Yr Arolygiaeth Gynllunio, Adeilad y Goron, Parc Cathays,
Caerdydd CF10 3NQ ☎ 029 2082 3889 Ffacs 029 2082 5150
e-bost wales@planning-inspectorate.gsi.gov.uk

The Planning Inspectorate, Crown Buildings, Cathays Park,
Cardiff CF10 3NQ ☎ 029 2082 3889 Fax 029 2082 5150
e-mail wales@planning-inspectorate.gsi.gov.uk

Adroddiad

Ymchwiliad a agorwyd ar 07/09/04
Ymweliad â safle a wnaed ar 16 & 22/9/04

Report

Inquiry opened on 07/09/04
Site visit made on 16 & 22/9/04

gan/by Clive Nield BSc, CEng, MICE, MCIWEM

Arolygydd penodwyd gan Cynulliad Cenedlaethol Cymru

an Inspector appointed by the National Assembly for Wales

Dyddiad/Date 08 – 11 - 04

TOWN AND COUNTRY PLANNING ACT 1990

SECTION 77

MERTHYR TYDFIL COUNTY BOROUGH COUNCIL

APPLICATION BY MILLER ARGENT (SOUTH WALES) LIMITED

LAND SITUATED AT FFOS-Y-FRAN, EAST MERTHYR

Cyf ffeil/File ref: APP/U6925/X/04/514548

CONTENT

File Ref: APP/U6925/X/04/514548

Site address: Land situated at Ffos-y-fran, East Merthyr

- The application was called in for decision by the National Assembly for Wales by a direction, made under section 77 of the Town and Country Planning Act 1990, on 1 December 2003.
- The application is made by Miller Argent (South Wales) Limited to Merthyr Tydfil County Borough Council.
- The application (Ref 030225) is dated 30 April 2003.
- The development proposed is the Ffos-y-fran Land Reclamation Scheme, incorporating the extraction of coal by opencast methods, and being the final phase of the East Merthyr Reclamation Scheme.
- The reason given for making the direction was that the proposed development raises planning issues of more than local importance in that it would have wide effects beyond the immediate locality, particularly with regard to groundwater and waste disposal issues.
- On the information available at the time of making the direction, the following were the matters on which the National Assembly for Wales particularly wished to be informed for the purpose of its consideration of the application: - impact on surface and groundwater resources;
  - the relevant national policies as set out in Planning Policy Wales (March 2002) and Minerals Planning Policy Wales (Dec 2000);
  - policies in the adopted Merthyr Tydfil Local Plan.
- The inquiry sat for 8 days on 7 – 10 September 2004 and 14, 15, 17 & 20 September 2004.

Summary of Recommendation: The application be approved and permission be granted.

Preamble

1. This report includes descriptions of the site and surrounding area, the proposed development, the planning history and policies, the gist of representations made, my appraisal and conclusions and my recommendation. Document references are shown in brackets, and in my appraisal and conclusions the numbers in square brackets indicate the relevant paragraphs of the report. Details of the people who took part in the Inquiry and comprehensive lists of the documents and plans referred to are attached at the end of the report, and possible conditions are attached as an annex.

Procedural Matters

2. An agreed schedule of application documents and supporting information submitted to the Local Planning Authority is contained in Appendix 1 of the Statement of Common Ground (Core Document CD 075). The main documents are the Planning Application and Supporting Information (Core Document CD 001), the Environmental Statement prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (Core Documents CD 002 – CD 005), a Transport Assessment (Core Documents CD 006 & 007), and a report on a Geoenvironmental Ground Investigation of the Hoover, Merthyr and Tip 13 Landfills (Core Document CD 054). These 3 former landfill tips lie within the application site and would be disturbed by the proposed scheme.

3. Appendix 2 of the Statement of Common Ground contains an agreed schedule of plans that form part of the planning application or have been provided as supporting information to aide assessment of the scheme. 3 plans are identified as part of the application itself: FLRS/PA1, 2 & 3 (Plans A1 – A3). The figures and drawings of the Environmental Statement (Core Document CD 003) are also listed.

4. A useful glossary of terms used in the Environmental Statement and in other documents is contained in Core Document CD 073.

5. The application was called in for determination by the National Assembly for Wales on 1 December 2003 as it was considered that the proposal would have wide effects beyond the immediate locality, particularly with regard to groundwater and waste disposal issues. Following the submission of further information, the Assembly Minister acknowledged in a letter dated 14 January 2004 (e12 in Core Document CD 040) that the waste disposal issues did not justify call-in, and this matter was not included in the Assembly's Rule 6(12) statement of matters on which it particularly wished to be informed, contained in the Planning Inspectorate's subsequent letter of 14 April 2004 (e21 in Core Document CD 040). Nevertheless, evidence was heard on it at the public inquiry.

6. In order to determine whether the Local Planning Authority should support or oppose the proposal the Council's Head of Planning presented a detailed report to a Special Council meeting on 20 June 2004 recommending that it support the proposals, subject to conditions and associated environmental safeguards (Core Document CD 037). The Council accepted the recommendation by a vote of 20 for, 7 against and 6 abstaining and/or declaring an interest (as recorded in the following week's local paper, and subject to confirmation of the minutes) (Document A13). Thus the Council's position at the public inquiry was one of support for the proposal.

7. At the inquiry 13 witnesses presented evidence on behalf of Miller Argent, the applicant company. In addition to the Council, further support was also provided by representatives of the Confederation of UK Coal Producers and the Transport & General Workers Union and by 2 local residents. Opposition was provided by 2 organised groups, the Merthyr Initiative Group and the Merthyr Tydfil Anti Opencast Campaign, by representatives of the Swansea Friends of the Earth and by 13 local residents.

8. The application site is adjacent to the County boundary along part of its eastern edge, and the Caerphilly County Borough Council originally intended to appear at the inquiry as an objector. However, after further discussions with Miller Argent and after taking independent advice, Caerphilly CBC withdrew its objections subject to certain conditions and environmental safeguards (Document 11.3). Miller Argent has entered into a Planning Obligation to Caerphilly CBC (under Section 106 of the 1990 Act) to address the various matters of concern (Document A6).

9. Independent evidence was presented at the inquiry on behalf of the Merthyr Tydfil Local Health Board (Documents 9 & 10). CADW also originally indicated that it would present evidence at the inquiry but later advised that its statement should instead be taken as a written representation (Document 12).

10. I held a pre-inquiry meeting on 29 June 2004. During the course of the inquiry I carried out an extensive site visit over a period of 2 days, 16 and 22 September 2004. The itinerary included visits to several key viewpoints of the site and to the nearby residential areas and a visit to the Nant Helen Opencast Coal site to observe the operations and a blasting event. A wide range of features within and adjacent to the application site were also visited. The itinerary is detailed in Document 31.1 and included all features suggested by the various parties. I was accompanied throughout the site visits by representatives of Miller Argent and the Council and by several representatives of the opposition groups and local residents (see lists in Documents 31.2 & 31.3).

11. Applications under Sections 247 and 257 of the Town and Country Planning Act 1990 were made by Miller Argent to the National Assembly for Wales on 23 June 2004 (Core Document CD 074). These were for the associated stopping-up, diversion and improvement of the unclassified common road known as Bogey Road, which runs through the application site, and stopping-up of footpaths that lie over the site. These applications have not been considered at the public inquiry, other than as material considerations in connection with the planning application itself.

Site and Surroundings (Core Document CD 075)

12. The application site is some 400.6 hectares in size and lies on the eastern edge of Merthyr Tydfil, about 2 km east of the town centre. It is about ½ km south of Dowlais, 3 km north of Bedlinog, 1½-2 km north west of Fochriw, and ¾ km east of the Merthyr districts of Penydarren, Thomas Town and Twynyrodyn. The western boundary follows the alignment of the recently diverted A4060(T) trunk road, and the south western boundary is close to Mountain Hare. The site area is shown on location plan FLRS/PA2 (Plan A2).

13. The site is essentially in 2 parts, to the north and south of the Bogey Road. The northern part is bounded by the A4060(T) trunk road to the west and north-west, the Trecatti Refuse Site to the north-east and the boundary with Caerphilly CBC to the east. The southern part extends some 1-1½ km south of the Bogey Road with the wooded valley of the Nant Gyrawd as its eastern boundary and the access road to the Bryn Caerau, Cwmbargoed and Nant-y-ffin farmsteads as its south-western boundary. The Cwmbargoed Rail Disposal Point, which would handle the coal produced, lies immediately to the east of the site.

14. The majority of the site is classed as derelict and unsightly and contains the remains of former workings and spoil tips. It is crossed by several power lines, existing and disused railway lines, small roads and tracks. The main site features and landscape are illustrated on Figure FLRS/ES1 in Core Document CD 003. The northern and western part of the site occupies exposed high land overlooking Dowlais and Merthyr. It is characterised by steep, unnatural slopes covered with old mine tips and 3 waste tips containing household and industrial waste. The central part of the site comprises more natural moorland with the land falling gently to the south across farmland between the Bogey Road and the southern boundary. (Core Document CD 005)

15. A large part of the site is common land, and much of the remainder is farm land. The common land is used mostly for the grazing of sheep with some cattle and horses and the farmland mostly for the grazing of sheep. The land lies within the Merthyr Tydfil Landscape of Outstanding Historic Interest and generally reflects its industrial heritage. In particular, it contains a series of ponds and drainage channels associated with the Dowlais Free Drainage System, a complex system both above and below ground, which was constructed in the 18th and early 19th century to collect water and provide a controlled supply to the Dowlais Iron Works located to the north-east of the site. (Core Document CD 005)

Planning History (Core Document CD 075)

16. The agreed planning history is set out in Section 5 of the Statement of Common Ground (Core Document CD 075). The East Merthyr Land Reclamation Scheme (EMLRS) was conceived in the mid-1980s as part of a wider land reclamation programme to deal with some 1300 hectares of derelict land in the County Borough, following earlier initiatives dating back to the Aberfan Tip disaster in 1966. It comprised 3 separate but interrelated phases the first 2 of which have already been completed.

17. The stated aim of the EMLRS was to improve the environment of East Merthyr by reclaiming extensive tracts of derelict land, stabilising the ground, introducing landscaping and, where appropriate, providing infrastructure for future "built" development. Phase 1 (known as Incline Top) covered an area of some 37 hectares between Goat Mill Road, Pantyffin Road and Penydarren High Street and is illustrated on Figure FLRS/PA3 (Plan A3). Deemed planning permission was granted in 1988 and work was completed in June 1993. It comprised the extraction of 0.31 million tonnes of coal by opencast methods to ensure ground stabilisation, land reclamation, the provision of new infrastructure including the Incline Distributor Link Road, and preparation of the land for subsequent residential development (now known as Bradley Gardens).

