPC) Permit in respect of the proposed operations. Before

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securing a Permit the applicant will need to show that: the proposals represent Best Available Techniques (BAT) to prevent and minimise pollution from the landfill operation; and that, no significant pollution would be caused. Any permit granted would contain conditions to regulate the day to day management of the site with the aim of minimising the effect of the operation on the environment. It would also contain conditions regulating site management and monitoring after the landfill operations are completed.

#### **Alternatives**

- 4.21 The planning application details the alternatives considered by the applicants to the current proposal to landfill BPD at Southam Quarry. This includes:recycling and minimisation of BPD, disposal to merchant landfill, disposal to other locations and alternative sites at Southam Quarry.
- 4.22 Although there are uses for some BPD, for example as an alternative to lime in soil stabilisation and for the stabilisation and solidification of waste, in the case of BPD from Rugby Cement Works the options are limited due to its classification as hazardous waste. Where chemically suitable, BPD is reused within the cement making process through the employment of dust recirculation systems which are now becoming common place in cement kilns. Until technology enables virtually all BPD to be re-used or recycled there will continue to be a need for landfill as a disposal option.
- 4.23 The applicant has investigated the availability of open market landfill facilities that could accept BPD. The nearest was found to be in Peterborough, approximately 60 miles away. The applicant states that transportation of waste over this distance is uneconomic and has attendant environmental disbenefits related to the associated vehicle trips. Therefore this option was discarded.
- 4.24 Historically, cement kiln dust from the Rugby Cement Works was landfilled at Parkfield Road Quarry, which is situated adjacent to the Rugby Works. The Parkfield Road facility did not meet modern landfill design requirements. In 2001 planning permission was granted to allow BPD to be deposited at Southam Quarry, which has an engineered landfill cell, on a temporary basis. The applicants original intention was to recommence the landfilling of BPD at Parkfield Road Quarry. However, following refusal of an application for a Pollution Prevention and Control (PPC) Permit at Parkfield Road Quarry by the Environment Agency a strategic review was undertaken to assess the merits of potential available sites for long term landfill of BPD. The sites considered were, Southam Quarry, Parkfield Road Quarry and Lodge Farm Quarry, which also adjoins the Rugby Works. Following careful consideration of the relative impacts of development at each site, including site specific conditions such as; proximity to people, effects on air, ground and surface water, etc the decision was taken to pursue a proposal at Southam Quarry.
- 4.25 Upon concluding that the continuation of landfilling BPD at Southam Quarry was likely to have least impact on people and the environment than at the other sites assessed the applicant considered the most appropriate location for further tipping within the Quarry itself. The current application site was identified by the applicant as the most suitable location for the following reasons: the quarry floor

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in this area is above the maximum predicted water level following the cessation of water pumping on site; a substantial thickness of low permeability clay remains in-situ to provide protection to the underlying minor aquifer; the site holds the least geological interest within the quarry void; and, is farthest away from residential areas.

## **Environment and Amenity**

## **Visual Impact**

4.26 Southam Quarry is a large site where the immediate landscape has been substantially altered by mineral workings. Whilst the former cement works is particularly prominent in the landscape the mineral workings are substantially screened from view by vegetation. The perimeter of the quarry void, particularly where it adjoins the public highway, is demarcated by a wooded fringe which restricts views into the site from the highway. The existing temporary BPD landfill facility is largely screened from view and can only be glimpsed fleetingly from the highway. This is particularly so during the winter months. The proposed development would similarly be substantially screened from view with only limited visual impact. Upon restoration the landfill would appear as a greened up vegetated ridge. Although, views of the site from public vantage points would remain restricted. It is therefore considered that the proposed development would have only a limited visual impact during the operational phase and post restoration.

