

Paul Mobbs,
Mobbs Environmental Investigations,
3 Grosvenor Road, Banbury, Oxon. OX16 8HN.
Phone/fax 01295 261864.
Email: mobbsey@gn.apc.org
URL <http://www.gn.apc.org/pmhp/meir.htm>

**Mobbs'
Environmental
Investigations**

* Environmental consultancy
* Research
* Campaigns coordination

**Abernant Farm
Landfill Application -
Objection on behalf of
Dinefwr FoE**

October 1999

Contents

1. Introduction.....	3
2. Evaluation of development proposal	4
2.1. The application and environmental assessment	4
2.2. The justification for continued operation	5
2.2.1. The justification for extending time limits	5
2.2.2. Justification through need	6
2.2.3. Waste policy and sustainable development.....	8
2.3. Environmental impacts and the EC Framework Directive on Waste	8
2.4. Geotechnical appraisal	10
2.4.1. Geology and hydrogeology	10
2.4.2. Landfill engineering	12
2.4.3. Stabilisation.....	13
2.5. Site restoration considerations	14
2.6. Need, BPEO and proximity	15
2.7. Risk and public perception.....	15
3. Recommendations to planning authority	17
3.1. Evaluation of proposal.....	17
3.2. Reasons for refusal	19
3.2.1. Lack of an environmental statement.....	19
3.2.2. Failure to Comply with 'Relevant Objectives'	20
3.2.3. Failure to Identify 'Best Practicable Environmental Option' and Proximity.....	21
3.2.4. Protection of Health and Amenity	21
3.3. Consideration of appeal proceedings.....	22
4. Appendices	23
4.1. Schedule 4, The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI. 1999/293).....	23
4.2. Part 1, schedule 4, Waste Management Licensing Regulations 1994 (SI. 1994/1056)	24
4.3. Section 14, Planning Guidance Wales - Planning Policy (April 1999).....	27

1. Introduction

This report has been commissioned by Dinefwr Friends of the Earth and Green Group in response to the application¹ by Bill Munslow Services for a continuation of landfilling activities near Abernant Farm, Heol Ddu, Ammanford.

I am an independent 'environmental investigator' based in Banbury, Oxfordshire. I have been an active environmentalist for many years. I trained in the engineering industry before setting up my current business in early 1992. Since then I have been working across the UK as a consultant to community groups and small businesses in the fields of planning, waste management, sustainable development, pollution and risk assessment.

I have compiled this report from information taken from the planning register for this application, comprising the application forms, supporting documents and plans.

The format of the report is as follows:

- Section 2** outlines my main observations on the content of the material submitted with the application to Carmarthenshire County Council
- Section 3** details my recommendations with regard to the determination of the application
- Section 4** contains information, referred to in the report, and appended for reference

If the planning authority have any specific queries or requests in relation to this report then by all means please submit them to me.

Paul Mobbs
21st October, 1999

¹ Application reference E/01712, registered 23rd July 1999

2. Evaluation of development proposal

2.1. The application and environmental assessment

The application was registered on the 23rd July 1999. This is significant since it falls a few months after the implementation of the new environmental assessment regulations². In a letter from Hugh Town of Carmarthenshire county Council's planning department to the applicant's agents it was noted that in the opinion of the planning authority this development fell under Schedule 2 of the regulations. It therefore required an environmental assessment.

Paragraph A36 of the circular on Environmental Impact Assessment³ states that, "EIA is more likely to be required where new capacity is created to hold more than 50,000 tonnes per year, or to hold waste on a site of 10 hectares or more". The application site falls short of the 10 hectare threshold. The issue is therefore whether the site will accept 50,000 tonnes per year of waste:

- The applicant assumes 18 vehicles per day at 10 tonnes, for 5.5 days per week at 50 weeks per year. Total 49,500 tonnes per year.
- The calculation by the planning authority assumes 18 vehicles per day at 10 tonnes, for 6 days per week at 52 weeks per year. Total 56,150 tonnes per year.

In my view because the applicant's figures are so close to the 50,000 tonne threshold, it makes very little difference. As clearly stated in the introduction to Annex A of the circular - which lists the indicative thresholds:

The criteria and thresholds in this Annex (referred to in paragraphs 43-44) are only indicative. In determining whether significant effects are likely, the location of a development is of crucial importance. The more environmentally sensitive the location, the lower will be the threshold at which significant effects will be likely. It follows, therefore, that the thresholds below should only be used in conjunction with the more general guidance in this Circular on "Establishing whether EIA is required" and, in particular, the guidance on environmentally sensitive locations (paragraphs 36-40).

The levels anticipated by the applicant are so close to the threshold that any error could easily carry it over 50,000 tonnes per year. For example, if each lorry were to carry on average 100 kilos more waste, the limit would be exceeded. The site lies just over half a mile from the boundary of the Brecon Beacons National Park. Also, the roads travelled by traffic gaining access to the site form a valuable access for the public going onto the western slopes of the Black Mountain.

The failure to produce an environmental statement has meant that cross-cutting legal issues have not been considered. For example, in a location such as this I would almost certainly expect some protected species to be resident. Also, in relation to the proposals to widen the road, this would almost certainly be caught under the Hedgerow Regulations 1997.

The issue as to whether the proposal is or is not a Schedule 2 development is not a matter of law, but a matter of interpretation of the facts presented to the planning authority⁴. In challenging the decision of the planning authority the applicant would have to show that the decision of the officers was unreasonable in the 'Wednesbury' sense - i.e., that it was a decision no other planning officer would reasonably take. In my view, given the potential for error in the figures, the decision that the development falls under Schedule 2 is quite correct.

² The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI. 1999/293), came in to force 14th March 1999.

³ DETR Circular 2/99 (Welsh Office 11/99), *Environmental Impact Assessment*, 12th March 1999.

⁴ *R v Swale Borough Council ex parte the Royal Society for the Protection of Birds* [1991] JPL 39

I concur with the planning authority's request for an environmental statement, and that the applicant should have, in case of doubt, submitted a request for a scoping opinion. This application is therefore caught by regulation 7 of the Environmental Impact Assessment Regulations. Quite correctly the planning authority have - in accordance with regulation 7(3) - notified the applicant⁵ within a three week period that an environmental statement was required. Technically the applicant could make a request to the Secretary of State to confirm the need for an environmental statement, but I believe this will only forestall the inevitable.

There is of course the issue as to whether the information submitted with the application⁶ actually constitutes, for the regulations, and environmental assessment. The content of an environmental statement is specified in Schedule 4 of the Regulations [these have been reproduced in section 4.1 of this report]. In my view it is clear that the content of the supporting information does not meet the criteria in Schedule 4, and therefore the applicant could not claim this to be a valid environmental statement.

Given that regulation 3(2) of the Environmental Impact Assessment Regulations prohibits the granting of planning permission until the environmental information can be considered, the planning authority cannot determine this application until:

- **An environmental statement has been served by the applicant;**
- **That environmental statement has received the required publicity; and**
- **The content of the environmental statement has been considered by the planning authority, and that an opinion on the content of the statement can be made in accordance with the regulations.**

2.2. The justification for continued operation

2.2.1. The justification for extending time limits

It is important to note that this application is not for the variation of a condition on an extant planning permission in order to extend the time periods. As the permission under which work was previously carried out has now lapsed under condition 5, the whole issue must be considered afresh.

In our view, apart from the failure to fill the site within the prescribed, the only other justification for the continued filling of the site is the need to receive income in order to restore the site. In our view this is not a valid reason for granting permission if, on the basis of the evidence available, the continued import of wastes would damage the amenity of the area.

In this case there is another option that the applicant has not considered (and should be considered within the context of an environmental statement). That is seek a limited permission to restore the site as is. The lining and capping materials are sourced from on site, so there is no need for importation. Furthermore given the level of filling already it would be possible to re-profile the waste and then cap the site in order to achieve the necessary gradients to shed water.

Even if no further permissions are granted for infilling, there will at some point need to be some limited permission granted to achieve site restoration. Before the 1st May 1994 an operator could hand back a waste license and walk away from a site. But since the implementation of Part II of the Environmental Protection Act 1990 - through the Waste Management Licensing Regulations 1994 - an operator cannot hand back a license until the waste regulation authority (the Environment Agency)

⁵ Letter from Hugh Towns to Carlisle, Davies and North, 3rd August 1999.

⁶ 'Abernant Farm Landfill', Geotechnology, report 007.2/0/0699

are satisfied that the site is safe and stable. If there is any doubt that the operator is not a '*fit and proper person*' - by virtue of the fact that he does not have sufficient funds to operate the site - then they can take enforcement action. In the worst scenario they can step in and take over the site, and secure the necessary funds from the operators assets. In fact, if the operator is claiming that insufficient funds are available to secure the site in the long-term, then it would be wise for Carmarthenshire County Council to hold discussions over the future of the site with the Environment Agency, and how best to secure it safe closure.