18. Phase 2 (known as the Great White Tip) covered an area of some 64 hectares between Goat Mill Road and the A4060(T) trunk road (see Figure FLRS/PA3 – i.e. Plan A3). Deemed planning permission was granted in 1988 for both Phase 2 and Phase 3 operations, comprising the extraction of coal by opencast methods, full restoration and landscaping, new road construction and preparation of the land for future development. Phase 2 was carried out between August 1993 and September 1997, and 0.91 million tonnes of coal was extracted.

19. The boundaries of Phase 3 are illustrated on Figure FLRS/PA3 (Plan A3) and covered a total area of 278 hectares bounded by the A4060(T) trunk road, the Bogey Road and Gelligaer Common. The scheme granted permission allowed for some 5.0 million tonnes of coal to be extracted over a period of 8 – 10 years. However, because of land acquisition problems, it was never implemented. A Compulsory Purchase Order was made under the National Parks and Access to the Countryside Act 1949 in respect of some 197 hectares of the land. However, following a public inquiry in 1999, the Order was not confirmed.

20. In 1994 a deemed planning application was submitted for a scheme described as Phase 3A, which would have covered a larger site area of some 549 hectares extending as far as the Trecatti waste disposal site in the north, Fochriw Road in the east and a considerable distance south of the Bogey Road, and allowing for some 10 million tonnes of coal to be extracted over a period of about 15 years. However, that application was withdrawn in May 1999, and in July 1999 a similar application for the same area of land was submitted by a consortium known as CLH Ltd. That application was withdrawn in June 2003. Again, the area of land covered by these applications is illustrated on Figure FLRS/PA3 (Plan A3).

21. The current application bears comparison with the approved Phase 3 East Merthyr Land Reclamation Scheme and the subsequent revised proposals described above.

Proposed Development (Core Document CD 075)

22. An agreed description of the proposed scheme is included in the Statement of Common Ground (Core Document CD 075). A total of some 10.8 million tonnes of proven coal reserves would be extracted, coal well suited for power generation at Aberthaw Power Station. The scheme would achieve the reclamation and restoration of Derelict Land Sites DL14, DL15 and DL52 of the Priority Reclamation Programme identified in Policy GR2 of the adopted Merthyr Tydfil Borough Local Plan (Core Document CD 014). These cover most of the application site and are illustrated on the Local Plan Proposals Map.

23. Within the proposed excavation area there are 49 known shafts and 36 adits from previous iron ore and coal workings, and it would be expected that more would be encountered, as most of the previous mining at Ffos-y-fran predates 1872 when it became mandatory to record mine workings. These would be removed in the proposed coal working.

24. The proposed works would be performed by mechanical excavators, dump trucks and other ancillary plant. Coal seams would be cleaned and loaded into lorries for transport via an internal haul route to the Cwmbargoed Rail Disposal Point, just outside the application site, for onward despatch by rail. Other materials would be excavated and stored at various on-site locations for reuse in the restoration work.

25. The scheme would be carried out in 4 phases with progressive operation and restoration of the land, working in a south-to-north direction, as illustrated on figures FLRS/ES3/1 to FLRS/ES3/6 of the Environmental Statement (Core Document CD 003). The first phase, the development of the box cut, would involve the stripping of soils and soil-forming materials from the excavation and overburden storage areas and initial excavation of the void, commencing in the south-west corner and working in a north-easterly direction, with overburden materials being transported for storage in the Northern and Southern Overburden Mounds and coal being transported to the Cwmbargoed railhead via a controlled crossing of the Bogey Road. A borrow pit would be excavated in the Eastern Overburden Storage Area to release suitable stone for the under-drainage of the overburden mounds. The facilitate access to the Southern Overburden Storage Area a short stretch of the Bogey Road would be realigned and an underpass incorporated for construction traffic.

26. During the initial part of this phase the waste material from Tip 13 and the parts of the Merthyr and Hoover landfill tips that are within the excavation area would be excavated, sorted, recycled and treated as necessary. Inert material (general construction waste) would be used within the site for haul roads and other hardsurfaces. Non-inert waste would be transported off the site, non-hazardous waste going to the nearby Trecatti Tip and hazardous waste to a suitably licensed tip elsewhere. These waste tip operations would take about 9 months.

27. The second phase of the scheme would advance the working void in a north-easterly direction with progressive backfill of the area previously excavated and some overburden movements to the Southern and Eastern Overburden Mounds. As overburden mounds were completed they would be progressively seeded to grass to improve their appearance and reduce dust generation. As the void itself was progressively backfilled to final profiles it would be restored with soils and soil-forming material, cultivated, seeded and planted to complete the restoration scheme on a progressive basis. This phase would continue until the maximum void was achieved.

28. The third phase would involve continued excavation to the north-eastern end of the site, with the size of the void gradually reducing, up to the end of coaling operations. Coal movements would continue throughout this phase but overburden movements would be entirely to the void backfill area; during the latter stages material would begin to be brought back from the Southern Overburden Storage Area. Progressive restoration would continue as the backfilled area advanced behind the working void.

29. The fourth phase would be the final restoration. Overburden would be returned from all of the overburden storage areas, topsoil, subsoil and soil-forming materials would be spread to achieve the restoration profiles and the land would be cultivated, seeded and planted to complete the restoration scheme. The land used for the overburden and soil storage areas would be similarly restored. The general restoration strategy is illustrated in Figure FLRS/ES3/5 (in Core Document CD 003) and would aim to generally restore the land to its former use and to a landform and landscape characteristic of the area. Planting and seeding varieties would reflect this aim.

30. While most of the land would be restored to urban common or agricultural use, certain areas would be protected for nature conservation, archaeological or local heritage purposes. A network of watercourses, drainage channels and water features would be incorporated for livestock watering and to complement the remaining Dowlais Free Drainage System features. Suitable nature conservation habitats would be created, and notable ecological features, such as acid grassland, hedgerows and nesting sites, would be reinstated. Archaeological features protected during operations would be incorporated into the restoration strategy, and a footpath and bridleway network would be provided to reflect the current unregistered routes over the common. The restoration would be subject to an aftercare period of 5 years to ensure that it became well established.

31. Coal production would be anticipated to be 750,000 to 1 million tonnes per annum, and the duration of the scheme would depend on the rate achieved. Preliminary operations would take about 6 months. The period of coaling would be between 11¼ and 14¾ years and the period for return of overburden after coaling about 1¾ years, making a total operational period of between 13½ and 17 years, followed by a 5 year aftercare period.

Planning Policy (Core Document CD 075 & Document 17.1)

32. Relevant planning policy is summarised in Section 4 of the Statement of Common Ground (Core Document CD 075). National Policy is contained in Planning Policy Wales (March 2002), Minerals Planning Policy Wales (December 2000) and various Technical Advice Notes (Core Documents CD 009, CD 012/1, CD 021, CD 022, CD 023, CD 024/2, CD 026 and CD 027) and Minerals Planning Guidance documents (Core Documents CD 017–019 & CD 052). Local Policy is contained in the Mid Glamorgan (Merthyr Tydfil County Borough) Replacement Structure Plan 1991 – 2006, adopted in August 1996 (Core Document CD 013), and the Merthyr Tydfil Borough Local Plan 1996 -2006, adopted in May 1999 (Core Document CD 014), which together make up the development plan for the purposes of Section 54A of the 1990 Act (as amended). The Merthyr Tydfil Biodiversity Action Plan, adopted in July 2002, and the Merthyr Tydfil Countryside Strategy and Action Programme 1997 – 2002, adopted in March 1998, are also relevant (Core Documents CD 015 & 016).

Planning Policy Wales (Core Document CD 009)

33. Planning Policy Wales (PPW) makes it clear that the planning system has a fundamental role in delivering sustainable development and that it is necessary to balance and integrate a range of competing objectives in order to meet current development needs whilst safeguarding those of the future. The objectives are described as:
    - social progress that recognises the needs of everyone;
    - effective protection of the environment;
    - prudent use of natural resources;
    - maintenance of high levels of economic growth and employment.

34. PPW also describes the principles that underpin the Assembly Government's approach to planning policy. Those most relevant to the current proposal include:
    - putting people and their quality of life at the centre of decision making;
    - respect for environmental matters, such as biodiversity and harmful emissions;
    - applying the precautionary principle where risks are uncertain;
    - using scientific knowledge to aid decision making;
    - taking account of all costs and benefits, including non-monetary ones.

35. PPW also encourages the conservation of the historic environment and cultural heritage, the reduction of pollution, the promotion of good environmental management and practice, the promotion of employment opportunities and the protection of people's health and wellbeing. In regard to the natural heritage it promotes conservation of the landscape and biodiversity and seeks to safeguard statutorily designated sites and protected species. It also promotes the creation of new opportunities to enhance biodiversity or compensate for losses. PPW advises that common land should not be developed or access to it impeded unnecessarily. It also recognises the importance of the historic environment, including archaeology, ancient monuments and historic landscapes. They are part of the historic and cultural identity of Wales and valuable both for their own sake and for their role in education, leisure and tourism. PPW encourages the preservation of ancient monuments and their settings.

36. With regard to environmental risks and pollution, PPW advises that the planning system has an important role to play in minimising the adverse effects of any environmental risks. The Assembly Government's aims are described as maximising environmental protection for people and natural and cultural resources by preventing or managing pollution and promoting good environmental practice. It advises that potential hazards due to contaminated or unstable land should be taken into account and that developers should carry out specialist ground investigations to identify suitable remedial measures.