#### Noise

4.27 The operation of plant and machinery involved in the engineering of the landfill facility, movement of HGV's accessing the site to tip BPD and operation of plant to spread and compact deposited material has the potential to create adverse noise impacts. However, these activities would be identical to the existing BPD disposal operations that have taken place on site for a number of years without giving rise to noise complaint. In addition quarrying operations, involving a greater intensity of activity, also take place on site and will continue for many years with or without this development. A noise assessment undertaken in support of this application has identified that noise levels would be within those outlined in Minerals Policy Statement 2 – Controlling and Mitigating the Environmental Effects of Minerals Extraction in England and accordingly the development would result in negligible noise impact. The Environmental Health Officer at Stratford on Avon District Council has been consulted and has raised no objection on noise grounds.

## **Air Quality**

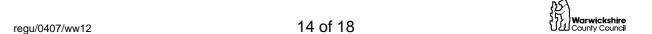
4.28 The transport, handling and deposit of BPD has the potential to create dust/particulate matter impacts. In order to minimise the potential of dust becoming a cause for concern/complaint the BPD under goes a process known as 'nodulisation' before leaving the Rugby Works. Nodulisation involves the addition of water to the dust which causes it to form into granules which harden like cement. The granules are much less susceptible to being broken up and dispersed than the untreated dust. BPD is transported in vehicles fitted with

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automatically operated covers. Before leaving the Rugby Works vehicles go through a wheel wash facility and are inspected before joining the public highway. In addition, an emergency response plan is in place that sets out procedure in the event that there were to be a spillage of BPD on the public highway. At the application site access roads would be swept and water sprayed to reduce dust emissions. Following the deposit of CKD, the working area would be sprayed with water or leachate to minimise the possibility of dust becoming a problem.

- 4.29 Monitoring of dust emissions arising from the existing operations, including mineral extraction and deposit of BPD, undertaken at the Quarry identify that dust emissions are very low and typical of a rural area. An assessment of dust emissions likely to arise from the proposed development submitted with the application shows that BPD deposition would have minimal impact on the local environment with no discernable dust impact.
- 4.30 The Environmental Health Officer (EHO) at Rugby Borough Council raised initial concerns with the proposed development in respect of: dust and the potential health effects of BPD (especially fine particles –PM<sub>2.5</sub> and PM<sub>10</sub>); general air pollution such as nitrogen dioxide/delivery vehicle emissions and its impact upon the Council's Air Quality Management Area, and, noise emissions associated with vehicle movements. Whilst the proposed landfill facility is located outside of Rugby Borough the EHO's concerns relate to impacts associated with the transport of BPD on the highway network through the Borough from the Rugby Cement Works.
- 4.31 In response to the Borough's concerns the applicant submitted further supporting information. This states that there has only been one known complaint of dust release since 2001. This was identified as being steam rising from the vehicle, rather than dust, which results from BPD being transported whilst still warm. The further supporting information also indicates that with the procedures in place, including 'nodualisation' of BPD and sheeting of vehicles, the risk of dust release from lorries is likely to be very small indeed. It is also emphasised that vehicles transporting BPD would not be additional trips on the highway as these vehicles would otherwise be returning to Southam empty. Therefore there would be no increase in emissions or impact on air quality. The EHO is generally satisfied with these findings. However, he would wish to see conditions imposed on any planning permission granted requiring air quality monitoring to be undertaken both at the application site and along routes used by vehicles transporting BPD. Suitably worded conditions are suggested.
- 4.32 The Environmental Health Officer at Stratford on Avon District Council has raised no objection in principle to the development. However, he has recommended that any planning permission granted is subject to conditions requiring that dust deposition be monitored on an ongoing basis on and off the site. Suitably worded conditions are suggested.