Even if the site operator were to go bankrupt, the receivers would have to supply the funds necessary to ensure the safe restoration of the site before any other creditors received any monies owed. Therefore the claims on page 2 of the report submitted with the application are bogus when they state that the operator must fill the site in order to amass enough money to restore it. When the operator took on the site he also accepted the 'regulatory risk' that applies to any polluting process.

If the applicant's proposal is unsuitable:

- **on the grounds of the importation of materials;**
- **the continuation of disturbance for at least another ten years due to filling operations on the site; and**
- **because of the uncertainties about the need for the site, when balanced with the risk to the environment it creates...**

then serious consideration should be given to approaching the site operator in order to propose the compromise solution of seeking the immediate restoration of the site using the materials already available.

2.2.2. Justification through need

In April of 1992 an extension to the site was granted, on appeal, for a period of seven years. However we now have another application to extend working yet again - to extend filling by eight years, with 2 years restoration and 5 years aftercare⁷. There are clearly problems with the completion of this site. This should raise the questions of:

- What is the capacity of this site;
- What is the quantified input to the site - on average, and at peak rates;
- And, as a product of these two figures, when can completion be expected.

In my view there must be a question as to the period over which the site will be restored, and when such restoration will be achieved. The application for a waste management license in May 1991 noted the site capacity as approximately 80,000 cubic metres. The information submitted with the application notes that only 50% of the capacity has been filled over the last seven years.

There is a discrepancy between the 1992 appeal decision letter⁸, and the waste license application. The appeal letter notes that there would be on average 18 lorries entering the site every day (although the mass of the load is not stated). The waste license application assumes a maximum level of 18 lorries per day, with an averaged mass of 8.6 tonnes. If we calculate the implications of this we arrive at some very strange conclusions.

Table 1 over the page considers the fill rate if, as projected, 18 lorries per day use the site. Using the applicants figures for the periods over which the site is open, the annual site input would be in the region of 8,500 tonnes per year. Over seven years enough waste should have been delivered to fill

⁷ Figures provided in introduction to the report submitted with the application

⁸ Application P6/17/18079/91, 2nd April 1992

the site nearly three times over. The actual level of filling must have been significantly less than this. Table 2 calculates the actual number of lorry movements that would have been created by the fill levels stated - approximately 3.1 lorries per day. This is a very low figure, but if we extrapolate from this a completion period this is very close to that the applicants have asked for - 8 years - which would tend to show they have done the same calculations.

In general terms, when considering material issues before determining a planning application the general balance to be applied is the 'need' for the development versus any 'harm' that development would cause. It is clear that this development would cause disamenity to nearby properties, and possibly pollution of the environment. Therefore there should be a pressing need. In my view that need has not been demonstrated. Firstly, because of the failure to adequately quantify the site inputs, the capacity, and the service area of the landfill. Secondly, the fact that there have been problems filling the landfill - or there appears to be given the shortfall of material - then there is clearly no pressing demand for the development. Consideration should therefore be given to the alternative scenario of permitting only the short-term restoration of the site, irrespective of whether the void has been entirely filled or not.

Table 1: Calculation of total site input and excess at stated input

<u>Capacity of site, 1991, m³:</u>	80,000	[A]
<u>Site inputs:</u>		
18 lorries/day @ 10 te per load	180	[18 x 10 = B]
Yearly total, te	49,500	[B x 5.5 x 50 = C]
Total after 7 years filling, te:	346,500	[C x 7 = D]
Convert to volume @ density 1.5te/m ³ , m ³ :	231,000	[D / 1.5 = E]
<u>Level of surcharge:</u>	2.9	[E / A]

Table 2: Calculation of average traffic flow at stated fill rate

<u>Calculated annual input:</u>		
Capacity of site, 1991, m ³ :	80,000	[A]
Filled void, assuming 50% utilisation, m ³ :	40,000	[A x 0.5 = B]
Convert to mass @ density 1.5te/m ³ , te:	60,000	[B x 1.5 = C]
Annual site input over filling period, te:	8,571	[C / 7 = D]
<u>Traffic generation:</u>		
Average mass of a lorry load, te:	10	[E]
Number of lorry loads per year:	857	[D / E = F]
Number of lorry loads per week:	17.1	[F / 50 = G]
number of lorry loads per day:	3.1	[G / 5.5]
<u>Completion period:</u>		
Remaining void, m ³ :	40,000	[A - B = H]
Convert to mass @ density 1.5te/m ³ , te:	60,000	[H x 1.5 = I]
Completion, assuming calculated input, years:	7.0	[I / D]

Table 3: Calculation of the mass of an average load

Capacity of site, 1991, m ³ :	80,000	[A]
Filled void, assuming 50% utilisation, m ³ :	40,000	[A x 0.5 = B]
Convert to mass @ density 1.5te/m ³ , te:	60,000	[B x 1.5 = C]
Annual site input over filling period, te:	8,571	[C / 7 = D]
Number of deliveries per year:	4,950	[18 x 5.5 x 50 = E]
Average mass of delivery, te:	1.7	[D / E]

2.2.3. Waste policy and sustainable development

There is a general requirement that all development should attempt to be 'sustainable'⁹. There has been no sustainability assessment provided with this application. In relation to planning policy sustainable development has not been discussed, and no attempt has been made to demonstrate that this project fulfils the objectives of national policy on sustainable development.

In considering proposals for any disposal facility regard must be had to the national waste strategy. Currently the national waste strategy - *A Way With Waste* - is in draft¹⁰. However, in order to avoid a legal challenge on the implementation of the European Framework Directive on Waste, the draft strategy has been designated as the formal 'legal' strategy for the purposes of the Framework Directive (see paragraph 6.4 of the consultation document). Also, although the original draft was evolved by DETR, the final strategy will be drawn up by the Welsh Assembly. Therefore in writing the new strategy they will be obliged to have regard to the need to development more sustainable systems of waste management because of their obligations under section 121 of the Government of Wales Act 1998.

One could trawl through the application to gain a certain amount of information for such a determination, there are two important pieces of evidence missing:

- Firstly, what is the applicant's general definition of what a '*sustainable landfill*' and how does this relate to the wider legal framework for waste development (in this respect, we could take draft Planning Guidance Wales¹¹ as a starting point, but we should also have regard to the recent DETR consultation paper '*A Way With Waste*').
- Secondly, and more importantly, we need information as to how this landfill will fit into the wider network of waste management systems, and why the addition of this capacity in this location will aid the attainment of sustainable development.

It is clear that no serious consideration is given to the 'sustainability' of this proposal. I believe that the planning authority should require that the applicant submit clear details on the sustainability implications of this development. This statement should clearly reference the guidance in the UK Sustainable Development Strategy, 'A Better Quality of Life'¹², and the draft Sustainable Waste Management Strategy, 'A Way With Waste'.

2.3. Environmental impacts and the EC Framework Directive on Waste

Given that this is a application to renew a long standing permission, it is important that we examine how the law has changed since permission was granted for this development in April 1992. The important question to consider is whether this development can be permitted today - through the established presumption for development. Also, are there different standards of evidence required to prove the suitability of the site given the changes to planning and environmental law.

Many applicants argue that issues relating to waste disposal, safety, health, etc., are all a matter for the pollution control authority - in this case the Environment Agency. We do not agree that this is factually or legally the case where waste developments are involved. This position is also supported in the recent revision to *Planning Guidance Wales - Planning Policy* (see section 4.3 of this report).

⁹ Section 3.2, Planning Guidance Wales, '*Planning Policy*', April 1999 (see section 4.3).

¹⁰ '*A Way With Waste: A Draft Waste Strategy for England and Wales*', Department of the Environment, Transport and the Regions, June 1999. Ref. 99RP0254/1. Part 1 of the strategy in particular notes the main issues in relation to sustainable waste management.

¹¹ Section 14, Planning Guidance Wales, '*Planning Policy*', April 1999 (see section 4.3).

¹² '*A Better Quality of Life: A Sustainable Development Strategy for the UK*', Cm4345, May 1999

Waste is the one area of environmental law and planning where there is a legal requirement for the local planning authority to consider pollution issues. The Part 1, Schedule 4 of The Waste Management Licensing Regulations 1994 makes planning authorities the '*competent body*' for the taking of '*any specified action*' in relation to the '*relevant objectives*'¹³ of the Directive [see section 4.2 of this report].