Minerals Planning Policy Wales (Core Document CD 012/1)

37. Minerals Planning Policy Wales (MPPW) is the National Assembly's primary minerals policy document. Paragraph 5 says:

"Mineral working is different from other forms of development in that:

- *extraction can only take place where the mineral is found to occur;*
- *it is transitional and cannot be regarded as a permanent land use even though operations may occur over a long period of time;*
- *wherever possible any mineral workings should avoid any adverse environmental or amenity impact; where this is not possible, working needs to be carefully controlled and monitored so that any adverse effects on local communities and the environment are mitigated to acceptable limits;*
- *when operations cease land needs to be reclaimed to a high standard and to a beneficial and sustainable after-use so as to avoid dereliction, and to bring discernible benefits to communities and/or wildlife."*

38. Paragraph 10 provides further explanation and advises that the essential role of mineral planning authorities in relation to mineral workings is to ensure that a proper balance is struck between the fundamental requirement to provide society with a range of minerals, the need to ensure a prudent use of finite resources, and the protection of amenity and the environment. It says that the overriding objective is to provide a sustainable pattern of mineral extraction by adhering to 5 key principles:

"- provide mineral resources to meet society's needs and to safeguard resources from sterilisation;

- *protect areas of importance to natural or built heritage;*
- *limit the environmental impact of mineral extraction;*

- *achieve high standard restoration and beneficial after-use;*
- *encourage efficient and appropriate use of minerals and the re-use and recycling of suitable materials."*

39. Paragraphs 11- 56 of MPPW expand on these principles. They advise that access to minerals should be safeguarded, that the demand for energy minerals is largely based on power generation and is difficult to predict because of the volatile nature of world markets, and that environmental protection should be provided commensurate with the relevant importance to the biodiversity and overall landscape of the area concerned, taking into account any incidence of protected species. Paragraph 34 lists matters to be addressed in working practices and operating standards, and these include traffic generation, noise, dust, fumes, blasting, impact on surface and ground waters, visual intrusion and landscaping, impact on sites of nature conservation, historic and cultural importance, land stability, treatment of unstable, derelict or contaminated land, cumulative impact, and restoration and aftercare.

40. Paragraph 40 advocates the use of buffer zones to provide areas of protection around mineral workings and says these should depend on the nature of the operation. Paragraph 42 advocates the use of rail freight rather than road transportation wherever feasible, and paragraph 53 advises that *"properly worded and relevant planning conditions should be able to secure the restoration, aftercare and after-use of the mineral sites"*, that *"operators and land owners should ensure that sufficient finance is set aside to enable them to meet restoration and aftercare obligations"* and that *"for larger sites, progressive restoration should be achieved"*.

41. Paragraphs 61 and 62 provide specific guidance on coal. Paragraph 61 summarises the Government's central energy policy as ensuring a secure, diverse and sustainable supply of energy at competitive prices. This objective takes into account concern for the environment, health and safety. Paragraph 62 specifies requirements that all opencast development proposals should meet. These may be summarised as follows: environmentally acceptable and no lasting environmental damage; if not achievable, then local and community benefits to clearly outweigh the disbenefits; and a high standard of restoration to beneficial and suitable after-use.

Other National Advice and Guidance

42. Several of the National Assembly's Technical Advice Notes (TANs) are relevant to this application. TAN 5, Nature Conservation and Planning (1996), provides advice on the protection of flora, fauna and natural habitats, on protected species of plants and animals, and on the creation and management of landscape features important to wildlife. TAN11, Noise (1997), says that noise generating development should not cause an unacceptable degree of disturbance and provides advice on measures to control noise, including the use of suitable planning conditions. TAN15, Development and Flood Risk (July 2004), the latest version of which has recently been issued, provides advice on drainage systems. TAN18, Transport (1998), promotes the carriage of freight by rail. Finally, TAN21, Waste (2001), advocates the re-use of materials and the disposal of waste as close to the source as possible. (Core Documents CD 021, 022, 024/2, 026 & 027)

43. Further advice on the control of noise at surface mineral workings is contained in Minerals Planning Guidance (MPG) 11, issued by the Department of the Environment and the Welsh Office in 1993 (Core Document CD 019). Although replacement advice has recently been issued in respect of aggregates (Minerals Technical Advice Note MTAN (Wales) 1:

Aggregates, March 2004), it does not apply to coal, and MPG11 remains the relevant extant advice. The annexes of MPG3, Coal Mining and Colliery Spoil Disposal: July 1994 (Core Document CD 052), also remain in force in Wales, pending their replacement by a Technical Advice Note. Annex C contains guidance on other impacts including visual, blasting, dust, transportation and nature conservation.

44. Parts of several other MPGs also remain in force in Wales, including MPG2 (1988) Applications, Permissions and Conditions, MPG7 (1989) The Reclamation of Mineral Workings, and MPG12 (1994) Treatment of Disused Mine Openings and Available Information on Mined Ground.

Adopted Structure Plan (Core Document CD 013)

45. The adopted Structure and Local Plans make up the development plan for this area. The Mid Glamorgan (Merthyr Tydfil County Borough) Replacement Structure Plan 1991 – 2006, adopted in August 1996, provides strategic development plan policies. Policy EV1 presumes against most development in the countryside, Policy EV4(2) requires development in areas of high landscape value to include measures to reduce effects to acceptable levels, and Policy EV6 requires provision to be made to minimise effects on sites important for nature conservation where these would be disturbed.

46. Policy EV9 favours *"environmental improvement schemes to maintain and enhance the quality of the built and historic environment"*, and Policy EV10 specifies criteria for development on or within major sites or features of the built and historic environment. It does not permit development likely to destroy or damage archaeological sites or ancient monuments of national importance and does not normally permit development that fails to preserve other features of archaeological or historic interest.

47. Policy EV13 covers derelict and contaminated land and seeks to clear all major dereliction in the County within the planned period. It recognises land reclamation as a key step in the regeneration process and describes how the Mid Glamorgan Regeneration Programme has been expanded to include not only dangerous dereliction but also landscape improvement of derelict areas. Policies D1, D5 and D6 also deal with derelict and contaminated land. Policy D1 says *"All identified derelict land will be subject to treatment appropriate to the condition and nature of the site and proposed after uses, during the plan period"*, whilst policies D5 and D6 make provision for the protection and enhancement of nature conservation, archaeological and historic features during implementation of the reclamation scheme and subsequent restoration.

48. The Structure Plan also contains specific minerals policies. Policy MIN1 specifies criteria for acceptable mineral extraction, including: acceptable levels of disturbance to the environment; no pollution or disturbance to water supply or drainage; acceptable levels of disturbance to neighbouring land uses, including noise, dust and vibration; acceptable traffic considerations; benefits to the economy, including employment; suitable restoration, aftercare and re-use proposals; and acceptable impact on land stability. Policies MIN2, MIN7 and MIN8 provide additional safeguards for open pit working and mineral waste tipping, including depth of working and operational phasing not prejudicing site restoration, scale of working not unacceptably disruptive to the local community or the landscape, and measures to take account of geological factors.

Adopted Local Plan (Core Document CD 014)

49. The Merthyr Tydfil Borough Local Plan 1996 – 2006, adopted in May 1999, contains a range of policies, both specific and general, relevant to the proposed development. Chapter 6, Geomorphology and Reclamation, is particularly relevant and refers to objectives *"to ensure that the majority of the Land Reclamation Programme is completed within the plan period"* and *"to ensure that the development of opencast mining is properly considered within the need to conserve and protect the environment"*. Paragraph 6.21 says *"In an area where extensive dereliction is often a normal feature of the environmental background, it has been possible to devise pragmatic methods to treat the defined land. The former Borough and County Councils co-operated in a successful Land Reclamation Programme at East Merthyr, one of the largest derelict land reclamation schemes in Western Europe. Phase I at Incline Top and Phase II at Great White Tip are completed and Phase III will begin within the plan period. The scheme is an interesting example of the co-operation between public authorities and Celtic Energy Ltd. Eventual restoration is financed through opencast coal extraction, enabling approximately 400 hectares to be reclaimed at little extra cost to the public authorities. The Reclamation Scheme has taken into account the need to retain and incorporate a number of conservation interests which occur within the area of the scheme."*

50. The site for the East Merthyr Phase III Reclamation Scheme is identified on the Local Plan Proposals Map and is listed in paragraph 6.18 as derelict land sites DL14, 15 and 52. Derelict land is defined as *"land so damaged by past industrial or other development that it is incapable of beneficial use without treatment"*. Paragraph 6.18 includes recommendations for treatment of the various derelict land sites. Site DL14 East Merthyr III (201 hectares) is listed as *"coal recovery and restoration for mixed uses in accordance with the agreed scheme"*; site DL15 Cwm Bargoed (140 hectares) is listed as *"possible coal recovery and restoration as extension to East Merthyr III"*; and site DL52 Cwm Bargoed Sidings (26 hectares) is listed as *"a range of aftercare and management arrangements will be needed as these sites become abandoned and reclassified as derelict land"*. Policy GR2 lists derelict land sites that are included in the Priority Reclamation Programme for the period 1995 – 2006, and this includes sites DL13, 14, 15 and 52, described as the East Merthyr Phases II & III Extension.

51. Policy GR1 says *"Development proposals for the reclamation of derelict or unsightly land will be permitted subject to consideration against the following criteria:*

    1) the developer must undertake adequate site investigations to establish the exact nature and scale of the reclamation and treatment works required, including the need to retain features of water, wildlife, geological and historic interests identified during the assessment and design of the scheme;

    2) *the reclamation must be undertaken in a manner which adequately safeguards public safety and amenity and includes an agreed monitoring, aftercare and restoration programme;*

    3) *the scale of the proposal is acceptable having regard to dust, odour and nuisance emissions;*

    4) *the proposal does not conflict with transportation considerations including parking, traffic generation and access;*

    5) *the reclamation proposal has regard to the provisions of NH7 regarding the water environment.*

52. Turning to more general Local Plan policies, Section 3 sets out the environmental context, including objectives towards reducing the risk of global warming, conserving natural resources, reducing pollution, promoting economic development, and protecting wildlife species and habitats, historic built and archaeological sites, the water environment and landscape and geological features. It comments that some historical decisions may be reconsidered in the light of sustainability aims.

53. Section 4 covers the natural heritage and describes its aims as *"to conserve and enhance the natural heritage and protect the countryside from inappropriate development"* and *"to contribute towards the achievement of sustainable development"*. Policy NH1 permits development in the countryside outside settlement boundaries subject to consideration of certain criteria, including: the merits of the development should clearly outweigh the effects on the countryside character, amenity and landscape; no unacceptable risk to nature conservation, the water environment, geological or geomorphological interests, no conflict with transportation considerations, and no compromise to the enjoyment of public rights of way or other access to the countryside. Policy NH7 specifies criteria to be considered in connection with the water environment, including any impact on the quality and quantity of groundwater resources, surface waters, other water bodies or the flora and fauna dependent upon such water features. Other policies aim to safeguard sites of importance for nature conservation (SINCs), a non-statutory designation for sites of recognised wildlife and ecological value (Policy NH5), and trees and woodlands (NH6).