## Groundwater

- 4.33 BPD is designated as a hazardous waste. BPD does not in itself generate leachate. However, following the deposit of BPD within the landfill, the infiltration of rain will produce a leachate containing soluble components of BPD and suspended solids. The release of leachates into the environment is potentially hazardous. If not properly controlled, leachate can have an adverse impact on the quality of groundwater and surface water.
- 4.34 The application site is located in an area where the geology is of low permeability resulting in it being a relatively low risk hydrological setting. During the operational stage of the landfill the site will be filled and capped in a phased manner in order to limit the creation of leachate. The landfill has been designed as an engineered facility to contain any leachate generated. Leachate would drain into a leachate storage lagoon from where it would be transferred off site for treatment. As each landfill cell is completed it would be capped with a clay and polyethylene (plastic) membrane which should create an impervious seal preventing the ingress of surface water and generation of leachate.
- 4.35 Groundwater levels and groundwater quality would be monitored in boreholes around the perimeter of the site until it can be shown that the facility would not have any significant environmental impact. A Groundwater Action Plan prepared for the development proposed specifies the actions that would be taken to mitigate any adverse impacts. The Environment Agency have raised no concern in respect of impact upon groundwater.

## **Surface Water Features and Hydrology**

4.36 Landfill operations can result in increased runoff from raised landforms, a reduction in groundwater recharge and pollution of groundwater and near-surface runoff by leachates. Surface water would be managed to prevent it from entering the deposited waste. Surface waters arising during the operations phase of development and post restoration would be directed to the Quarry lake elsewhere within the site. Therefore, the development would not result in any adverse impact associated with runoff from the site. The Environment Agency have been consulted and are satisfied with the measures proposed to maintain the integrity of surface water resources.

## **Ecology**

4.37 The application site occupies part of the void created by previous mineral workings and therefore has undergone substantial despoilment. However, the site has lain largely undisturbed for a long period enabling natural regeneration and colonisation of the site. The lime-rich clay found at the site has allowed calcareous grassland, important to various plant, bee, wasp, butterfly and moth species, to establish on site. A reedbed which has colonised a pool within the application site supports a number of species of birds and moth and provides breeding habitat for Great Crested Newt, Smooth Newt, Common Frog and Common Toad.



- 4.38 The proposed development would result in the loss of the calcareous grassland reedbed and associated standing water from the application site. The landfilling operations would result in the permanent loss of a Great Crested Newt Breeding site. Construction of the site access road and landfill would also result in the permanent loss of habitats that support various species of flies, bees, wasps, beetles, butterflies and moths.
- 4.39 In order to minimise the adverse impacts the development would have on the ecology of the site the application proposes a series of measures in mitigation. Upon completion of landfilling in each phase the capped landform would be covered with a calcareous substrate, that had been scraped off the site prior to the deposit of BPD. This would encourage natural colonisation from adjoining habitat. Reedbeds would be translocated elsewhere within the Quarry void. New breeding ponds for Great Crested Newts would be created elsewhere within the Quarry site and the newts relocated under licence obtained from the Department of Environment, Food and Rural Affairs (Defra) prior to works commencing. The applicants have submitted detailed proposals for the creation of new breeding habitats for great crested newts to mitigate for the loss of existing habitat. Natural England have been consulted on this matter and are satisfied with the proposed mitigation measures. Post restoration the vegetation that would naturally re-colonise the site would be maintained in a favourable condition to provide suitable habitat for flies, bees, wasps, beetles, butterflies and moths.
- 4.40 The proposed development would result in the short-term loss of calcareous habitat within the site during site preparation and landfilling operations. However, the restored landform would be recapped with materials that would encourage the re-colonisation of the site which through management in the long-term would increase calcareous grassland providing adequate habitat for notable insect species. Translocation of the Great Crested Newt population and their breeding ground would enable the species to be maintained at a favourable conservation status.

## Geology

4.41 Southam Quarry is identified as a Regionally Important Geological Site because of its classic alternate sequence of limestones and shales from the Jurassic and Triassic periods. The most significant faces of particular interest are situated along the south-western edge of the Quarry outside of the current application site. Whilst, the landfilling operations would result in the loss of geological faces exposed by previous mineral extraction, they are considered to be of lesser importance than other faces elsewhere within the Quarry that would remain undisturbed.