There is the note in paragraph 2(2) of Schedule 4 of The Waste Management Licensing Regulations that '*nothing... above requires a planning authority to deal with any matter which the relevant pollution control authority has the power to deal with*'. This seemingly absolute position is not reiterated in the circular¹⁴ that accompanies the regulations, and which clarifies the duties of planning and pollution control authorities in paragraphs 1.46 to 1.56. There is a positive requirement for competent authorities to evaluate every waste proposal in terms of the relevant objectives. As stated in paragraph 1.47 of circular:

"The general duty in paragraph 2(1) [of Schedule 4 to the 1994 Regulations] means that in exercising the specified functions authorities must always consider the objectives of the Directive and aim to determine decisions ... in line with them" [emphasis added]

This is the language of materiality (to consider) but the duty imposed by the relevant objectives is far more onerous than this implies. Paragraph 2(1) of Schedule 4 to the 1994 Regulations actually requires that:

"2(1) ...the competent authority shall discharge their specified functions, insofar as they relate to the recovery or disposal of waste, with the relevant objectives" [my emphasis]

Insofar as the planning authority are a competent authority, they must be able to demonstrate the application of the relevant objectives. In terms of role, planning authorities assess 'damage' to interests of acknowledged importance. This of course gives them a more holistic view than the Environment Agency who can only consider what is before them in a waste license application. But beyond that, a planning authority has a much greater freedom to identify and definite 'harm' to interests of acknowledged importance. In determining this application the planning authority must prove to the public that they have considered the relevant objectives of the Framework Directive on Waste by implementing Schedule 4 of the Waste Management Licensing Regulations.

There will of course be some overlap between planning and pollution control in this case. Waste licensing is the responsibility of the Environment Agency, and any waste applications will require consultation with that Agency. At the same time the Waste Management Licensing Regulations 1994 also have direct effect on the determination of the planning authority. The limitation oft quoted in response to the consideration of environmental issues in the determination of applications is the *Gateshead*¹⁵ case. However the main debate in this case was the assumption by the planning authority that the grant of planning permission would mean the pollution control authority was bound to issue a permit, and that insufficient consideration would be given to pollution issues. The Court of Appeal held that it is right and proper for planning authorities to consider pollution issues, and that there is overlap, but the determination as to whether or not a pollution control authorisation should be given is a matter which is the sole responsibility of the pollution control authority.

It is clear on an examination of the available guidance that the consideration of a wide range of issues, and sometimes issues which are not the direct responsibility of the local planning authority, are an implicit requirement within case law and sections 54A/70(2) of the Town and Country Planning Act 1990. The 'material considerations' in any determination will, in the first

¹³ See section 4.2 of this report.

¹⁴ DoE Circular 11/94 (Welsh Office 26/94), '*The Framework Directive on Waste*', April 1994.

¹⁵ *Gateshead Metropolitan Borough Council v. Secretary of State for the Environment and Northumbrian Water* [1993, 67 & CR179; affd 1994, 71 P & CR350]

instance, be the policies specified in the development plan. But other matters must also be considered, including environmental pollution and health, and standing given to each accordingly, at the time of the determination.

2.4. Geotechnical appraisal

2.4.1. Geology and hydrogeology

Given that the legal process for considering waste developments requires the consideration of the potential effects on the environment, it is curious that the applicant has not provided more detailed geological information. Much of the information that has been provided is poorly presented - not surprising given that it was to accompany a Control of Pollution Act (COPA) waste disposal license application. This standard of information would not be acceptable under the new system of waste licensing that commenced in May 1994. In particular it would not satisfy the requirements for the assessment of risk to groundwater under regulation 15 of the Waste Management Licensing Regulations.

However, I have been able to produce some information from the resources that I have to hand. The current geological survey sheet for this area is very complex (as are most in this area) and therefore I have prepared a schematic geological map (see figure 1 over the page).

The site itself sits within glacial drift. Having read the working plan¹⁶ it is clear that this drift is not a homogenous mass of deposited materials. As noted in the report, "*The exact stratigraphy in this area is unclear but there could well be some inter-bedding of glacial deposits*". If the glacial deposits have a stratified structure with connecting lenses or layers of sands or gravels this presents a serious risk to the environment. Such structures would permit the lateral movement of leachate through zones of lower permeability material.

The presence of low-permeability horizons in the glacial drift is also important from the point of view of landfill gas migration. It is crucially important that the extent of these deposits and their relation to the landfill are studied because impermeable drift acts as a 'cap' to trap any migrating landfill gas. If there were low permeability strata in the boulder clay landfill gas could migrate some distance before coming to the surface. It was precisely this type of geology - a porous strata overlain by low permeability strata - which led to the migration of gas from the landfill at Loscoe in Derbyshire, and the explosion in a nearby building, in 1986.

Given the close proximity of a former coal mine, and the presence of coal seams in the area, care must be taken monitoring landfill gas. If landfill gas monitoring does take place it is important that trace gas analysis is carried out in order to differentiate the movement of landfill gas with the potential migration of coal gas. The two can be very easily confused if only a limited spectrum of gases are analysed.

The solid geology is also very variable - like most of the South Wales Coalfield the area it is heavily folded and faulted. In the area of the site the underlying rocks are made up of the Lower Coal Measures (primarily carboniferous limestone, sandstone and siltstone). The strata dip to the south-south-east at an angle of 20 to 40 degrees (without fieldwork it's difficult to be precise). Immediately to the south-east lie the Middle Coal Measures (the divide being marked by the *Gastrioceras Subcrenatum* Marine Band (GSMB). A short distance to the north east, separated by a large north-west/south-east trending fault lie Millstone Grits. There are a number of coal seams to the south-east of the site (Gwendraeth ('Gwd') and Green seams). These seams are off-set by nearly two

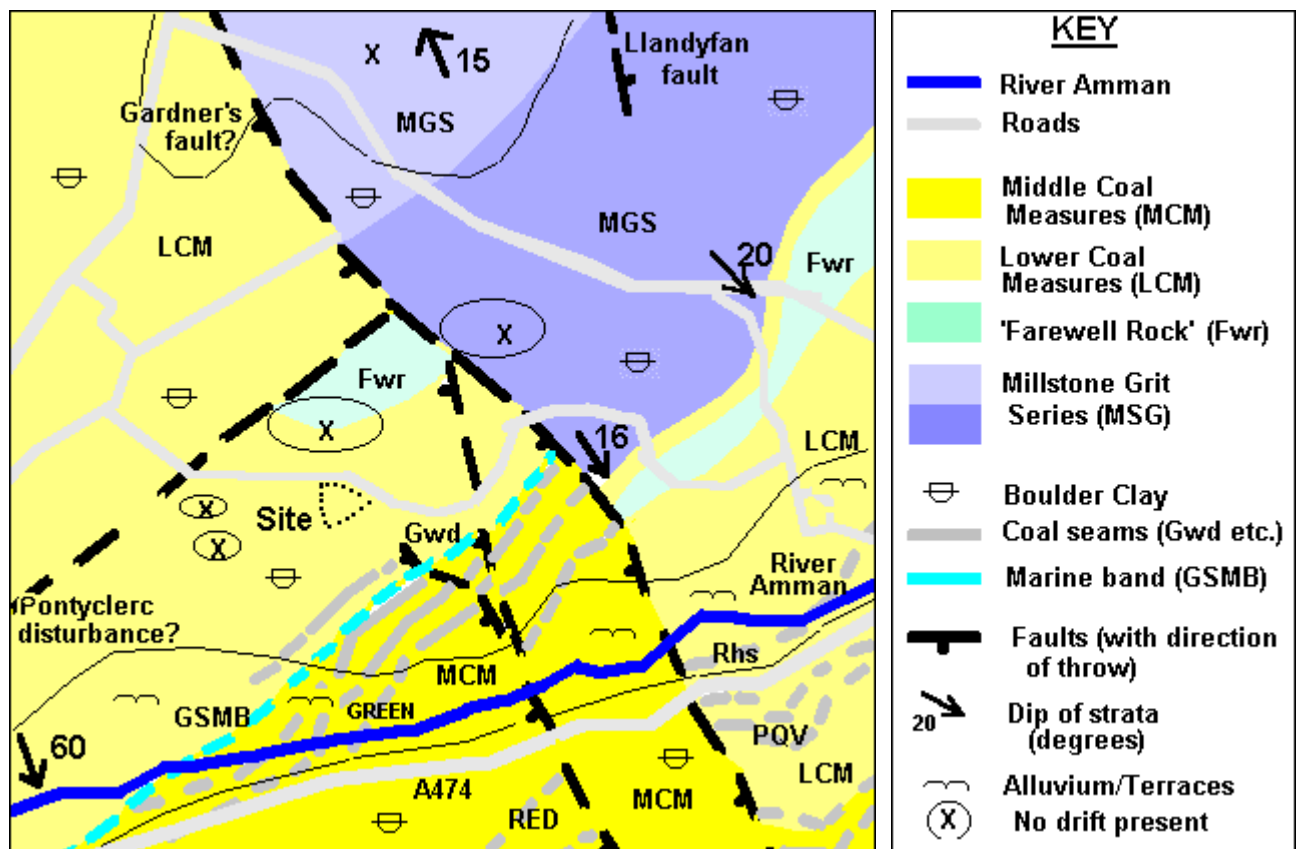
¹⁶ Page 5 of the working plan that accompanied the waste license application, prepared by Golders Associates, dated December 1990.

kilometres by transverse movement of the major fault to the north-east of the site. However this area has been subject to mineral working which could result in changes to the hydrogeological system in the area. The presence of a former mine immediately adjacent to the site could result in subsidence problems which could potentially lead to failure of the landfill liner.