54. Paragraph 4.22 identifies the Gelligaer and Merthyr Common (identified as CL38) as an extensive area of land on the eastern side of the Borough defined under the Commons Registration Act 1965 as land that certain members of the community have a common right to use. It is described as a public access common (under Section 193 of the Law of Property Act 1925); however, rights of way across the common are not included on a definitive rights of way map and most are unregistered.

55. Section 5 deals with the built heritage. It recognises that the heritage of Merthyr Tydfil has been created over centuries and is irreplaceable. The introductory text says *"It is essential that the planning process takes full account of this fact, as the heritage resources are finite and once lost cannot be recreated. At the same time the protection of our heritage for the benefit of future generations is considered to be an integral part of the concept of sustainable development. However, it will not always be feasible to retain all aspects and features of heritage in the widest sense or in the form of design and appearance of their original construction. The planning system needs to take a balanced view of the interests of heritage and conservation in relation to the economic and social needs of the community. However, all parties now agree that a greater weight should be given to the interests of heritage and conservation when considering new proposals or redevelopment options."*

56. These principles form the basis for the relevant plan objectives and policies. The main settlement of Merthyr Tydfil is identified in CADW's "Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales" as a Grade I landscape of exceptional historic interest and is described as *"a potent example of an internationally renowned industrial landscape of the 18th and 19th centuries"*. Policy BH3 provides protection for the site and setting of areas of archaeological importance and ancient monuments. Scheduled ancient monuments are listed in paragraph 5.18 and include the "Sarn Howell Pond and Watercourses" and the "Deserted Iron Mining Village at Ffos-y-fran". Policy BH4 provides similar protection to listed buildings and structures, and the list in paragraph 5.20 includes the "Timber Aqueduct over Former Taff Bargoed Railway".

57. Finally, Section 8 covers waste and recycling, and Policy WR2 is relevant. It permits development on land considered to be potentially contaminated subject to certain criteria. These include: adequate site investigations; acceptable impacts on the character, amenity and landscape of the area and on rights of way and public access to the countryside; acceptable transport considerations; a satisfactory programme of phased working and restoration; and regard to the water environment.

Other Local Policy Guidance (Core Documents CD 015 & CD 016)

58. Reference has also been made to the Merthyr Tydfil Biodiversity Action Plan (adopted in July 2002) and the Merthyr Tydfil Countryside Strategy and Action Programme 1997 – 2002 (adopted in March 1998). The former does not contain any specific policies but compiles more than 20 habitat and species action plans. It was formulated in partnership with a wide range of local and national bodies and individuals.

59. The latter provides a framework for the implementation of countryside proposals and includes policies that support those of the adopted Structure and Local Plans. The strategy recognises that land reclamation can positively enhance amenity but advises that schemes should work sympathetically with the existing features and landscape and should incorporate nature conservation and historic features into the design, particularly as some derelict areas have regenerated naturally and created existing wildlife habitats. Specific reference is made to the East Merthyr Reclamation Site.

Case for Miller Argent (South Wales) Limited

The material points are:

General Summary (Documents MA 013/2 & A14)

60. The proposed scheme has been the subject of detailed Environmental Impact Assessment, which has been accepted by the Assembly as meeting the requirements of the Environmental Impact Assessment Regulations 1999 (email e20 in Core Document CD 040). When the application was lodged the Council carried out extensive consultations, and none of the statutory consultees objected to the proposals provided various safeguards were put in place by condition. Further evidence to reinforce the environmental information has been provided at the public inquiry, and none of this has been successfully challenged.

61. Although the application has been called-in by the National Assembly the Local Planning Authority has considered the proposal and resolved to support it. A detailed report by the Head of Planning (Core Document CD 037) was considered at a Special Council meeting on 30 June 2004. It dealt with all relevant development plan policies and material considerations and recommended support for the scheme. The Council, the one democratically elected body that represents all of the people of Merthyr Tydfil, accepted the recommendation by a large majority: 20 for, 7 against, and 6 abstained or declared an interest (Document A13).

62. The scheme is in accordance with the development plan and, where there are impacts, they are more than outweighed by the benefits of the scheme. An agreement has been concluded with the Council to ensure the benefits and guarantee completion of the scheme, as confirmed in a joint statement submitted to the inquiry (Document A12). Miller Argent's case is presented below first in terms of the development plan and then in regard to each of the various material considerations.

Development Plan (Documents MA 013/2 & A14)

63. The Structure Plan, adopted in 1996, was prepared after the 1988 planning permission was granted for the East Merthyr Land Reclamation Scheme, which included "the extraction of coal by opencast methods" (see Appendix 1 of Document MA 013/2). Therefore, the strategic planning authority would have had this in mind when formulating Policy D1, which reads: *"All identified derelict land will be subject to treatment appropriate to the condition and nature of the site and proposed after-uses, during the plan period"*. The identification of the land was carried forward into the Local Plan, adopted in 1999.

64. Local Plan policies GR1 and GR2 and their supporting text expressly identify derelict land areas DL14, DL15 and DL52 as East Merthyr Phase III within the Priority Reclamation Programme and the individual elements for appropriate treatment and after-use. Area DL14 is listed for *"coal recovery and restoration for mixed uses"*, DL15 is listed for *"possible coal recovery and restoration"*, and DL52 is one of several areas listed as Active Derelict Land where *"a range of aftercare and management arrangements will be needed as these sites become abandoned and reclassified as derelict land"*. The current application site lies entirely within these 3 areas, and the proposed development is entirely in accord with the treatments and after-uses listed, as all of the proposed coal recovery would take place within DL14, DL15 would be used for overburden storage, and all 3 areas would be subsequently restored (Document MA 013/3). The locations of the 3 areas are illustrated on the Local Plan Proposals Map (Core Document CD 014) and on the plan included in Document MA 013/4.

65. The Local Plan is explicit in relation to the East Merthyr Land Reclamation Scheme Phase III, saying that it will involve coal extraction of major reserves, will be begun within the plan period (i.e. by 2006), and the eventual restoration will be financed through opencast coal extraction, enabling approximately 400 hectares of derelict land to be reclaimed at little expense to the public purse. The proposal would be in accord with all of these, though some 50 hectares of land would be deliberately excluded in order to safeguard scheduled ancient monuments or areas of particular value for nature conservation purposes (e.g. Cwm Golau valley near south east corner of site).

66. Some objectors have compared the proposal with that at Winchfawr West, which was the subject of a recent unsuccessful application and appeal. However, the circumstances there were quite different. The schedule to Local Plan Policy GR1 identified the land for "recontouring for forestry and amenity" and made no mention of coal extraction. Furthermore, the land was not included in the Priority Reclamation Programme identified in Policy GR2.

67. Various other development plan policies specify requirements or criteria to be satisfied. The following sections illustrate how these would all be met. The clear identification of the land within the development plan shows there are no fundamental objections to the scheme, even though most of the site is included within the boundaries of CADW's Grade 1 landscape of historic interest in Wales, which was clearly not seen as inconsistent with the development plan intentions.

68. One objector has made particular mention of Local Plan Policy NH1, which aims to protect the countryside from unsuitable development and requires the merits of the development to clearly outweigh effects on the countryside (Document 17.1). However, it is noteworthy that the supporting text makes particular mention of land reclamation outside settlement boundaries, with a specific cross reference to policies GR1 and GR2, as an example of development that may meet this requirement.

69. Taken as a whole, the proposed development is in accordance with the development plan, and planning permission should be granted unless material considerations indicate otherwise, as stated in Section 54A of the 1990 Act (as amended).

Need for Reclamation (Documents MA 002/2 & A14)

70. Reclamation of the land is needed for 3 reasons: firstly, it is littered with the remains of old workings, which are liable to collapse and are a safety hazard; secondly, the derelict land is unsightly and harmful to the landscape and the appearance of the area; and thirdly, the landfill waste tips are inadequately formed and present a risk of leachate polluting the water environment and hazardous gas escaping.

71. Approximately 317 hectares of the total 400 hectares site area is designated in the Local Plan as derelict land, i.e. 79.1%. This is made up of derelict land areas DL14, DL15 and DL52 of total area 367 hectares, less 50 hectares excluded from the application site in respect of areas containing scheduled ancient monuments or land of particular ecological value. The site contains numerous old workings and waste tips and is often used nowadays for fly-tipping, joyriding and the abandonment of old cars. Although the old workings have some historical value, the decision to identify the land for reclamation was taken through the Local Plan process, and the proposed scheme would achieve this.

72. There are 48 known shafts and 39 known adits from former iron ore and coal workings within the site (figure 3 in Document MA 002/3), and it is likely there are considerably more that are unknown, particularly as most of the mining in this area took place before 1872 when the legal requirement to record mine workings was first introduced. In response to consultation at the time of the planning application, the Valuation Office Agency advised the Council on these matters and confirmed the continuing risk of associated ground collapse and underground mining subsidence (letter of 31 July 2003 in Appendix 3 of Document MA 002/4). The last recorded human death caused by ground collapse in the area was in 1948. However, collapse events occur regularly and continue to be a safety risk. Photographs of ground collapses elsewhere are included in Appendix 4 of Document MA 002/4 and illustrate how dangerous such events can be. Recent ground collapses in the area have occurred at Trecatti (immediately to the north of the application site), where some 20 sheep were drowned, Nant Llesg (to the east of the site), and on 5 August 2004 within the site itself. Photographs of these incidents are included in figures 4 & 5 of Document MA 002/3 and in Document MA 001/5.

73. The safety case for reclamation is compelling. Much of the land affected is urban common land where people have a right of access. The risks are clear and, although other options for reclamation have been considered, the land can only be properly made safe by allowing the proposed development to proceed. It includes a scheme of progressive investigation supported by a detailed geological assessment.

74. Several alternative means of addressing the dereliction and safety hazards have been considered. Cosmetic treatment of key frontages along the A4060 trunk road would improve a limited area but do little to address the majority of the derelict land or safety hazards. The estimated cost for such treatment would over £5M (Appendix 5 of Document MA 002/4). Full reclamation could be carried out without the removal of coal and would meet the main aims. However, it is estimated that it would cost of the order of £43M, including landfill liability costs (Appendix 6 of Document MA 002/4), a substantial sum in comparison with the Council's annual budget of £85M for public services in 2004. This assessment reinforces

the view that the major benefit of the proposed scheme would be full reclamation of the land at no cost to the public purse, a benefit worth some £43M.