#### **Access and Traffic**

4.42 Vehicle movements associated with the transport of BPD from the Rugby Works to the existing landfill facility at Southam Quarry are controlled by a formal routing agreement fixed under the provisions of a Section 106 Agreement. Vehicles travel to Southam along the A426 via Dunchurch and return to Rugby on the A423 and B4453 or B4455 via Princethorpe. BPD is transferred between

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the two sites as return loads in vehicles that transport clay between Southam Quarry and the Rugby Works. The vehicles would otherwise be making the trip empty. The movement of BPD amounts to around nine loads per day compared with approximately 70 loads per day arising from the transport of clay. The applicant proposes to continue using the existing vehicle routing to transport BPD from the Rugby Cement Works to Southam Quarry.

- 4.43 The transfer of leachate off site for treatment and disposal would generate a maximum of 3 tanker loads per week.
- 4.44 Access to the landfill would be via the existing access off the A423 Southam Road into the former Cement Works. This access is currently used by vehicles accessing the Quarry and existing BPD landfill. The proposed development would result in no greater use of the access than existing operations undertaken on the site.
- 4.45 The transport of BPD between Rugby and Southam would not generate any additional vehicle movements. These lorries would otherwise be making the return trip to Southam empty to collect a load of clay. The transport of BPD between the two sites would therefore result in no greater impact, including noise, than existing operations at the Quarry. However, it would be appropriate to continue to control vehicle routing via a Section 106 Agreement.

#### Restoration

- 4.46 When planning permission was granted in 2005 to extend Southam Quarry the applicant was required to produce a restoration master plan for previously worked areas of the site. This includes the current application site. The restoration scheme for the proposed landfill has been designed to replicate and enhance existing habitats. It is therefore considered that the proposed restoration would compliment the overall restoration master plan for the site as a whole.
- 4.47 Councillor Appleton has suggested that any planning permission granted should be time limited. However, waste inputs to the site would be restricted to BPD arising from the Rugby Cement Works and inputs to the site would be restricted to the void created by the approved restoration landform. It is therefore considered that it would not be necessary to time limit any planning permission granted.

## Conclusion

4.48 Southam Quarry has been used for the disposal of BPD for a number of years with little disturbance or adverse impacts. The enclosed remote nature of the Quarry, relatively low level of inputs to the facility and no increase in vehicle movements to the site overall, results in activities having minimal impact upon the residential amenity of nearby residents. The proposed landfill operations, as with the existing BPD disposal, would be well screened resulting in the development having little impact on the landscape during the operational phase. Upon completion of landfilling operations the site would be restored to



- complement the overall restoration Master Plan for the Quarry which seeks to enhance the ecological value of the site.
- 4.49 The existing and proposed landfill provides a facility for the disposal of a specific waste stream arising as a by-product of the manufacture of cement at the Rugby Cement Works. The application identifies that alternative active landfill facilities suitable for the disposal of BPD are limited in number and distant from Rugby. In addition, alternative sites in the immediate vicinity that may be suitable for the disposal of BPD are similarly restricted. Thus resulting in the applicant pursuing the current application site. Whilst, steps are being taken to increase recycling and minimise waste, there is a continued need for landfill facilities to be provided for the disposal of BPD. It is considered that the proposed development represents the most sustainable and environmentally acceptable means of disposing of this waste product.
- 4.50 Subject to the imposition of suitably worded conditions to control operations on site, it considered that the proposed development accords with the policies of the Development Plan set out in paragraphs 6.9 to 6.17 above.