The hydrogeology of this area is certainly complex. Firstly, because of the potentially complex nature of the stratigraphy on the glacial deposits. The interface between the glacial deposits and the solid geology will almost certainly be a highly permeable horizon of sands and gravels. This presents a particular risk since the River Amman is only a short distance away - approximately half a mile - and the adjacent streams provide a direct surface route. Secondly the area of mineral workings to the south-east could have significantly changes the character of the groundwater flow. If there has been a draw-down of the water table this could result in unusual groundwater movement. Conversely if the restoration of the mineral workings provided a higher permeability barrier there could be significant changes in the direction and quantity of groundwater flow. Finally, the presence of mineworking voids immediately adjacent to the site runs the risk that any leachate leaking from the site could be transmitted rapidly and unpredictably away from the site.

Much of the work that has taken place as part of the preparation of the working plan in 1990 does provide a basis form which to inform further research. However, in my view, it is unlikely that this evidence would satisfy the requirements for an assessment in accordance with regulation 15 of the Waste Management Licensing Regulations. This is significant because this throws the suitability of the site under both the Groundwater Directive and the new Landfill directive into doubt. This means that planning permission cannot be granted in accordance with the relevant objectives specified in Schedule 4 to the Waste Management Licensing Regulations.

Figure 1: Schematic geological chart



The failure of the applicant to provide detailed geological information is a significant flaw in the whole application. It is a legal obligation on the planning authority to satisfy itself on the safety of the site for the purpose intended. In summary, this is a complex geology. The nature of the South Wales Coalfield makes clear deduction from such limited information difficult. The presence of mineral workings close by, and a former mineworking immediately adjacent to the site, makes it difficult to judge the nature of the hydrogeological system in the area. The presence of mineworkings also raises the issue of subsidence. The acknowledged poor characterisation of the glacial deposits means that there is great uncertainty about the suitability of the location for the deposit of leachable/degradable waste. The presence of potential avenues for migration in the glacial deposits, and at the interface between the glacial and solid geology, also raises the possibility of landfill gas migration. The body of evidence on geology is too vague, with large gaps in the knowledge about local ground conditions, to allow the development of a landfill site.

2.4.2. Landfill engineering

The theory of containment landfill is relatively new. Although it only became common in the UK from the 1980s, in the USA it has been used for a much greater period (around 40 years). However recent experience in the USA and the UK has demonstrated that containment landfill is unreliable, and unsafe in use. For these reasons the UK Government developed the concept of the 'bioreactor' landfill, and according to current policy guidance of landfill design¹⁷, this is the 'sustainable' type of landfill we should envisage constructing.

The main benefit of bioreactors is that the waste is degraded within one to one and a half generations (30 to 50 years), after which it will cease to pose a problem as a source of landfill gas or leachate. To do this leachate and water are circulated within the site to aid degradation. This site, as far as I can tell, is not a bioreactor. The use of a drainage system and leachate collection will keep the site artificially dry. Hence, in terms of government guidance¹⁸, it cannot be sustainable. In any case, bioreactors require a great deal more site engineering because of the need to operate with much higher leachate heads in the site. There has been no quantified risk assessment provided with the application. This makes meeting those parts of the relevant objectives relating to risk (see paragraph 4(1)(a)(i) in section 4.2 of this report). There is therefore no reliable evidence relating to potential of seepage from the site.

I am very concerned that no detailed information has been given regarding landfill gas and leachate management. These can have serious land-use impacts such as noise, odour, as well as health effects. The location of landfill gas flaring or usage must be carefully controlled. The 'point source' of pollutants a flare or generating plant represents can be a serious health risk. Likewise leachate treatment, if any, cannot be taken for granted because leaks or spillages can easily contaminate ground or surface water. We cannot assume that leachate will simply be taken to the adjacent sewage works for treatment because it may require pre-treatment before discharge to the sewage works.

Finally, there has been no evaluation of the suitability of the leachate collection system. Leachate collection systems can very easily become clogged with silt or biological growths that develop in the nutrient rich environment. It appears that the drainage layer used in the site only consists of coarse graded material produced from material excavated or imported onto the site. If this system is installed without any sand or geotextile filter layer it could cause rapid silting of the collection pipes. This runs the risk of causing higher leachate heads in parts of the site, which will cause a consequential risk in the rate of seepage through the landfill liner.

¹⁷ Waste Management Paper 26B - 'Landfill Design, Construction and Operating Practice', Department of the Environment 1995

¹⁸ Paragraphs 1.20 - 1.31, Waste Management Paper 26B

All landfill liners leak - even plastic membrane and 'composite' liners. This is accepted, albeit in private, by most people in the waste management industry. In fact there is a methodology to assess site leakage in Appendix H of Waste Management Paper 26B. This site uses a compacted layer of low-permeability material excavated on site. There are two problems with this. Firstly, the quality of the lining material may be variable. Secondly, the excavation of the boulder clay actually reduces the thickness of clay below the site, and hence the distance to the higher permeability horizon at the interface between the drift and the solid geology. The problem about speeding the transmission of leachate to the environment, and so bringing it less into contact with the soil, is that the natural absorptive and buffering qualities of the soil cannot significantly reduce the pollution load of the leachate.

Seepage from this site will be a two stage process. First, seepage through the engineered liner. Second, propagation through the boulder clay, which could potentially be significantly augmented by low-permeability strata in the boulder clay. Of the two, the significant delay will be due to the liner. The period of time it takes to breach the liner can be calculated using a simple time-distance calculation - dividing the distance to travel (the thickness of the liner, m) by the speed (the permeability of the material, ms^{-1}) and then dividing by 31,557,600 to convert from seconds to years. It is also possible to calculate the rate of seepage using D'Arcy's law:

$$q = k ((h + d) / d); \text{ where -}$$

- d = thickness of liner, m (1 metre);
- h = head of leachate above liner, m (assume 1 metre);
- k = permeability of liner medium, ms^{-1} (see below); and
- q - seepage rate, $\text{m}^3 \text{s}^{-1} \text{m}^{-2}$

The result of this calculation can be made more meaningful by multiplying q by the discharging area of the site (the lowest parts, usually controlled by the shape of the site) in square metres, and converting to days by multiplying by 86,400.

Assuming this material does meet the $1 \times 10^{-9} \text{ms}^{-1}$ permeability standard then leachate will begin seeping from the site after 32 years. At this point the site will leak, assuming the 1 hectare area of leakage (the lowest part of the site), 1.7 cubic metres of leachate per day (631 cubic metres per year). If the permeability drops by a factor of ten, leakage will increase by a factor of ten (the natural permeability of this material is up to a factor of 1,000 higher). If the head of leachate increases by 1 metre, the flow rate increases by 0.85 cubic metres per day.

In my view the applicant has failed to include the information and analyses of the landfill aspects of this proposal necessary to carry out the statutory evaluations of harm under Schedule 4 to the Waste Management Licensing Regulations. Objective analysis using the information that is available shows that there is a potential risk from leachate should it find a low permeability route to the environment. In my view this application does not objectively establish that risk to the environment and human health can be minimised, and therefore the planning authority should invoke the precautionary principle and refuse this application.

2.4.3. Stabilisation

I consider that the period for stabilisation, used in the environmental statement/supporting information, is completely unrealistic. The application assumes an 8 year filling period, followed by 2 years restoration, and five years post-closure management (as part of, presumably, the standard 30 year post-closure monitoring that will be required by the Environment Agency). The waste licensing procedures no longer allow operators to hand back their licenses after a fixed period of time. The site must first be proven to be safe. If there are particular problems with this site due to leakage or gassing, aftercare, and the disturbance it brings with it, could extend well beyond 30 years. Since it will take 32 years for leachate to breach the liner, and perhaps another 10 to 20 years for that leachate to find its way to the surface if low-permeability routes exist it is conceivable the operator could have handed back the license by the time leakage is detected at distance from the site. In

which case it would fall to the local authority and the Environment Agency to manage the site as 'contaminated land'.

If problems do arise, and the operator does not have the funds to deal with the problem (since, apparently, he does not have the funds to restore the site at the moment) then the site could prove a significant problem to the local authority and the Environment Agency (the costs of landfill remediation are at least two or three times higher than restoration costs). This is the reason why the siting of a landfill is so important. The lining system will have to stay in place for at least 500 years (the period over which a shallow landfill like this will take to stabilise). It is very unlikely that this will be the case because highly engineered systems such as landfill liners have never survived that length of time. For example, liner manufacturers will not guarantee plastic liners for more than 20 to 30 years for landfill operations.