75. Turning to the matter of appearance, the present derelict land can be readily seen from the west, including from the A4060 trunk road. Its current unsightly appearance is illustrated by photographs at figures 1 & 2 of Document MA 002/3. The landscape scars of the industrial past have adverse consequences for tourism in the area. The benefits of proper reclamation of derelict land are clearly illustrated by comparing the aerial photographs of Phases I and II before and after reclamation and subsequent redevelopment at figures 9, 10 & 11 of Document MA 002/3.

76. Finally, the proposed scheme would deal with the 3 former landfill tips on the site, known as Tip 13, Hoover Tip and Merthyr Tip. They date from the 1970s and 1980s and contain non-inert waste, contrary to the terms of their leases. Site investigations have shown that they are predominantly made up sand and gravel size ash and colliery shale with some domestic and demolition debris. The proportion of degradable material is typically 2–5%, although hotspots up to 21% have been identified. Some material classified as hazardous, probably 1% at most, is also present. (Document MA 003/2)

77. Whilst predominantly uncontaminated, tests have shown some locations with elevated concentrations of determinants, and these are available for leaching from the soil into the water environment. The tips are poorly constructed without proper containment and capping and could give rise to water pollution and the emission of landfill gas. The legal liability for these tips rests with the Council, and costs of the order of £19.5M have been estimated to deal with them in isolation (Appendix 6 of Document MA 002/4). Some 5 years ago the Council's estimate for removal of the tips was £6.8M but it did not take into account the presence of non-inert material. The Council's Head of Engineering now accepts £19.5M as being a reasonable estimate. (Document MA 003/2)

78. The proposed scheme would include the removal of the parts of the tips (some 200,000 cubic metres of the total 440,000 cubic metres) within the planned excavation area and the proper sealing and capping of the remainder. Most of the removed material would be inert waste and would be used for site roads and bases. The original intention was that the non-inert waste (estimated to be between 20,000 - 50,000 cubic metres) would be removed to either a new waste storage cell constructed near the eastern boundary of the site or to the nearby Trecatti tip. However, negotiations with the operator of the Trecatti tip have now been concluded, and it is confirmed that all such waste would be removed to that tip, which lies immediately to the north of the application site (Document A4). A small proportion of the waste would be likely to be classified as hazardous and would be separately removed to a suitably licensed landfill site, probably near Swindon. All waste removed from the existing tips would be sorted, allocated to the appropriate category and disposed of in accordance with latest good practice and regulatory requirements. The Environment Agency has raised no objection to these proposals. (Documents MA 003/2 & MA 003/4)

Need for Coal (Documents MA 002/2 & A14)

79. The coal on the site is a strategic reserve and of prime importance to the UK energy balance. It is of ideal quality for the Aberthaw Power Station, its intended market, and the owners of that power station have written to support the scheme (Appendix 8 in Document MA 002/4). They explain that it has become more difficult to obtain coal that meets the particular specification needed at Aberthaw and that Ffos-y-fran would meet that specification. At present a significant percentage of its fuel is imported.

80. Coal accounts for some 32% of the UK's power generation. The other main sources are nuclear (18%) and gas (29%). Nuclear power generation is likely to be phased out, and gas power generation is becoming increasingly dependent on imported supplies. Security of supply for coal and gas has become a matter of some concern in the light of the increase in terrorist activities in recent years and is reflected in national policies. MPPW says that *"the objective of the Government's central energy policy is to ensure a secure, diverse and sustainable supply of energy at competitive prices"*, and it recognises that *"while UK coal is available and the generators continue to choose it, UK coal contributes to energy diversity and supply"*.

81. Much is made of aspirations for renewable energy to play a more dominant role in a mixed energy portfolio. However, renewable energy sources account for only about 2.7% of energy generation in the UK at present and, although targets of 10% by 2010 and 20% by 2020 were set in the Government's 2003 Energy White Paper (Core Document CD 028), the Government's latest aspiration is to achieve 15% by 2015. Much of this depends on the promotion of a challenging programme for wind power generation, for which alternative back-up generation is needed when winds are light (see the advice of the Royal Academy of Engineering contained in several papers in Appendix 7 of Document MA 002/4). Furthermore, power demands continue to rise, and there are potential shortfalls in power generation in future years, particularly in the light of the anticipated closure of many coal-fired power stations as they reach the end of their working life or fail to comply with the Large Combustion Plant Directive (LCPD), which sets new emission standards. Consequently, there remains a place for coal-fired power generation for the foreseeable future provided the LCPD can be met. The 2003 Energy White Paper (Core Document CD 028) identifies the production of electricity from new clean coal power stations as one of its 5 main policy strands, recognising the enormous coal reserves in Wales and the technology that now exists to use the resource in a more environmentally friendly way.

82. Aberthaw Power Station has recently received consent under Section 36 of the Electricity Act 1989 to fit flue gas desulphurisation (FGD), which will remove up to 95% of sulphur emissions and enable it to meet the LCPD standards with no increase in its carbon dioxide emissions (Document A8). The capacity of the power station will also be increased. At present Aberthaw relies on imported coal for about 50% of its supply, and it is anticipated that coal from Ffos-y-fran would allow this to be reduced as well as meeting the increased demand due to expansion. Ffos-y-fran would provide high quality low volatile coal that would be blended with existing supplies of anthracite from the Tower Colliery and Celtic Energy's sources. It would compete with foreign imports not with other sources in Wales. Its use would be more sustainable than imported coal, particularly as all transport would be by rail, which is in line with national policy as expressed in MPPW.

83. Aberthaw Power Station represents almost 20% of the total installed capacity in Wales and is the only power station in the UK capable of burning the low volatile coals produced in the South Wales coalfields. Although North Wales is a net exporter of power to England, the reverse is the case in South Wales, and Aberthaw supplies power to most of the area. Aberthaw Power Station operates at a high thermal efficiency (Document A7). However, its continued success is inextricably linked to that of the South Wales coal industry and vice versa. Consequently, the Ffos-y-fran scheme would contribute towards the preservation of the South Wales coal industry.

84. A key objective of MPPW is to provide mineral resources to meet society's needs and to safeguard resources from sterilisation. The proposal would be entirely in accord with this

objective. Several objectors have said that the scheme would sterilise other resources, such as sandstone and fireclays. Some of these materials would be used within the site for drainage blankets and seals or as aggregates. However, the sandstone over most of the site is of poor quality and both this and the fireclay would be unlikely to be viable resources. The Council reports that it occasionally gets speculative enquiries about these materials but considers that such initiatives would only be likely to come to fruition as part of the planned coal recovery operations.

Benefits to Local Community (Documents MA 002/2 & A14)

85. It is generally recognised that the first 2 phases of the East Merthyr Reclamation Scheme have been successful and beneficial to the local community. In addition to the reclamation of 106 hectares of land at no cost to the public purse a wide range of other benefits also accrued to the local community, including a new road and other infrastructure, the payment of more than £1.25M in rates, and the construction of facilities or the provision of equipment for many local organisations. The current proposal would provide even more benefits.

86. The key benefit would be the reclamation of 317 hectares of derelict and unsightly land, as identified in the Local Plan, at no cost to the public purse. This represents a benefit of some £43M, which would otherwise have to be diverted from other public funds to return the land to safe and beneficial use. The developer would also pay back the monies originally loaned by the Welsh Development Agency (WDA) to initiate phases I and II. The original agreement was that this would be paid back on the basis of coal exploited and, as most of that would fall under Phase III, agreement has been reached to honour that debt. The WDA wrote to the Council in August 2003 confirming its support for the scheme and acknowledging that it would receive a return of its catalyst funding (Appendix 9 of Document MA 002/4). Repayment of these monies would enable the WDA to fund and invest in other projects in Wales.

87. Over the period of the project an average of 200 jobs would be created in a directly employed labour force, worth approximately £67M (at 2003 pay levels) over the course of the scheme (Document MA 001/2). They would be good and well paid jobs, and most employees would be recruited locally. As a result there would also be indirect benefits for the local economy as the money flowed through it. Merthyr Tydfil has one of the highest rates of unemployment in the UK and one of the lowest average income rates. The scheme would bring a large number of well paid jobs into an otherwise deprived area.

88. Many local residents are sceptical that jobs would be filled locally. However, as confirmed by the representative of the Transport & General Workers Union, there is little doubt that the majority of the jobs would benefit local people. It would not make economic sense for the operator to employ travelling labour when there is plenty available locally. Miller Argent has already received 153 unsolicited job applications to work on this scheme, even though it has not yet advertised. 72% of those have been from people who live within 15 km (9.3 miles) of the site. Some jobs would be highly skilled and specialist but not all. Training schemes would enable local people to take up the jobs, and some local people would already have the skills.

89. The local economy would also benefit from the payment of rates in respect of the coal extraction, plant and buildings. It is estimated that this would amount to about £1M per annum. As part of a proposed agreement with the Council (see Document A12) a community benefit fund of between £6.4M and £10.8M would also be established. This would be paid on a royalty basis over the course of the project, the exact amount depending on actual coal prices. The community benefit fund would be controlled by the Council.

90. The scheme would involve the relocation of a length of water main, and the Company would contribute £0.6M towards the cost of its diversion and upgrading, which would be part of a wider scheme planned by United Utilities (for Dŵr Cymru Welsh Water). In view of the ecological and historical interest of the area, the Company also plans to provide a visitor/education centre at Cwmbargoed. The centre would be used to explain and interpret the scheme and the wider interests to schoolchildren and other visitors. A planning application has been submitted to Caerphilly CBC in this regard.

91. The total value of all of these benefits is estimated to be over £130M. The Merthyr Tydfil Anti Opencast Campaign has made claims about the amount of profit likely to be made per tonne of coal. However, this is pure speculation and grossly exaggerated. (Document MA 002/5)

Dust & Air Quality (Documents MA 010/2 & A14)

92. Potential air quality issues from the proposed scheme are dust (from the removal of soil and overburden material and their transport to stockpiles, and from coal extraction, handling and loading), fine particles (PM_{10}) and nitrogen dioxide (NO_2) (from emissions and movements of site plant) and odour (from removal of landfill waste). These have all been addressed in the Environmental Statement (Core Document CD 002). Most concerns expressed by local people have been in regard to the health effects of the finer dust particles, PM_{10} and $PM_{2.5}$, and the plant exhaust emissions. PM_{10} is defined as particles of diameter less than 10 µm (10 millionths of a metre) and $PM_{2.5}$ as particles of diameter less than 2.5 µm. $PM_{2.5}$ is a component of PM_{10}, and the assessment has conservatively concentrated on the amount of particles in the wider range.