## 5. Environmental Implications

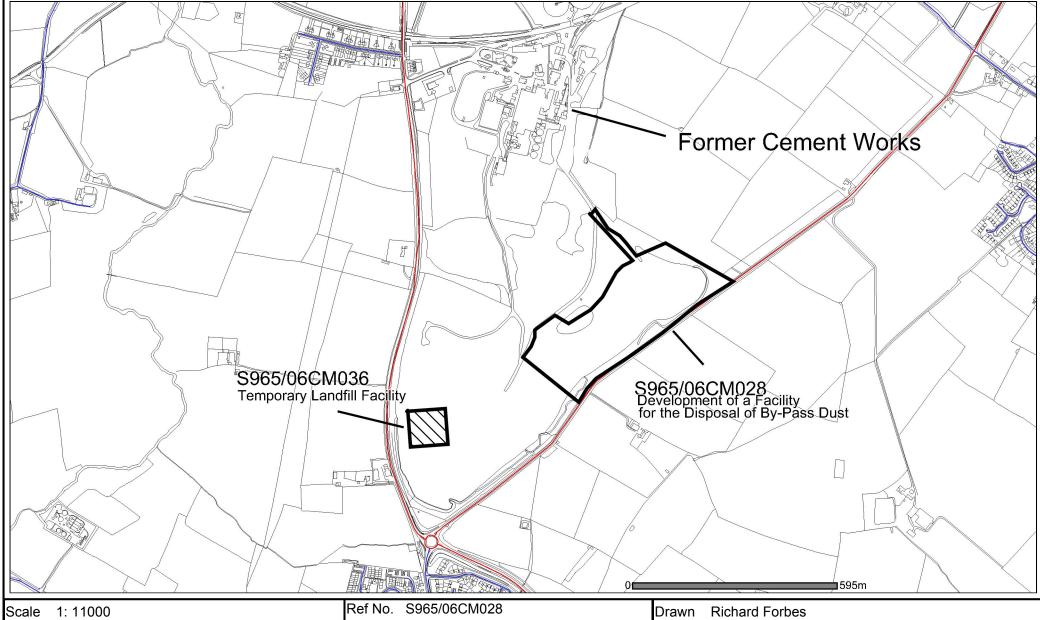
5.1 The development of a permanent facility at Southam Quarry for the deposit of BPD would have no greater impact on the environment than the existing BPD disposal operations undertaken on site.

JOHN DEEGAN Strategic Director for Environment and Economy Shire Hall Warwick

19th March 2007



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Regulatory Committee - 3 April 2007

Subject

**Southam Quarry - Facility for the disposal of By-Pass Dust** 

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John Deegan Strategic Director for Environment and Economy Shire Hall, Warwick, CV34 4SX

## Regulatory Committee – 3rd April 2007

## Southam Quarry – Development of a Facility for the Disposal of By-Pass Dust

Application No: S965/06CM028

## **Commencement Date**

1. The development hereby permitted shall be commenced no later than 3 years from the date of this permission.

**Reason:** To comply with the provisions of Section 51 of the Planning and

Compulsory Purchase Act 2004.

## **Pre-Commencement**

2. The development hereby permitted shall not be commenced unless and until a detailed air quality monitoring scheme has been submitted to, approved in writing by the County Planning Authority and fully implemented in accordance with that approval. The scheme, designed to monitor respirable dust (PM10) and nuisance dust on site, off-site and in transit, shall include details of monitoring equipment to be used, monitoring locations, frequency of monitoring and record keeping.

**Reason:** To protect the amenity and the health of those who may be

exposed to dust from the permitted development.

## **General Operations**

3. Unless otherwise agreed in writing the development hereby permitted shall not be carried out other than in accordance with the submitted application ref. S965/06CM028 submitted plans ref: Planning Fig 01 P1, Figure 02 P1, Figure 03 P1, Figure 04 P1, Figure 05 P1, Figure 07 P1, Figure 08 P1, Figure 09 P1, Figure 10 P1, Figure 11 P1, Figure 12 P1 and in accordance with any details or samples approved in accordance with these conditions.

**Reason:** To ensure development is carried out in accordance with the

planning permission hereby granted.

4. No development shall take place that would affect Great Crested Newt habitat until mitigation work has been completed in accordance with that detailed in 'Method Statement for the Creation of Great Crested Newt Ponds' dated March 1997.

**Reason:** To ensure the continuation of habitat and secure the protection of

the Great Crested Newt community.



5. Unless otherwise agreed in writing with the County Planning Authority noise from the development and associated operations hereby approved, but excluding vehicle noise generated beyond the boundary of the development site, when measured at a height of 1.5m and a minimum distance of 3.5m from any noise sensitive properties, shall not exceed the following levels:-

0700-1900 50 dB Laeq (1 hour) 1900-2200 47 dB Laeq (1 hour) 2200-0700 37 dB Laeq (5 minutes)	Time Period	Noise Limit
	1900-2200	47 dB Laeq (1 hour)

**Reason:** To protect residential amenity.

6. No waste other than Cement Kiln By-Past Dust arising from the Rugby Cement Works, Lawford Road, Rugby, shall be imported to the site.