In practice, leakage through the base of the site in the early life of the landfill is not the only issue. After a few decades the cap liner will begin to break down (there is evidence that this begins shortly after restoration because of the settlement of the site). At this stage the site will receive a high infiltration from rainfall. Infiltration will then exceed seepage, and the site will fill up with water. If the basal layer does not rupture from fluid pressure then the fluid will begin to flow out from the side of the cracking cap - especially on a steep site like this. This will inevitably cause environmental pollution.

The long-term suitability of the site, and its ability to contain the pollutants placed into it, has not been established in the reports provided by the applicant. These issues are not abstract. They relate directly to the planning system, as found in a recent landfill appeal in Lancashire¹⁹. The safety of this site over the stabilisation period, the leakage of leachate which can be anticipated, and the effects of that leachate on human health and the environment have not been properly assessed. Without some form of engineering assessment to gauge the level of gas and leachate emissions from the site then impacts on the environment cannot be judged. This information must be provided in order that the planning authority can discharge its legal obligations under the Framework Directive on Waste. Unless this information is provided, and this demonstrates that the emissions from the site will cause no harm, permission must be refused.

2.5. Site restoration considerations

In my view the most repugnant aspect of this application is the falsehood propagated by the applicants that this site must be '*restored*', and that the development proposal achieves restoration. The discussion over the restoration of this site is a clever fallacy; the issue is not about restoration, it is about providing a landfill site.

There are four key criticisms of this proposal for 'restoration':

- **Must the site be restored?** - this has not been proven. In terms of the end-point of this site there are other options - for example the creation of a wildlife habitat (if this site is restored to a low-grade level, and subject to minimal management, it will restore itself to a nature conservation area a minimal cost).
- **Are there alternatives?** - these have not been properly analysed. In my view there are other options for the site
- **Is the proposal objectively valid?** - that is, does it make sense. Certainly not. We are taking an area of former mineral workings, which has already undergone some restoration, and we are turning it into an area - in terms of the law - of contaminated land with a sheep pasture on top. To

¹⁹ Appeal by UK Waste Management Ltd: Round 'O' Quarry, Cobbs Brow Lane, Skelmersdale, Lancashire. Appeal Ref. APP/Q2371/A/97/288746

say this development has a beneficial afteruse as an agricultural unit is clearly misleading since the material deposited in this site will never move away, except by leakage, and it will take many hundreds of years to stabilise to an inert state. This is not a sustainable proposal.

The important balance we are seeking in the application is the 'harm' this development will cause versus the 'need' for this development. However, purely on the basis of the restoration argument, there is no benefit from this development because there is no urgency to restore this site. There are other potential afteruses which could see a much lower impact restoration of this site to a beneficial afteruse.

2.6. Need, BPEO and proximity

There has been no evidence provided to demonstrate that the development of this site is necessary. The fact that it has been difficult to fill the site means that there is little demand for it. It could also mean that the operator is prepared to accept more 'unusual' loads from further away that fit within the license criteria - for example contaminated spoil - to make up the shortfall.

Need alone is not the prime determinant as to whether a site is suitable. In determining the 'need' for waste disposal sites we must also consider:

- **'Proximity'** - is the site close to the source of waste. The current UK Sustainable Waste Strategy, *'Making Waste Work'*²⁰ stated the need to ensure that waste is disposed of as close to its origin as possible. This has been reiterated in *'A Way With Waste'*.
- **'Best Practicable Environmental Option'** (BPEO) is a requirement established in law²¹. In order to prove that the disposal option is objectively the best in environmental terms the applicant must demonstrate that, for the waste involved, there are no better disposal options. BPEO for construction waste is usually reuse on construction site.

The source, type and composition of waste is an integral part of the proximity and BPEO assessments. For example, BPEO for inert waste in certain circumstance may be restoring former quarry workings. However, many in the waste industry consider the most effective use for this material is as daily cover at biodegradable waste sites (currently there is a shortage of cover material).

The information supplied with the planning application provides no detailed information on the sources and compositions of the waste that will be used to fill the site. Therefore not only is proximity difficult to prove, but it is not possible to have any regard to the 'best practicable environmental option'. Therefore the planning authority should refuse permission for this development unless information can be provided to prove that this site is the closest possible site for disposal for the major sources of waste being sent here - given alternative options for disposal that may exist. It must also be demonstrated to be the best option for the wastes involved.

2.7. Risk and public perception

Since the Gateshead case there have been some important changes. Planning guidance on waste has advanced, as have the national waste policies through the development of the National Waste

²⁰ *'Making Waste Work - A strategy for sustainable waste management in England and Wales'*, Cm3040, Department of the Environment/Welsh Office Dec. 1995

²¹ R. v Bolton Metropolitan Borough Council ex. parte Roger Arthur Kirkman

Strategy. More importantly than this has been the introduction of the Waste Management Licensing Regulations and hence the introduction of the 'relevant objectives' into UK law. The planning functions exercise by local authorities must have regard to the relevant objectives. The case law has also developed with the recent Bolton Incinerator cases bringing the assessment of the 'Best Practicable Environmental Option' (BPEO) for waste streams into the frame of materiality. The court of appeal decision on the Bolton case also suggests that the division between planing and pollution controls is no longer as clear in respect of waste management facilities.

There have also been important developments in relation to the materiality of public perceptions of risk. Mr Justice Glidewell said in the Gateshead Court of Appeal judgement:

"Public concern is, of course, and must be recognised by the Secretary of State to be a material consideration for him to take into account. But if in the end that public concern is not justified, it cannot be conclusive".

In the case of this site there is public concern (hence, the reason for me being commissioned to write this report) and I believe that this report has demonstrated that concern to be justified. However the Browning Ferris case²² takes the Glidewell judgement further. The Court of Appeal allowed the application by Newport Borough Council and quashed the decision by the Secretary of State. This is described in the Sept. 1998 Journal of Planning Law as:

"...a very significant decision, for it establishes that - (i) public concern, even if objectively unfounded, is a material consideration to be taken into account on the question of costs. Arguably this conclusion has wider application. There appears to be no reason why public concern per se requires objective expert justification. (ii) In some circumstances an objectively unfounded, albeit genuine, fear (i.e. public concern) can of itself constitute a valid reason for refusing planning permission."

We consider this to be a very important development and, together with the West Midlands and Broadlands cases²³, gives powerful evidence that the local concerns can be weighed heavily. Reference should also be made to a paper in the October 1998 issue of the Journal of Planning Law, 'Public Concern: The decision-makers' dilemma'. The paper concludes:

"Recent cases, confirming that public concern is a material consideration, pave the way for potentially the most significant development in planning law since the introduction of section 54(A) of the Town and Country Planning Act 1990 ... recognition that "NIMBY" objections to posses real teeth!"²⁴

Local people's objections are deeper than NIMBY - we believe that rejection of this proposal will result in the development of more sustainable waste and resource management options.

In our view significant issues have been raised with regard to the safety of the proposed development, and the long-term impacts of emissions from the tipped waste on the environment. There are clear questions about the suitability of this site for waste disposal due to geotechnical and landfill engineering limitation - caused mainly by the failure of the applicant to produce a detailed environmental report. We have also raised points with regard to the legal process that should be undertaken in determining this application. We therefore believe that there is sufficient weight of public evidence to justify citing concern about the development as a material consideration in refusing permission.

²² *Newport Borough Council v SoS Wales and Browning Ferris Environmental Services Ltd [1998] JPL 377*

²³ *West Midlands Probation Committee v. Secretary of State for the Environment and Walsall Metropolitan Borough Council [1998] JPL. 388.*

R. v. Broadland District Council and others ex parte Dave, Harpley and Wright, January 1998.

²⁴ *'Public Concern - The Decision Maker's Dilemma', Neil Stanley. JPL [1998] 919-934*

3. Recommendations to planning authority

3.1. Evaluation of proposal

In general terms, when considering material issues before determining a planning application the general balance to be applied is the 'need' for the development versus any 'harm' that development would cause. It is clear that this development would cause disamenity to nearby properties, and possibly significant pollution of the environment. That has been characterised in many case studies of badly designed and sited landfills.

Is there a pressing need to rush the restoration of this site? In my view that need has not been demonstrated. Firstly, because of the failure to adequately quantify the site inputs, the capacity, and the service area of the landfill. Secondly, the fact that there have been problems filling the landfill - or there appears to be given the shortfall of material - then there is clearly no pressing demand for the development. Consideration should therefore be given to the alternative scenario of permitting only the short-term restoration of the site, irrespective of whether the void has been entirely filled or not.