93. Statutory air quality objectives have been set for Wales in the Air Quality Regulations (Wales) 2000 (Core Document CD 048) and a subsequent amendment in 2002. The provisional (amended) objective for PM_{10} to be met by 2010 is an annual mean of 20 $\mu g/m^3$ and a daily mean of 50 $\mu g/m^3$ not to be exceeded more than 7 times per year. The present objective is to achieve an annual mean of 40 $\mu g/m^3$ by the end of 2005. The objective for NO_2 is an annual mean of 40 $\mu g/m^3$ to be achieved by the end of 2005. Air quality in Merthyr Tydfil is well below these values and is classed as good. Background levels are predicted to decline in the future, and the air quality objectives are expected to be met.

94. There are no statutory objectives for general dust or odour. An average daily dust deposition rate of 200 $\mu g/m^2$/day is often used as an indicator of the rate of dust deposition likely to give rise to complaint. However, the former DoE issued guidance on dust from surface mineral workings in 1995 (Core Document CD 051); this remains applicable and recommends the use of best available techniques to minimise dust emissions. For the proposed scheme these would include the regular maintenance and spraying of haul roads, the avoidance of exhaust gases being emitted downwards, dust collection systems for blasting operations, vapour masts, controls on the construction of baffle mounds in windy weather, and the early sealing and seeding of mounds, storage and restoration areas. During site investigation of the landfill areas a slight odour was sometimes detected. However, the proposed operations would be expected to have little effect on odour as the nearest houses are some distance away from the landfill areas.

95. A modelling exercise has been carried out to assess the likely effects on air quality for comparison with the statutory objectives. Modelling has been based on a series of "worst case" assumptions for each of the stages of operation. Nitrogen oxides and fine particle

matter from the site plant have been estimated using emission factors published by the US Environmental Protection Agency (Appendix 2 of Document MA 010/3), though manufacturer's emission data for one of the machines likely to be used on the site is actually 3 times lower than the US EPA data. The nearest dwellings affected would be those at Incline Side but the effects on them would be variable, greatest at the start of operations and at the end of the reclamation period. The nearest haul road has been assumed to be about 85 metres away and the nearest house to a working area about 125 metres. The site boundary is 36 metres from the nearest house but coal would not be extracted close to the site boundary, and for most of the time the workings would be considerably more than 125 metres from houses. The overburden mounds would be even further away from any houses, the nearest being an isolated farmhouse over 400 metres away.

96. Modelling has also taken no account of the fact that most working would take place deep within the void rather than at ground level and that plant would tend to work for less than the maximum hours assumed. Thus the predictions are for the worst case scenario, and contaminant levels would be much lower for most of the time. The Design Manual for Roads and Bridges (DRMB) Regional Impact Assessment Methodology was used for the modelling, suitably adapted for the circumstances.

97. The above methodology does not take into account dust emissions from operations for which there is no reliable methodology available. Allowance has been made for this based on the results of a study carried out into PM_{10} levels in communities close to and away from opencast coal mining sites in Northeast England, known as the Newcastle Study (Appendix 4 of Document MA 010/3). That study found that average concentrations may be 2.1-2.5 µg/m3 higher in opencast coal mining communities than in other similar communities. A fugitive emissions rate of 4 $\mu g/m^3$ has been assumed for the Ffos-y-fran assessment, a conservative allowance almost double that found in the Newcastle Study.

98. Several factors show that this is an extremely conservative assumption. Rainfall is 70% higher at Merthyr Tydfil than in the area of the Newcastle Study, and this would significantly reduce levels of dust in comparison. Furthermore, the communities in that study were downwind of the opencast site for the prevailing wind direction. At Ffos-y-fran the prevailing wind direction is away from the nearby communities. (Appendices 5, 6 & 7 of Document MA 010/3)

99. The results of these assessments show a predicted maximum annual mean concentration for nitrogen dioxide of 22 $\mu g/m^3$ in 2006. However, this elevated level would only occur for a relatively short period of time, while initial surface preparations were carried out, and would still be well within the national air quality standard (Table 5 in Appendix 1 of Document MA 010/3). Within a year there would be no significant impact on background levels. Similarly, PM_{10} levels would be predicted to peak at a rate of some 24 $\mu g/m^3$ for a short period of time in 2006 but would meet the proposed air quality objective throughout the scheme (Table 6 in Appendix 1 of Document MA 010/3). These levels still represent good air quality standard.

100. Notwithstanding these various predictions, measures to minimise and mitigate incidence of dust, fine particles and nitrogen dioxide emissions would be taken in line with industry best practice. Such measures and appropriate monitoring would be ensured by a set of appropriate planning conditions. It is relevant that there were 918 dwellings within 200 metres of the East Merthyr Reclamation Scheme Phase I and few complaints were recorded. 61 dwellings would fall within 200 metres of the current application site boundary.

Health (Documents MA 011/2 & A14)

101. The health effects of the scheme have been assessed in 2 ways: first, by reference to the national air quality standards; and second, by extrapolation of the results of epidemiological studies. The key parameters affecting health are nitrogen dioxide and fine particulate matter.

102. Nitrogen dioxide is an irritant to the human respiratory system and can lead to measurable reductions in lung function in people with asthma, and there is some evidence that it may make children more susceptible to respiratory infections. The WHO recommended guideline of 40 $\mu g/m^3$ is embodied in the UK national air quality strategy as an objective to be achieved by the end of 2005. These air quality standards are set at concentrations of air pollutants that can be breathed on a regular basis without significant adverse effects on the general population. The modelling predictions for the proposed scheme fall well within the national standard, and nitrogen dioxide is unlikely to cause any significant adverse health impacts on local residents.

103. The levels of PM_{10} predicted would also fall within the prescribed air quality standards (annual average concentrations of 40 $\mu g/m^3$ to be met by 2005 and the provisional target of 20 $\mu g/m^3$ to be met by 2010), and further confidence can be gained by comparison with the Newcastle Study (Appendix 4 of Document MA 010/3). It has been suggested that smaller particles defined as $PM_{2.5}$ would be a better measure of health risk from dust, and the Government's Expert Panel on Air Quality Standards has considered this. However, it concluded that there would be no benefit in moving to such a standard and that the PM_{10} standard offers a better level of protection.

104. Fine airborne particles are one of the pollutants causing the greatest public health impacts in the UK. The effects include premature mortality through both respiratory and cardiovascular disease and increased hospital admissions and symptom exacerbation in people with heart and lung disease. Although sources of PM_{10} are diverse, emissions from road traffic and the formation of particles from chemical reactions of sulphur and nitrogen oxides are the most important sources in most locations.

105. The Newcastle Study was commissioned by the Government to try to provide quantitative information on any additional risk faced by local communities through exposure to pollutants from opencast mining. It studied communities close to active opencast sites and others further away and found that on average PM_{10} levels were slightly higher (about 2.5 $\mu g/m^3$ higher when other factors had been allowed for) at the former than the latter. However, it found little evidence for associations between living near an opencast site and any increased prevalence of respiratory illness, asthma severity or daily symptoms, although children in some of the opencast communities had more GP consultations on respiratory matters. Although some variations in health matters between communities remained unexplained (and may be due to statistical idiosyncrasies), the study concluded that there is little evidence of an association between residential proximity to opencast mining sites and cumulative or periodic respiratory illness or asthma severity. The Department of Health's Committee on Medical Effects of Air Pollution (COMEAP) reviewed the study report, agreed with its findings and commended it to be a high standard study. Subsequent research of parents' perceptions in the same communities has confirmed that parents' concerns about children's asthma risks before opencast mining commenced have not been realised.

106. The findings of the Newcastle Study were not unexpected. An earlier study for the Department of Health in 1995 had concluded that there was no convincing evidence that ambient air pollution would cause asthma in people who would not otherwise develop the

disease but that it could exacerbate the symptoms of those already suffering from asthma. The small increase in PM_{10} measured in the Newcastle Study would be unlikely to be sufficient to cause a measurable change in the incidence of asthma symptoms. To put the matter in context, the small increases in emissions predicted at Ffos-y-fran would be less than normal day-to-day changes in air pollution that occur because of changes in the weather. The overall conclusion is that any possible effects of the proposed scheme on the health of local people would be minimal and far smaller than could be detected by any feasible epidemiological study. These conclusions are not affected by the close proximity to the application site of several schools.

107. The Merthyr Tydfil Local Health Board has presented independent evidence on risks to health but has acknowledged at the inquiry that some of these have been overestimated. The WHO coefficients used to quantify deaths brought forward or increased hospital admissions in the elderly are subject to a number of significant provisos and the corrected statistical analysis would show much lower rates. However, even ignoring these factors, the Local Health Board's calculations show only very limited consequences.

108. Some objectors have criticised the Newcastle Study and, in particular, have referred to views expressed by Dr Van Steenis, a GP from Pembrokeshire. His views conflict with those of the Government's expert committee (COMEAP) and have been condemned both by members of that committee and by the experts representing the Local Health Board. His criticisms are quite unfounded. References have also been made to a report on the Acute Effects of Air Pollution on the Respiratory Health of Children in West Glamorgan, dated 1997 (known as the Glynneath Report). The Government's COMEAP committee has considered that report and concluded that it did not support any assertion that asthma was more common in areas close to an opencast coal mine than in areas distant from such industry (Document A9/1). Furthermore, the Health & Safety Executive has also confirmed that it has no knowledge of any cases of occupational asthma directly attributable or related in any way to opencast coal mining (Document A9/2).

109. Merthyr Tydfil is acknowledged as a deprived area and its people suffer poor health (though not above the Welsh average for asthma). There is a clear relationship between poverty and ill health, and the proposed development provides an opportunity to bring substantial economic benefits to the community, which would go some way towards alleviating the deprivation. Although difficult to quantify, this is a factor to be taken into account in considering the balance of effects on health risks. Some objectors have called for a health impact assessment but this is unnecessary, as it has been fully addressed in the Environmental Statement and in expert evidence to the inquiry. Many local people have expressed concerns about health risks. However, the expert evidence presented shows that those concerns are not justified and that the scheme should not be refused on such grounds.

