

Minutes of a public meeting called by BKP Ltd to discuss its proposed gasification plant which was held at the Village Hall, Braishfield on Thursday 7th September 2006 at 7.30pm

PRESENT:-

Martin Hatley (Chairman)
Nick Healey (CEO BKP Group)
Phil Scowcroft (MD Planet Group)

About 60 members of the public and BKP staff

Apologies for absence were received from:
Peter Boulton (TVBC Councillor)
Andrew Lalonde (Chairman Braishfield Parish Council)
Mike Prince (Vice Chairman Braishfield Parish Council)

1. Introduction

Martin Hatley, Deputy Leader of Test Valley Borough Council and who BKP invited to be an independent Chairman, opened the meeting by introducing those present and saying that this was a pre-application public meeting called by BKP with the aim of exchanging information prior to making a formal application for a gasification plant. Although many might wish the Bunny Lane area to be returned to a greenfield site, this was not going to happen, so it was a case of wanting to have the best solution of the options available. It was expected that there would be further meetings with the Borough and Parish Councils.

2. BKP presentation

Before giving a brief history of BKP, Nick Healey apologised for not giving full enough information on the gasification plant in the previous application.

BKP started in 1964 at Embley Park Farm before moving to Bunny Lane in 1987, a move which he said was welcomed by the Planning Department. Existing permissions were taken over as there had been mineral extraction from the site since about 1942. The waste transfer station was constructed in 1997 and permission for storage etc of electrical equipment under the WEE Regulations was approved in 2005. BKP has six Divisions with a turnover of £8m and has 120 employees.

The current plan is to convert waste to energy at the rate of 1 tonne/hour. The type of waste would be what BKP is currently permitted to handle ie building construction waste. 80% of this is recycled but the remaining 20% goes to landfill. The main purpose of the proposal is to avoid the use of landfill.

With waste management, the usual environmental factors of noise, dust, litter, vermin, odours, visual intrusion etc would mostly improve. The emissions aspect will be addressed by Phil Scowcroft later in the meeting. There would be no increase in traffic, probably a reduction owing to fewer movements to landfill.

In summary, Nick Healey said that the need for the proposal is to react to and embrace legislation which is forcing up the cost of landfill, to change present practices and to provide alternative sources of energy.

3. Planet Presentation

Phil Scowcroft introduced the Planet Group which supplies gasification plants and which is connected to Ascot Environmental. This is an organisation which manages associated landfill activities such as leachates, gas etc. Legislation is forcing waste management away from landfill towards energy production and recycling. The Planet process is advanced and is classified as 'green'.

Planet would provide a turnkey solution for BKP with a relatively modest sized plant. There are 12 plants operating in the USA, mainly on islands and remote locations such as Alaska and Nova Scotia and a similar one has just been commissioned in Iceland. The Iceland plant uses 8000 tonnes/year and deals with domestic waste along with commercial fish and meat processing waste.

In the UK, the planning process is slow but construction has started on a 30000 tonnes/year plant in Dumfries which will provide 3MW. Four other plants have been approved and there are others on the go.

The technology involved uses an advanced thermal process known as gasification. There is an oxygen-starved process in which the waste is heated to produce gases which in turn are burned at a controlled temperature. Control of the process provides better emissions and also better quality residues. The plant operates under strict EU regulations and is regulated by the Environment Agency. Results of analyses are monitored and it is BKP's intention to make live data available on its website.

In relation to environmental considerations, landfill is a 'dirty' option. It produces CH₄ which is a strong greenhouse gas. The Planet process is CO₂ neutral as the materials are derived from plant life, so that it is not adding CO₂ to the atmosphere. In the process there is clean combustion and extensive scrubbing. The output is cleaner than background emissions and there is no H₂O pollution as dry materials are used to react with acids. Some water is used for cooling.

The visual impact is low because it is a small scale operation and it fits in with the proximity principle as the site is where the waste is located. There is now a move away from large sites.

On the question of noise, it is very quiet and is housed in a building. The steam turbine is the only significant noise emitter, but this is well below statutory limits. There are no odours from the system, particularly as putrescent waste is not involved. The residue is a fine white sterile ash which is about 10% by weight of the original material. It may be used in such components as breeze blocks.

Phil Scowcroft gave a presentation of the typical amounts of emissions compared to the statutory limits and said that an environmental impact assessment would be produced. However, BKP would not confirm this, but Martin Hatley said that HCC would not consider the application without one.