It is clear that no serious consideration is given to the 'sustainability' of this proposal. I believe that the planning authority should require that the applicant submit clear details on the sustainability implications of this development. This statement should clearly reference the guidance in the UK Sustainable Development Strategy, '*A Better Quality of Life*', and the draft Sustainable Waste Management Strategy, '*A Way With Waste*'.

Insofar as the planning authority are a competent authority under the Waste management Licensing Regulations, they must be able to demonstrate the application of the relevant objectives when considering this development. In terms of role, planning authorities assess 'damage' to interests of acknowledged importance. This of course gives them a more holistic view than the Environment Agency who can only consider what is before them in a waste license application. But beyond that a planning authority has a much greater freedom to identify and define 'harm' to interests of acknowledged importance. In determining this application the planning authority must prove to the public that they have considered the relevant objectives of the Framework Directive on Waste by implementing Schedule 4 of the Waste Management Licensing Regulations.

The failure of the applicant to provide detailed geological information is a significant flaw in the whole application. Especially given that it is a legal obligation of the planning authority to satisfy itself on the safety of the site for the purpose intended. In summary, this is a complex geology. The nature of the South Wales Coalfield makes clear deduction from such limited information difficult. The presence of mineral workings close by, and a former mineworking immediately adjacent to the site, makes it difficult to judge the nature of the hydrogeological system in the area. The presence of mineworkings also raises the issue of subsidence.

The acknowledged poor characterisation of the glacial deposits means that there is great uncertainty about the suitability of the location for the deposit of leachable/degradable waste. The presence of potential avenues for migration in the glacial deposits, and at the interface between the glacial and solid geology, also raises the possibility of landfill gas as well as leachate migration. The body of evidence on geology is too vague, with large gaps in the knowledge about local ground conditions, to allow the development of a landfill site in this location.

The long-term suitability of the site, and its ability to contain the pollutants placed into it, has not been established in the reports provided by the applicant. These issues are not abstract. They relate directly to the planning system, as found in a recent landfill appeal in Lancashire. The safety of this site over the stabilisation period, the leakage of leachate which can be anticipated, and the effects of that leachate on human health and the environment have not been properly assessed. Without some form of engineering assessment to gauge the level of gas and leachate emissions from the site then

impacts on the environment cannot be judged. If this information is not provided permission must be refused.

Objective analysis using the information that is available shows that there is a potential risk from leachate should it find a low permeability route to the environment. In my view this application does not objectively establish that risk to the environment and human health can be minimised, and therefore the planning authority should invoke the precautionary principle and refuse this application.

The information supplied with the planning application provides no detailed information on the sources and compositions of the waste which will be used to fill the site. Therefore not only is proximity difficult to prove, but it is not possible to have any regard to the '*best practicable environmental option*' (BPEO). Therefore the planning authority should refuse permission for this development unless information can be provided to prove that this site is the closest possible site for disposal to the major sources of waste - given alternative options for disposal that may exist - and that it is the best option for the wastes involved.

The planning authority were clearly correct in requesting an environmental statement for this development under Schedule 2 of the 1999 Regulations. Given that regulation 3(2) of the Environmental Impact Assessment Regulations prohibits the granting of planning permission until the environmental information can be considered, the planning authority cannot determine this application until:

- An environmental statement has been served by the applicant;
- That environmental statement has received the required publicity; and
- The content of the environmental statement has been considered by the planning authority, and that an opinion on the content of the statement can be made in accordance with the regulations.

In our view significant issues have been raised with regard to the safety of the proposed development, and the long-term impacts of emissions from the tipped waste on the environment. There are clear questions about the suitability of this site for waste disposal due to geotechnical and landfill engineering limitation - caused mainly by the failure of the applicant to produce a detailed environmental report. We have also raised points with regard to the legal process that should be undertaken in determining this application. We therefore believe that there is sufficient weight of public evidence to justify citing concern about the development as a material consideration in refusing permission.

The important balance we are seeking in the application is the 'harm' this development will cause versus the 'need' for this development. However, purely on the basis of the restoration argument, there is no benefit from this development because there is no urgency to restore this site. There are other potential afteruses which could see a much lower impact restoration of this site to a beneficial afteruse.

If the applicant's proposal is unsuitable:

- on the grounds of the importation of materials; or
- the continuation of disturbance for at least another ten years due to filling operations on the site;
or
- because of the uncertainties about the need for the site, when balanced with the risk to the environment it creates...

then serious consideration should be given to approaching the site operator in order to propose the compromise solution of seeking the immediate restoration of the site using the materials already available.

In short - this is a very poor planning application!

There are a number of legal objections to the granting of planning permission due to errors by the applicant. In my view I also believe that the artificial use of the term 'restoration' to describe a landfilling proposal has contributed to serious shortcomings in the examination of this proposal in the reports provided.

In my view there are two priorities:

1. To request that the applicant withdraw their application.
2. If they will not withdraw the application, bring the matter before the planning committee and refuse permission on the basis of the objections outlined in the following section.

3.2. Reasons for refusal

When determining an application for planning permission the consideration a planning authority must generally make is:

- Is the application acceptable;
- Is the application unacceptable, but could be made acceptable through the imposition of conditions;
- Is the application totally unacceptable, and therefore must be refused.

In the case of this application the situation is further complicated because of legal difficulties:

- There is insufficient information to apply the 'relevant objectives' of the Framework Directive on Waste (required by Schedule 4 of the Waste Management Licensing Regulations 1994);
- There has been no proper consideration of 'best practicable environmental option' (established as necessary in the *Bolton* case);
- No environmental statement has been prepared in accordance with the EIA Regulations.

3.2.1. Lack of an environmental statement

The lack of an environmental statement important since the new environmental assessment regulations impose a new duty on planning authorities:

3. - Prohibition on granting planning permission without consideration of environmental information

1. *This regulation applies -*
 - a) *to every EIA application received by the authority with whom it is lodged on or after the commencement of these Regulations; and*
 - b) *to every EIA application lodged by an authority pursuant to regulation 3 or 4 (applications for planning permission) of the General Regulations on or after that date;*

and for the purposes of this paragraph, the date of receipt of an application by an authority shall be determined in accordance with paragraph (3) of article 20 (time periods for decision) of the Order.
2. *The relevant planning authority or the Secretary of State or an inspector shall not grant planning permission pursuant to an application to which this regulation applies unless they have first taken the environmental information into consideration, and they shall state in their decision that they have done so.*

Therefore in granting any permission it must be demonstrated that the relevant environmental issues

have been addressed - they can no longer be ignored or circumvented.

Ordinarily where legal problems exist the applicant should be invited to submit information to solve the problem. However in this problem I see two practical difficulties:

- The time taken to produce a new environmental statement could be excessive, particularly if, as part of the screening assessment the planning authority require new issues to be considered, or existing issues to be considered in more detail.
- In order to produce the information required to satisfy the various legal objections a whole new round of consultation would have to be undertaken because the new information would introduce new issues.

Therefore, in terms of expediently dealing with this application in the interests of all concerned, we suggest that before this application is finally resolved by the planning authority the applicant is requested to withdraw their application, and submit a new application at a later date. However, should this application be put before a committee the planning authority should refuse it on the basis of:

- **An environmental statement has not been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999;**
- **There is insufficient information in the environmental statement for the planning authority, having regard to Regulation 3 of the 1999 Regulations, to discharge its obligations under Schedule 4 of the Waste Management Licensing Regulations, and to resolve the issue of the proximity principle and the 'best practicable environmental option'.**

3.2.2. Failure to Comply with 'Relevant Objectives'

The 'relevant objectives' are set in Schedule 4 of the Waste Management Licensing Regulations 1994. As noted a number of times above, these objectives are binding on the local planning authority. In my view the following objectives are breached by this application (all quoted in relation to paragraph 4 of the Schedule 4 of the Waste Management Licensing Regulations):

- **Subparagraph 1(a):** On the basis of the information in the submitted reports it is my view that this application, if permitted, would enable the disposal of waste in a manner which would '*endanger human health or the environment*'. No evidence has been presented in the contrary. The failure to consider cross-cutting issues such as nature conservation has also been ignored because of the failure to apply the rigour of a full environmental impact assessment.
- **Subparagraph 1(a)(i):** The effects of this development, over the long term, will be to create a '*risk to water, air, soil and plants*'. This is a highly sensitive location, and landfilling of any waste should be carried out on this site with extreme caution. I do not believe that the long-term containment of contaminants in the site has been demonstrated.
- **Subparagraph 2(a) and 2(b)(ii):** This development cannot be considered to be part of the need to establish '*an integrated and adequate network of waste disposal installations, taking account of the best available technology not entailing excessive cost*'. Proximity has not been demonstrated. BPEO has not been demonstrated. The need for additional capacity has not been demonstrated. Without these three assessments we cannot be certain that this site is required. Also, in terms of the '*best available technology*' and '*protection of the environment*', for such sensitive sites like this, there are much better designs of landfill liner which give much greater protection to the environment - for example double composite liners.
- **Subparagraph 3(a), 3(a)(i) and (iii), and 3(b)(i):** This site facilitates the final disposal of waste. In the absence of a BPEO assessment there is no way to prove that the requirement to encourage waste reclamation is being undertaken. This site, in my view, will continue to facilitate final

disposal for the majority of the waste stream.