Noise (Documents MA 009/2 & A14)

110. Noise levels would vary during the course of the scheme as the main operations moved from the southern end to the northern end of the site. A range of noise mitigation measures would be employed, including baffle mounds, controls on hours of work and on the type of work carried out in the evenings, careful routing of site roads, and the use of acoustic enclosures for pumps, all in accordance with national guidance to minimise levels of noise. Miller Argent's original proposal was for weekday hours of work from 0600 to 2200 hours. However, after discussion with the Council, hours of 0700 to 2300 hours are now proposed and have been allowed for in the noise assessment.

111. Noise surveys have been carried out at the nearest residential properties (Incline Side, Blaen Dowlais Street, Japonica Drive and Mount View – see Plan FLRS/ES14/1 in Core Document CD 003 for locations) to measure background noise levels. Noise from site operations has been predicted using the methodology defined by CONCAWE (Core Document CD 041), which is preferred to that of BS5228: Part 1 1997 (Core Document CD 042), as the latter can lead to large under-predictions over the longer distances typical at this site. The noise prediction model has allowed the worst case situation to be determined for each group of nearby residential properties, and these noise levels have been compared with the measured background levels at different times of the day.

112. It is accepted that changes in noise levels up to ±3 dB are unlikely to be perceptible to the human ear. Above that level, 3 – 5 dB is a minor change, 5 – 10 dB a moderate change, and more than 10 dB a major change. Comparison of the measured background and the predicted noise levels shows that for most nearby locations around the Ffos-y-fran site and for most of the time the predicted increases would be of no significance (i.e. not perceptible), and at worst they would be "minor".

113. Noise limits would be set in accordance with the advice in MPG11, Minerals Planning Guidance: The Control of Noise at Surface Mineral Workings, April 1993 (Core Document CD 019). Although superseded in regard to the working of aggregates, this advice remains applicable for coal workings. It advises that during the day operational noise levels should not exceed 55 dB $L_{Aeq,\ 1h}$ at the nearest noise-sensitive dwellings. The term "$L_{Aeq,\ 1h}$" is a noise index that is used to describe the average level of noise over a 1 hour period, taking into account the fluctuations in human perceptions of loudness for different frequencies. MPG11 advises that at night (defined as 1900 to 0700 hours) a nominal limit of 42 dB $L_{Aeq,\ 1h}$ should be applied, although in some circumstances it does allow modified limits during evening hours (1900 to 2200 hours). Where background noise levels are low, MPG11 advises that noise limits should not exceed them by more than 10 dB(A).

114. Based on these principles, a condition has been agreed with the Council (see Statement of Common Ground, Core Document CD 075) that noise limits of 54 or 55 dB $L_{Aeq,\ 1h}$ should be set during the daytime (0700 – 1900 hours) and limits ranging from 44 to 47 dB $L_{Aeq,\ 1h}$ in the evening. However, during the course of the inquiry further consideration was given to arrangements for evening working and, by rearranging haul routes during the third stage of working (i.e. when the main excavation was nearing its northern end), an evening noise limit of 42 dB $L_{Aeq,\ 1h}$ could be adhered to (Document MA 009/4). A condition to that effect could be applied. Comments have been made on the proposal to work late into the evening on weekdays. However, although no coaling would be proposed during the evenings, if shorter hours were worked the duration of the project would be correspondingly increased and the benefits of restoration of the land would be delayed.

115. In conclusion, noise predictions have been carried out for the full range of operational stages, and they show that there would be no significant increase in levels of noise at any of the nearby residential properties and that recommended noise limits would be met. The noise levels generated by site operations would not significantly harm the living conditions of nearby residents.

Blasting (Documents MA 001/2, MA 009/2 & A14)

116. Blasting would be used when necessary to loosen the material to be excavated. Unlike quarrying, blasting at opencast coal sites is designed to induce fracture planes in the rock rather than to fragment it. Consequently, less explosive is used, and blasts are designed to

reduce ground vibration to a minimum and to avoid loss of energy to the open air (hence minimising air overpressure). A blast was witnessed at the Nant Helen opencast coal site and shown to be of limited impact. By law, every blast is subject to proper design by a competent blasting engineer, and it is unlikely that blasting operations on the Ffos-y-fran site would have any significant impact on nearby residents.

117. National guidance (BS 5228, Noise and Vibration Control on Construction and Open Sites, Part 4 – Core Document CD 044) gives a conservative threshold value of 10 mm/s ppv (peak particle velocity) for minor or cosmetic damage to residential properties due to intermittent vibration. At Ffos-y-fran blasting would not be carried out closer than 300 metres to any property, every blast would be monitored at selected nearby properties, and blasting would be carried out within limits prescribed by condition. All blasts would be designed to ensure that no ground vibration exceeded 8 mm/s ppv and that at least 95% were less than 6 mm/s ppv. It would be unlikely that any property damage would be caused by such blasting or that significant nuisance would be caused to nearby residents. In order to provide a baseline against which to monitor property condition, Miller Argent would propose to pay for full property surveys to be carried out for a representative sample of all houses near to the site.

118. Some local residents have expressed concern that blasting may affect the nearby Trecatti landfill waste site. This has been considered by Miller Argent, and the operators of the Trecatti site have also been consulted. The operator's design consultants advise that any effects would be insignificant. (Document MA 005/6)

Archaeology (Documents MA 006/2 & A14)

119. Although much of the application site is now derelict and covered by modern tips and fly-tipping, it contains numerous historical remains resulting from Post-Medieval and later farming, early industrial ironstone and coal crop and patch workings, deep coal and iron mining, and the management of water by the Dowlais Free Drainage System. The earliest known remains are features of a probable Prehistoric settlement, possibly of Iron Age date, in the southern part of the site (see Plan FLRS/ES3/5 in Core Document CD 003). Most of the surviving remains represent a small element of a once vast industrial landscape around the east side of Merthyr Tydfil, though it is clear that many are actively decaying.

120. The Dowlais Free Drainage System, an 18th and early 19th century complex system of water collection leats (ditches), canalised natural streams, tunnels and surface reservoirs, is of importance to the historic landscape (see Figure 3 in Document MA 006/4). Sarn Howell Pond, a surface reservoir, is a Scheduled Ancient Monument (SAM) (see Photograph 9 in Document MA 006/3). The system was built to collect ground and surface water and deliver it to the Dowlais Iron Works.

121. Most old pits were located on the moorland to the north of the Bogey Road, and mining related features include spoil heaps, shafts, adits, pithead structures and coal tips. The Ffos-y-fran Deserted Iron Mining Village, another Scheduled Ancient Monument, lies immediately to the south west of the site (see Figure 5 in Document MA 006/4). There are remnants of old tramways and railways on the hill slopes and through the centre of the site (see Photographs 4, 5 & 6 in Document MA 006/3), and there are some historic structures including a listed wooden aqueduct over a deep cutting (Photograph 10 in Document MA 006/3).

122. Plans FLRS/ES11/2-8 in Core Document CD 003 show the locations of the many known remains, classified by the ASIDOHL (Assessment of Significance of Impact of Development on Historic Landscape Areas) method of assessment into A, B, C, D or U classifications to

represent their importance ("A" is of national value; "D" is of low importance). The scheme has been designed to avoid affecting the Scheduled Ancient Monuments and other features of high archaeological value (A/B and B value sites). However, the lower value remains within the areas of reclamation, coal extraction and temporary overburden storage would be removed. Some areas of relatively recent tipping are devoid of remains in any case, as they have already been disturbed.

123. Miller Argent has gone to great lengths to mitigate the effects of the scheme and achieve archaeological preservation objectives. In comparison with previous proposals the scheme has been modified to keep well away from Scheduled Ancient Monuments and their settings. The southern overburden mound has been withdrawn to avoid the Prehistoric settlement and the Cwm Golau semi-wooded valley to the east. The northern overburden mound has been taken away from land containing a well-preserved portion of the Dowlais Free Drainage System, an area of standing stones and the presumed site of the Medieval Waun Fair. In addition, mitigation measures would include further documentation of the site's landscape and archaeological features, safeguarding of the main features within or close to the site, and the re-establishment of certain features of the Dowlais Free Drainage System.

124. CADW, the Glamorgan Gwent Archaeological Trust (advisers to the Council) and the Countryside Council for Wales do not object to the proposals. They have been fully consulted and have played an active role in their consideration. CADW's written submission to the inquiry (Document 12) raised certain concerns. However, these have been largely resolved after further discussions, as confirmed in notes of a meeting held on 27 August 2004 (Document MA 006/6). Further details of these assessments are summarised below.

125. Planning policy at all levels seeks the preservation of nationally important remains, and this is achieved by the proposed scheme. CADW's only concern on such remains has been overcome by splitting and repositioning the planned soil mound near the Sarn Howell SAM. Figure 7 of Document MA 006/4 shows the heritage area that would be protected around the Sarn Howell site. The Deserted Iron Mining Village SAM and the listed wooden aqueduct would also be safeguarded, the latter within the central corridor which would protect many features of the Dowlais Free Drainage System.

126. The value of the Dowlais Free Drainage System has really only been appreciated as a result of the assessment work carried out for this scheme. The extent of the surviving surface system is illustrated in Figure 3 of Document MA 006/4, and Figure 4 illustrates the limited impact the scheme would have on this. The underground complex would not be affected by the scheme, and the remaining surface elements would enable the overall system to be understood and observed. The Glamorgan Gwent Archaeological Trust commented: *"We have considered the impact specifically on the known and potential archaeological resource and we conclude that the various mitigation proposals will satisfactorily protect the archaeological interests of the site, either through preservation in situ or preservation by record."*

127. Planning Policy Wales advises that the historic landscape should be considered in determining applications. Figure 1 of Document MA 006/4 shows that large areas of the site have already been subject to extensive disruption, and the impact of the proposed scheme on the overall historic landscape is assessed in the Environmental Statement as "moderate", although with greater impacts in some areas (Core Document CD 002). However, the Glamorgan Gwent Archaeological Trust (GGAT) recognised that the Local Plan designates the land for reclamation and concluded: *"The decision on whether to retain this development*

area as historic landscape, as it is currently constituted, or allow a relatively short-term, economically beneficial development followed by land restoration, should reside with the people of Merthyr through their elected members." Clearly, the GGAT did not consider the harm to the historic landscape would be so severe as to warrant refusing the proposal. It is noteworthy that the Local Plan accepts the apparent conflict, as it recognises the Historic Landscape as well as identifying the land for reclamation with coal recovery.