**Reason:** This permission is only granted in recognition of the need for the

facility demonstrated by the operation of the Rugby Cement

Works.

## **Access and Protection of the Public Highway**

7. No access shall be used by vehicles entering and leaving the site for purposes connected with the development hereby approved except from the existing access onto A423 Southam Road.

**Reason:** In the interests of highway safety and residential amenity.

8. The site access shall be maintained in a good state of repair and kept clean and free of mud and other deleterious material at all times.

**Reason:** In the interests of highway safety.

9. No mud or deleterious material shall be deposited on the public highway. In the event that material is inadvertently deposited it shall be removed immediately.

**Reason:** In the interests of highway safety.

10. The wheel wash which is installed at the site shall be maintained in a clean and functional condition at all times and shall be used as necessary by all lorries leaving the site.

**Reason:** In the interests of highway safety and to protect the amenity and

health of those who may be exposed to dust from vehicle

movements.



11. No loaded lorries shall enter or leave the site unless they are sheeted or the load is otherwise adequately secured.

**Reason:** In the interests of highway safety and to protect the amenity and

health of those who may be exposed to dust from vehicle

movements.

#### **Restoration Conditions**

12. Within 6 months of the date of this permission a detailed phased restoration scheme shall be submitted to and approved in writing by the County Planning Authority. Such a scheme shall include details of habitat creation. Following approval the scheme shall be implemented accordingly.

**Reason:** To ensure satisfactory restoration of the site.

13. Site restoration levels shall be in accordance with plan ref: Figure 03 P1 – Final Restoration.

**Reason:** To ensure satisfactory restoration of the site.

14. Plant, machinery and access road associated with the landfilling operation shall be removed from the site and the land reinstated to its former condition on completion of the landfill operation.

**Reason:** To ensure satisfactory restoration of the site.

## **Aftercare**

15. Three months prior to the completion of the restoration of any phase a detailed aftercare scheme for that area shall be submitted to the Local Planning Authority for approval. The scheme shall specify the steps to be taken and the five year period in which they are to be taken. Following approval in writing by the Local Planning Authority the scheme shall be implemented accordingly.

**Reason:** To ensure satisfactory restoration and aftercare of the site.

16. At least once each year during the five year aftercare period relating to each restoration phase a formal annual review shall be held to consider the operations which have taken place on the site during the previous year and the programme of management to be adopted during the ensuing year. At least four weeks prior to the date of each annual review, the site operator shall provide the County Planning Authority with a record of the management and operations carried out on the restored land during the period covered by the review.

**Reason:** To ensure satisfactory restoration and aftercare of the site.



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## **Development Plan Policies Relevant to this Decision**

West Midlands Regional Spatial Strategy 2004 – Policies WD1 and WD3.

Warwickshire Structure Plan 1996-2011 – Policies GD.1, GD.2, GD.3, and ER.9.

The Waste Local Plan for Warwickshire – Policies 1 & 3.

Stratford on Avon District Local Plan 1996-2011 – Adopted July 2006 - Policy PR8, DEV.1, CTY.1, CTY.19, PR.1 and PR.8.

## Reason for the Decision to Grant Permission

The proposal is acceptable in land use and amenity terms and would allow a waste product to be appropriately managed and disposed of in the long term. There are no contrary material considerations to indicate that the application should be refused.

## **Note**

The policies, proposals and reasons given above are only summaries of the considerations set out more fully in the Committee Report. In accordance with Article 22(2) of the Town and Country Planning (General Development Procedure) Order 1995 and Article 3(3) of the Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999 (EIA Regulations) notice is hereby given that the county Council in determining the above application has taken into consideration an environmental statement and environmental information (as defined by the EIA Regulations).