Phil Scowcroft gave a more detailed description of the process in the Iceland plant in which there was gas production at a relatively low temperature but the gases were burned at greater than 800°C. The gases produced are H₂, CO, CH₄ and various other hydrocarbons.

There is complete combustion at this temperature and no auxiliary fuels are used except at startup. Heat is used to generate steam which drives a turbine to generate 750 KW of electricity. Chlorine and sulphur are removed from the exhaust and there is virtually no airborne ash.

The system is capable of using hazardous as well as non-hazardous waste, but in BKP's case it will be non-hazardous. It is also capable of using plastics.

The system is modular and further units may be added as required and allowed.

4. Summary of application

Nick Healey said that at the moment a new draft application is being submitted to HCC for comments. Braishfield and Michelmersh & Timsbury PCs will receive these comments and then a formal application is expected to be made later in the year.

The overall aim is to have a sustainable waste management system which is better than the current one and which produces energy, a reduction in greenhouse gases and a reduction in traffic.

BKP does have DVDs on the plant which people may have and a representative may be invited to go to Iceland.

5. Questions from the floor

Martin Hatley introduced this session and said that the Borough Council will be asked for comments and its Environmental Health Department will be involved. Under 'Nolan' rules Borough Councillors must refrain from expressing views beforehand.

A number of questions, implicit in the answers given, were asked by members of the public:

Charlotte Brown

BKP confirmed that the hours of operation would be the same as for the transfer station ie 6-6 Mon to Fri and 6-1.30 Saturdays.

Sheila Still

The ash would be loaded into sealed skips and would be contained at all times, preventing it from being blown about.

Steve Renvoize

Current waste is transported in and out of the site by skip. 80% of this is recycled and sent to different industries, with the remainder being sent to landfill. Soil from building construction waste is separated out and spread on the site across the road but this site will be finished in the next two years. BKP will continue to recycle 80% but of the remaining 20%, one tonne/hour will be burned. The plant is capable of taking straw bales.

Anne Edwards

The first application was made in that form because it was a repeat of one which had been given approval in Exeter. BKP now accepts this first application contained insufficient information. The removal of the shredding and briquette production from the proposal was due to a change in plant and process from the Waste to Energy organisation to Planet. In making these changes BKP said it has acknowledged the public's concerns. BKP did not wish to elaborate on any influence a letter circulated around the village may have had, yet BKP had described it as emotive.

Tony Lowe

Although the gasification in the first chamber takes place at a relatively low temperature at which dioxins etc may be produced, there is no contamination of the ash residue and information on analyses can be provided to show this.

Scrubbing of flue gases is done not by water but by solids such as NaHCO_3 and CaO . The products of these are disposed of as special waste.

It is not BKP's intention to burn tyres at the moment, but technology may permit this in the future.

Peter Gomme

Though not relevant to this application, Martin Hatley defended the Borough Council's actions in relation to the tyre mountain near Romsey and said questions should be directed at the Environment Agency.

Emissions of toxins is heavily regulated but it was eventually acknowledged that some are emitted, though well below the permitted levels.

Bob Harris

BKP sends approximately 60 tonnes a day in 3 loads to landfill. The proposal will remove one of these loads a day.

Charlotte Brown

Martin Hatley acknowledged the danger posed by traffic queuing round the corner at the household site in Bunny Lane particularly with lorries accessing the BKP site. It is hoped the household site will be relocated but in the meantime he will refer the matter to the highways people.

John Rhodes

BKP said that this application was for 1 gasification unit but if this plant operated successfully then there may be further applications for up to 5 units consuming the three loads a day which go to landfill.

The statement that the plant is CO_2 neutral even though plastics may be burned was a generalisation. Only a tiny amount of plastics would be burned.

The plant can be operated on a daily basis, rather than continuously. The Iceland plant, for example, starts up and shuts down.

John Harrison

In relation to concern about dioxin emissions and atomisation of low boiling point metals such as Hg and Pb, these are actively screened from the waste stream. Dioxins are destroyed in the high temperature second chamber. Outputs are independently tested.

Chris Marchant

In answer to a question about the daily work schedule with the number of operators and emergency procedures, there will be a plant manager and two operators who would extract the ash from the previous day and load up the waste. The plant has a control system with a general maintenance/boilerman on hand. After loading, the first process is to light the small ignition burner. The system shuts down after about 12 or 13 hours.

The effluent is monitored and there are spot checks on the gas output. The plant shuts down immediately if the effluent limits are exceeded. The plant manager would be a plant control engineer and BKP confirmed that it would employ such a qualified person.