There are clear and demonstrable grounds for the breach of the objectives. I do not believe that if this case went to appeal, on the basis of the evidence produced in the environmental statement, there can be few, if any, alternate deductions. The planning authority are bound by the obligations imposed by Schedule 4 of the Waste Management Licensing Regulations. If these are not properly discharged it could mean that the planning authority could face a judicial review from the opponents of this scheme. In the circumstances the planning authority should, on the basis of uncertainty, refuse permission for the development.

3.2.3. Failure to Identify 'Best Practicable Environmental Option' and Proximity

There is a serious lack of evidence in relation to the source of the waste to be deposited at this site, and its composition. The applicant has not, as is required by the *Bolton* judgement, provided sufficient evidence to prove BPEO. There is also no demonstrable case of need based, upon the proximity principle, made in the environmental statement (regional self-sufficiency does not guarantee proximity, and maintenance of a landbank work contrary to both proximity and the use of demand management as a means of moving waste operations further up the waste hierarchy).

There has been no proven calculation of landfill capacity and site inputs to justify the release of this site over any particular timescale. In my view the site could be as liable to take waste from long distances as it would local sources - contrary to the proximity principle. No evidence has been produced by the applicant to prove any other case.

In using this reason the planning authority must cite the Bolton judgement, and the guidance from *Planning Guidance Wales - Planning Policy*, the draft National Waste Strategy, 'A Way With Waste', and the recently adopted EC Landfill Directive.

Given the problems regarding BPEO and proximity, the applicant should be asked to provide detailed information as to the source and composition of the waste it is proposed to deposit at the site. As part of this new information, the applicant should demonstrate that the site meets the proximity principle in terms of the possibility of other sites possibly being available to serve the need of other areas. Likewise, it should be demonstrated, especially considering the changes to waste management over the next five to seven years that will be the result of the new EC Landfill Directive, that landfilling at this site is BPEO. If this information is not forthcoming, or the results are not satisfactory permission should be refused.

3.2.4. Protection of Health and Amenity

There is clear doubt over the engineering of the site. Additional engineering to reduce leakage of leachate from the site will also have the effect of prolonging the period over which the landfill site stabilises. There are also concerns regarding the operation of the leachate collection system.

Given the evidence produced in this report on behalf of local residents I believe that there is sufficient cause to prove that opposition to the scheme on the grounds of efficacy and safety meets the criteria set by the recent Browning-Ferris judgement. The planning authority should give due regard to the view of the public in forming its determination. It is important to use the precedent set in the Browning-Ferris case in considering the evidence in this report, and other objections.

3.3. Consideration of appeal proceedings

In terms of the possibilities of an appeal, I see no problem in defending any appeal with evidence as poor as that submitted by the applicant - so long as the correct reasons for refusal are cited. The chief reason for refusal would be the legal problems in giving this application permission in its current form, especially the lack of an environmental statement. Next there are the 'waste issues' relating to the Framework Directive, BPEO and proximity. Finally, there are significant issues in terms the damage to local residents amenities, damage to sensitive wildlife sites, the potential for harm to human health, and the public's concern over all these issues.

OUR PRIMARY CONCERN IF THERE IS AN APPEAL IS THAT THE PROCEEDINGS ARE CARRIED ON AS A FULL PUBLIC INQUIRY. NOT AS AN INFORMAL PRIVATE HEARING, OR BY WRITTEN REPRESENTATION. WE THEREFORE REQUEST IF AN APPEAL IS BROUGHT THAT THE COUNCIL IMMEDIATELY ASK FOR A FULL PUBLIC INQUIRY.

It is our view that the proceeding must take place within the forum of a full public inquiry so that the public can assist the planning authority in the defeat of this proposal

Some local authorities, and some elected members of authorities, are sometimes reticent because of the potential costs of a public inquiry. Some even fear surcharging for making a bad planning decision. In our view this is mistaken assumption. This is backed up by the position stated in a recent government guide to planning enforcement²⁵:

1.7. Nevertheless, the authority should not be inhibited from taking enforcement action which they consider essential in the public interest by any suggestion that individual members of the Planning Committee could be "surcharged" if there is a subsequent award of appeal costs against the authority for "unreasonable" conduct. The provisions of section 20(1) (b) of the Local Government Finance Act 1982 enable the auditor to certify that an amount is due for recovery where "a loss has been incurred or deficiency caused by the wilful misconduct of any person". It seems most unlikely that a Planning Committee's collective decision, even if it is contrary to officers' advice, would ever amount to "wilful misconduct", unless it was made for an improper purpose.

In our view if the applicant were to maintain his position into a public inquiry we would not only win, but we would also hope to secure costs.

We therefore request that on receipt of an appeal notice you request a public inquiry at the earliest opportunity.

²⁵ *Enforcing Planning Control: Good Practice Guide for Local Planning Authorities*, DETR 1997.

4. Appendices

4.1. Schedule 4, The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI. 1999/293)

SCHEDULE 4: Regulation 2(1) : INFORMATION FOR INCLUSION IN ENVIRONMENTAL STATEMENTS

PART I

1. Description of the development, including in particular -
 - (a) a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;
 - (b) a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
 - (c) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
2. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.
3. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.
4. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:
 - (a) the existence of the development;
 - (b) the use of natural resources;
 - (c) the emission of pollutants, the creation of nuisances and the elimination of waste,and the description by the applicant of the forecasting methods used to assess the effects on the environment.
5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
6. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.
7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

PART II

1. A description of the development comprising information on the site, design and size of the development.
2. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.
3. The data required to identify and assess the main effects which the development is likely to have on the environment.
4. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.
5. A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.

4.2. Part 1, schedule 4, Waste Management Licensing Regulations 1994 (SI. 1994/1056)

1. Interpretation of Schedule 4

In this Schedule, unless the context otherwise requires -

"competent authority" has the meaning given by paragraph 3;

"development", "development plan", "government department" and "planning permission" have the same meaning as in the Town and Country Planning Act 1990 or, in Scotland, as in the Town and Country Planning (Scotland) Act [1997];

"licensing authority" and "the Ministers" have the meaning given by section 24 (1) of the Food and Environment Protection Act 1985;

"local planning authority" and "the planning Acts" have the same meaning as in the Town and Country Planning Act 1990;

"permit" means a waste management licence, a disposal licence, an authorisation under Part I of the 1990 Act, a licence under Part II of the Food and Environment Protection Act 1985 or a consent under Chapter II of Part III of the Water Resources Act 1991 or under Part II of the Control of Pollution Act 1974 (and, in relation to a permit, "grant" includes give, issue or pass, "modify" includes vary, and cognate expressions shall be construed accordingly) ;

"plan-making provisions" means paragraph 5 below, section 50 of the 1990 Act [and] Part II of the Town and Country Planning Act 1990 or, in Scotland, Part II of the Town and Country Planning (Scotland) Act [1997] [and section 44A of the Environmental Protection Act 1990, or in Scotland, section 44B of that Act];

"planning authority" means the local planning authority, the person appointed under paragraph 1 of Schedule 6 to the Town and Country Planning Act 1990 or, as the case may be, the government department responsible for discharging a function under the planning Acts or, in Scotland, the planning authority (as defined in section 172 of the Local Government (Scotland) Act 1973) , the person appointed under paragraph 1 of Schedule 7 to the Town and Country Planning (Scotland) Act 1972, or, as the case may be, the government department responsible for discharging a function under the Town and Country Planning (Scotland) Act 1972, and the Secretary of State shall be treated as a planning authority in respect of his functions under the planning Acts or, in Scotland, the Town and Country Planning (Scotland) Act 1972;

"pollution control authority" means any competent authority other than a planning authority;

"river purification authority" has the meaning given by section 17 of the Rivers (Prevention of Pollution) (Scotland) Act 1951;

"specified action" means any of the following -

(a) determining -

(i) an application for planning permission; or

(ii) an appeal made under section 78 of the Town and Country Planning Act 1990 or, in Scotland, under section 33 of the Town and Country Planning (Scotland) Act 1972, in respect of such an application;

(b) deciding whether to take any action under section 141 (2) or (3) or 177 (1) (a) or (b) of the Town and Country Planning Act 1990, or under section 196 (5) of that Act as originally enacted, or under section 35 (5) of the Planning (Listed Buildings and Conservation Areas) Act 1990 or, in Scotland, under section 85 (5) (a) , (b) or (c) , 91 (3) (as enacted prior to its repeal) or 172 (2) or (3) of, or paragraph 2 (6) of Schedule 17 to, the Town and Country Planning (Scotland) Act 1972;

(c) deciding whether to direct under section 90 (1) , (2) or (2A) of the Town and Country Planning Act 1990 or, in Scotland, section 37 (1) of the Town and Country Planning (Scotland) Act 1972 or paragraph 7 (1) of Schedule 8 to the Electricity Act 1989, that planning permission shall be deemed to be granted;

(d) deciding whether -

(i) in making or confirming a discontinuance order, to include in the order any grant of planning permission; or

(ii) to confirm (with or without modifications) a discontinuance order insofar as it grants

planning permission, and, for the purposes of this sub-paragraph, "discontinuance order" means an order under section 102 of the Town and Country Planning Act 1990 (including an order made under that section by virtue of section 104 of that Act), or under paragraph 1 of Schedule 9 to that Act (including an order made under that paragraph by virtue of paragraph 11 of that Schedule), or, in Scotland, an order under section 49 of the Town and Country Planning (Scotland) Act 1972 (including an order made under that section by virtue of section 260 of that Act);

(e) discharging functions under Part II of the Town and Country Planning Act 1990 or, in Scotland, Part II of the Town and Country Planning (Scotland) Act 1972.