Mike Edwards

In answer to what happens if the combustion process is extinguished, Planet said that it never goes out.

Chris Marchant

BKP confirmed it had no experience of operating plant of this nature.

Rosie Groves

Although BKP has no experience, gasification plants have been in operation since the mid 80s provided by Planet's partner in the US. Planet now have a European licence and have just installed the one unit in Iceland. Data is available from the Iceland operation.

Tony Lowe

The secondary chamber does have an auxiliary burner in the second chamber which is used to maintain a high enough temperature so that there is no pollution. This burner is not used unnecessarily as it wastes fuel. The normal startup procedure is to light the first burner and then this one in the secondary chamber, though it is possible to light both at the same time.

Mike Edwards

In answer to a question about approvals and certification, the plant appears on Defra's website and there are only three or four which are recognised. There are no other approvals to get. Appearance on Defra's website means that the plant has been subjected to Defra's technical body. When asked if Defra have looked at the plant, Planet said they have looked at the data.

Mike Evans

In terms of capacity, the plant can run at 1 tonne/hour which is 24 tonnes/day. However, more units can be installed to increase these figures.

As far as using sealed containers and their use being a planning condition, Planet said that the ash is normally put on to a conveyor for loading into an enclosed skip.

On the matter of risk assessment, the probability of explosion is very low since the gas is burned straight away and not 'bottled'.

Richard Brazier

It was confirmed that the current quantities of material will continue to arrive at the plant but that there will be a reduction of the outgoing. The waste comes from the construction industry and is not domestic waste. 90% of the waste comes from within 30 miles.

David Teagle

BKP confirmed that they would be bound by any planning condition which incorporated the promise of a reduction in traffic. Similarly they would be bound by their promises about no use of tyres and any restrictions concerning the ash residue. However, BKP would not promise to limit the number of units to one only. Any additional units permitted would be housed in the same building.

Peter Gomme

The issue of the reversing beepers as a constant irritation was raised. BKP said that the majority of this comes from vehicles out in the open. In this proposal, some vehicles would be within the building. It is the Health & Safety Executive which insists on the beepers.

BKP declined to discuss the arguments about letters circulated around the village and claims of misinformation.

Jean Lowe

As far as removal of metals from the ash with consequent disturbance is concerned, metals can be removed but will not be done so in this application. BKP said that useful metal will be removed beforehand for recycling. It was in their interest to do so. Fugitive dust will not be a problem as this is collected by a large filter. There are no clouds of dust.

Colin Kemp

Colin Kemp expressed concern that there had been two major catastrophes with similar plant and that he did not feel reassured by what he had heard in the presentation. In response it was said that the explosions to which he was referring involved the collection of gas, which was not the case with this proposal.

David Teagle

BKP confirmed that there were options for it to buy the plant outright and use its own labour. BKP also confirmed that they have the finance to implement their plan and have been looking at this for 5 years. BKP declined to discuss any financial matters.

Charlotte Brown

If a steam turbine is added, then it will be installed inside the building and with sound screening. Charlotte Brown expressed concern at this saying that a rival company's sound proofing did not seem to work.

Chris Balchin

In connection with the various letters sent round the village and questions about apologies, BKP said that they would like to meet with Meryl Balchin.

Mike Edwards

Existing incinerators cannot be used for building construction industry waste as such incinerators are for municipal (ie domestic waste). Use of large plants, rather than these relatively small ones, would require transport of material over much larger distances.

Caroline Nokes

BKP agreed to look into the possibility of using directional beepers on their lorries so as to reduce the noise pollution causing irritation to the villagers.

Rosie Groves

In answer to a claim that this application did not meet the proximity principle because the waste was not generated in the area, it was re-stated that the waste comes from within 30 miles. BKP have permission to do this and this could not be withdrawn.

Peter Gomme

Peter Gomme remarked that if the system is safe, then why is it not done in Southampton where much of the waste is generated?

John Rhodes

It was confirmed that the plant automatically shuts down in the event of an urgent alarm and does not rely on an operator to take action.

Anne Edwards

It was confirmed that only 13 sites have been constructed worldwide in the last 25 years. BKP is interested in the system for commercial reasons and it will become cheaper than landfill owing to the increase in landfill tax.

George Elliott

BKP could not confirm the exact timing of the formal application. It was carrying out a screening application because it had made mistakes in the past and was now wanting to collect as much information as possible.

George Elliott thanked BKP and Planet for answering so many questions put to them.

Martin Hatley thanked Nick Healey and Phil Scowcroft for their contributions and closed the meeting.