2. - Duties of competent authorities

- (1) Subject to the following provisions of this paragraph, the competent authorities shall discharge their specified functions, insofar as they relate to the recovery or disposal of waste, with the relevant objectives.
- (2) Nothing in sub-paragraph (1) above requires a planning authority to deal with any matter which the relevant pollution control authority has power to deal with.
- (3) In a case where the recovery or disposal of waste is or forms part of a prescribed process designated for local control under Part I of the 1990 Act, and either requires a waste management licence or is covered by an exemption conferred by regulation 17 (1) of, and Schedule 3 to, these Regulations, nothing in sub-paragraph (1) above shall require a competent authority to discharge its functions under -
 - (a) Part I of the 1990 Act in order to control pollution of the environment due to the release of substances into any environmental medium other than the air; or
 - (b) Part II of the 1990 Act in order to control pollution of the environment due to the release of substances into the air resulting from the carrying on of the prescribed process.
- (4) In sub-paragraph (3) above, "prescribed process", "designated for local control", "pollution of the environment due to the release of substances into the air" and "pollution of the environment due to the release of substances into any environmental medium other than the air" have the meaning which they have in Part I of the 1990 Act.

3. - Meaning of "competent authority" etc.

- (1) For the purposes of this Schedule, "competent authority" means any of the persons or bodies listed in column (1) of Table 5 below and, subject to sub-paragraph (2) below, in relation to a competent authority "specified function" means any function of that authority listed in column (2) of that Table opposite the entry for that authority.

Table 5

Competent authorities (1)	Specified functions (2)
Any planning authority.	The taking of any specified action.
A waste regulation authority, the Secretary of State or a person appointed under [section 114 (1) (a) of the Environment Act 1995].	Their respective functions under Part II of the 1990 Act in relation to waste management licences, including preparing plans or modifications of them under section 50 of the 1990 Act [and preparing the strategy, or any modification of it, under section 44A or 44B of that Act].
A disposal authority or the Secretary of State.	Their respective functions under Part I of the Control of Pollution Act 1974 in relation to disposal licences and resolutions under section 11 of that Act.
A licensing authority or the Ministers.	Their respective functions under Part II of the Food and Environment Protection Act 1985, or under paragraph 5 below.
An enforcing authority, the Secretary of State or a person appointed under [section 114 (1) (a) of the Environment Act 1995].	Their respective functions under Part I of the 1990 Act in relation to prescribed processes except when -(a) the process is designated for local control; and (b) it is an exempt activity carried out subject to the conditions and limitations specified in Schedule 3.

Competent authorities (1)	Specified functions (2)
The National Rivers Authority or the Secretary of State.	Their respective functions in relation to the giving of consents under chapter II of Part III of the Water Resources Act 1991 (offences in relation to pollution of water resources) for any discharge of waste in liquid form other than waste waters.
In Scotland, a river purification authority or the Secretary of State.	Their respective functions in relation to the giving of consents under Part II of the Control of Pollution Act 1974 (pollution of water) for any discharge of waste in liquid form other than waste waters.

- (2) In Table 5 above, references to functions do not include functions of making, revoking, amending, revising or re-enacting orders, regulations or schemes where those functions are required to be discharged by statutory instrument.

4. - Relevant objectives

- (1) For the purposes of this Schedule, the following objectives are relevant objectives in relation to the disposal or recovery of waste -
- (a) ensuring that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment and in particular without -
 - (i) risk to water, air, soil, plants or animals; or
 - (ii) causing nuisance through noise or odours; or
 - (iii) adversely affecting the countryside or places of special interest;
 - (b) implementing, so far as material, any plan made under the plan-making provisions.
- (2) The following additional objectives are relevant objectives in relation to the disposal of waste -
- (a) establishing an integrated and adequate network of waste disposal installations, taking account of the best available technology not involving excessive costs; and
 - (b) ensuring that the network referred to at paragraph (a) above enables -
 - (i) the European Community as a whole to become self-sufficient in waste disposal, and the Member States individually to move towards that aim, taking into account geographical circumstances or the need for specialised installations for certain types of waste; and
 - (ii) waste to be disposed of in one of the nearest appropriate installations, by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health.
- (3) The following further objectives are relevant objectives in relation to functions under the plan-making provisions -
- (a) encouraging the prevention or reduction of waste production and its harmfulness, in particular by -
 - (i) the development of clean technologies more sparing in their use of natural resources;
 - (ii) the technical development and marketing of products designed so as to make no contribution or to make the smallest possible contribution, by the nature of their manufacture, use or final disposal, to increasing the amount or harmfulness of waste and pollution hazards; and
 - (iii) the development of appropriate techniques for the final disposal of dangerous substances contained in waste destined for recovery; and
 - (b) encouraging -
 - (i) the recovery of waste by means of recycling, reuse or reclamation or any other process with a view to extracting secondary raw materials; and
 - (ii) the use of waste as a source of energy.

4.3. Section 14, Planning Guidance Wales - Planning Policy (April 1999)

3.2 Sustainable Development

3.2.1 Sustainable development is commonly defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. [Report of the World Commission on Environment and Development (The Brundtland Report) 1987. Opportunities for Change, consultation paper on a revised UK Strategy for Sustainable Development, DETR/WO 1998] The Government's vision of sustainable development is based on 4 broad objectives:

- maintenance of high and stable levels of economic growth and employment;
- social progress which recognises the needs of everyone;
- effective protection of the environment;
- and prudent use of natural resources.

The National Assembly for Wales has a duty to make a scheme setting out how it proposes, in the exercise of its functions, to promote sustainable development. Although it will be for the Assembly to decide how to meet its sustainable development duty, it is likely to affect all the Assembly's functions, including those relating to planning. [Government of Wales Act 1998, s.121]

A key role of the planning system is to provide homes, investment and jobs in a way which is consistent with the principle of sustainable development. Development plans should be consistent with this principle. [Sustainable Development: Towards Better Practice Guide, DETR 1998]

14. Waste Treatment and Disposal

14.1 The Government's general policy towards waste management is based on a hierarchy of: reduction, re-use; recovery (including material recycling, energy recovery and composting); and safe disposal. A sustainable approach to waste management will in general require greater emphasis on reduction, re-use and recovery, and less reliance on disposal without recovery. Local authorities may wish to consider recovering energy from waste as an option in conjunction with recycling and composting activities. Waste should be disposed of (or otherwise managed) as close to the point of its generation as possible. This means that in Wales the aim should be to provide sufficient facilities to treat or dispose of all the waste produced. Local authorities should encourage the movement of waste by rail and water rather than by road wherever economically feasible and having regard to the proximity principle. Development plans should reflect these aims, and indicate the regard which the local planning authority has had to any waste management plan in its area. [Making Waste Work- A Strategy for Sustainable Waste Management in England and Wales, Cm3040, 1995. TCP (Development Plan) Regulations 1991, SI. 1991/2794, Regulation 9]

14.2 Planning authorities in determining applications, are obliged by EC Directives on waste to establish an adequate network of waste disposal installations, and to ensure that waste is recovered or disposed of without harming the environment, without endangering human health or causing a nuisance through noise, or adversely affecting the countryside or places of special interest. [Article 5, EC Framework Directive on waste (75/442/EEC, as amended by 91/156/EEC)]

14.3 The Environment Agency, which has responsibility for waste regulation, and local planning authorities are expected to work closely together to ensure the planning and pollution control regimes are implemented in a complementary way. [Environment Act 1995. Welsh Office Circular 46/95, Environment Act 1995: Transfer of Property Rights and Liabilities from Waste Regulation Authorities to the Environment Agency]