128. The Countryside Council for Wales advised: *"the inevitable loss that the scheme would cause to the historic landscape could be accepted provided that the archaeological mitigation strategy includes a full landscape survey of all affected elements prior to their removal, with the aim of establishing as many as possible of the physical and temporal links that existed between the individual elements. We draw particular attention to the DFDS in this respect. The dividends of this in terms of education and the interpretation of Merthyr's rich historic landscape legacy would be considerable."* The scheme would achieve this.

129. Objectors have referred to the National Assembly's decision in the recent past to refuse planning permission for the Winchfawr West site (on the western side of Merthyr Tydfil) and the Inspector's conclusion, in that case, that the historic landscape was a factor that weighed against granting planning permission. However, the circumstances of that case were quite different as the site had strong links with the Cyfartha Ironworks and a quite different planning context. That decision has little relevance to the Ffos-y-fran application.

Nature Conservation (Documents MA 007/2 & A14)

130. There are no statutory nature conservation sites or local nature reserves within the site. The Tair Carreg Moor Site of Importance for Nature Conservation (SINC) lies immediately to the east of the site, and possible effects of the scheme on that site have been a matter of some concern to the Caerphilly County Borough Council, in whose area the SINC lies. However, Caerphilly CBC is now satisfied that the hydrology and geology of the area is such that water does not flow from the site into the SINC and that, subject to appropriate safeguards covered by conditions, the proposals would not affect the SINC (Document MA 007/4). Similar land within the application site, containing dwarf shrub heath and acid grassland habitats, would be specifically restored to maintain the general ecological character of the area, including ponds and wetlands. The benefits of such restoration of opencast coal sites are well accepted, not least in regard to birds such as the lapwing. (Document MA 007/7)

131. Preparatory work for the draft Unitary Development Plan has looked at identifying new SINCs, and some parties have referred to the possibility that some may be within the application site. However, those considerations are still at an early stage, and the Council advises that no new SINCs are envisaged within the site. Nevertheless, the nature conservation importance of habitats within the site has been fully taken into account in the Environmental Impact Assessment (Core Document CD 002) and in the proposed mitigation measures and restoration strategy. (Document MA 007/5)

132. Table 1 in Document MA 007/2 provides a summary of ecological impacts ranging from "negligible" to "moderate", and the Countryside Council for Wales and the Environment Agency have not objected to the proposals. Habitats falling within the EC Habitats Directive, UK Biodiversity Action Plan (BAP), Local BAP and WAG criteria have been identified and impacts assessed. Minor impacts have been identified on several birds listed in the EC Birds Directive, WCA Schedule 1, UK BAP and list of Birds of Conservation Concern. Impacts on mammals are predicted to be minor, and known bat habitats in the Cwm Golau valley and the protected central corridor would be unaffected. The general impact on reptiles, amphibians

and invertebrates would be minor, though a moderate impact on great crested newts is identified and requires further explanation.

133. Great crested newts, a protected species, have been identified on the site, and a licence under Regulation 44 of the Habitat Regulations 1994 would be needed for measures to protect the newts from harm. To obtain such a "derogation" the regulations require a 3 part test to be satisfied, and Planning Policy Wales advises that the test should be considered at the time of the planning application to avoid planning permission being granted and a derogation being subsequently refused. The 3 tests are specified in Article 16 of the European Habitats Directive and require the decision maker to be satisfied that:

(i) the proposals are necessary to preserve public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment; and

(ii) there is no satisfactory alternative; and

(iii) the action proposed will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural habitat.

134. The first test is met because the scheme as a whole necessitates the disturbance of the newts, and the safety, amenity, planning and economic benefits of the scheme provide the imperative benefits for granting a licence. A draft method statement for disturbance of the newts, involving the creation of new ponds and the movement of the newts, has been discussed with the Countryside Council for Wales and would be finalised at the time of the application for the derogation (Appendix C of Document MA 007/3). The level of interference would be justified by the benefits of the scheme.

135. The second test requires the consideration of alternatives that would avoid disturbing the newts. Several alternative means of addressing the dereliction and safety hazards have been considered (see paragraph 74 above) but none meet the main aims whilst providing a suitable means of financing their achievement. The only satisfactory way of reclaiming this derelict land is by the currently proposed scheme, as acknowledged by the Council and in the adopted Local Plan. (Document MA 002/2)

136. The third test has been considered by the Countryside Council for Wales, which has confirmed that it is satisfied on this matter. CCW's letter to the Council dated 14 August 2003 (Appendix I in Document MA 007/3) says *"We have discussed with the applicants how they will fulfil their obligations with respect to Great Crested Newts and we are satisfied that, with the proposed mitigation, the favourable conservation status of this species will not be affected by this proposal."* Thus all 3 tests for the derogation would be met.

137. With regard to policy, the scheme would accord with the guidance of Planning Policy Wales and Minerals Planning Policy Wales in that ecological and nature conservation considerations have been fully considered in the development of the proposals through the process of environmental impact assessment. The proposals accord with the Structure Plan with respect to the protection of features of nature conservation interest (Policy D5), habitat creation through restoration (Policy D6), adverse effects on nature conservation outweighed by the need for the scheme and mitigation measures developed (Policy EV6), provisions for enhancing existing areas of nature conservation importance (Policy EV7), and maintenance of ancient woodland and strengthening of hedgerows (Policy EV14).

138. Assessed against Local Plan policies, the scheme would take account of wildlife interests and restoration (Policy GR1), balance effects on sites of nature conservation interest against the benefits of the scheme in achieving restoration of extensive areas of derelict land (Policy NH1), have no effect on SSSIs, Local Nature Reserves or Sites of Importance for Nature Conservation (Policies NH3, NH4 & NH5), retain and enhance the woodland at Cwm Golau, identified on the Proposals Map as Ancient and Environmentally Important Woodland (Policy NH6), and protect the water environment (Policy NH7).

139. In conclusion, the overall ecological effects of scheme would be only moderate, have not been subject to objections by the statutory consultees, and would be clearly outweighed by the benefits of the scheme.

Water Environment (Documents MA 004/2, MA 005/2 & A14)

140. The National Assembly has particularly asked to be informed of the effects on surface and groundwater resources. Minerals Planning Policy Wales requires planning authorities to take into account the need to protect the quantity and quality of surface and groundwater supplies and to ensure that changes in the water table do not unacceptably affect water resources or sources of water for sites of high landscape value or nature conservation importance. It recommends that monitoring be carried out and, if necessary, remedial measures be introduced and that the Environment Agency should be consulted. Local Plan Policy NH7 is also relevant. Amongst other things, it seeks to ensure that the development will not have an adverse impact on the quantity and quality of groundwater resources, surface waters, other water bodies or the flora and fauna dependent on such water features.

141. Dealing first with groundwater, investigations have shown that groundwater within the site occurs in 3 identifiable sub-surface reservoirs, the limits of which are defined by geological faults (see Figures RE/004 & RE/010 in Document MA 005/4). Reservoir 1 lies to the south-west of the Penydarren Fault, which runs in a north-west to south-east direction touching the south-west edge of the proposed void. Reservoir 2 lies between the Penydarren Fault and the Dowlais Fault, which runs roughly parallel to it and through the middle of the proposed void. Reservoir 3 lies to the north-east of the Dowlais Fault.

142. Groundwater levels in these sub-surface reservoirs are controlled by, or at least strongly influenced by, the Dowlais Free Drainage System, which has been in existence for at least 150 years. Each reservoir supports a different water table level, and these have been monitored in observation wells since 1997. Groundwater levels in Reservoirs 1 and 2 lie below the floor of the proposed excavations and will, therefore, not be affected by the proposed works. The groundwater in Reservoir 3 lies above the proposed excavation floor level. At its deepest the floor would be some 50 metres below the piezometric water surface, and during this latter stage of coal extraction (i.e when the excavation is near the north-eastern end of the site) the excavation would have to be kept free of water by pumping it away. This would cause the groundwater levels in the surrounding ground to be drawn down, and a cone of depression would be created (as illustrated on Figures RE/004 & RE/005 in Document MA 005/4). However, when excavations were completed, groundwater levels would recover within the backfilled void to similar levels to those that currently exist and the temporary cone of depression would also be recharged.

143. There are no licensed or unlicensed water extraction locations within the area of impact, and it is unlikely that there would be any impact on water supply or the maintenance of water resources. However, groundwater levels would be monitored throughout the scheme and, if the impact did prove to be more than local, an artificial recharge system would be installed to

mitigate the trend. Any such trend would develop gradually (typically over several years) and allow ample time to design and implement a recharge scheme if needed. At worst, it would only be needed for a short period of time near the end of the coaling period. (Document MA 005/6)

144. With regard to water quality, the groundwater quality is good and typically alkaline, which would reduce the risk of Acid Rock Drainage developing as a result of the cone of depression in sub-surface Reservoir 3. Acid Rock Drainage is the pick-up of metals in solution within the ground. When water flows to the surface and comes into contact with air there is a risk of the metals being precipitated out and causing deposits at the surface outfalls and pollution of the surface waters. At Ffos-y-fran the alkaline nature of the groundwater would reduce that risk. In the unlikely event of groundwater quality deteriorating water entering the void would be stored and treated as necessary in order to meet the discharge consent standards set by the Environment Agency.

145. Turning to surface water, many of the existing surface water drainage ditches and watercourses on the site would be lost and replaced during the operational period by a new flow-collector system, which would maintain the capacity of the surface water drainage system, including the collection of run-off from the soil storage and overburden mounds. The existing and proposed arrangements are illustrated in Figures 1 - 5 of Document MA 004/3. The system would include a network of ponds, flood attenuation lagoons and water treatment areas, which would lead to a net reduction in peak flood flows from the site and provide adequate control over water quality. More natural arrangements would be reinstated as part of the land restoration scheme, and wherever possible parts of the Dowlais Free Drainage System would be kept as parts of that system.

146. The rate and quality of discharge from the water treatment areas/lagoons would be controlled by discharge consents, which have already been granted by the Environment Agency. The Agency has also granted Land Drainage Act Consent for a number of new culverts and a channel diversion proposed as part of the scheme. (Appendices 1 & 2 and Figure 6 in Document MA 004/3)

147. In view of concerns expressed by Caerphilly CBC, particular attention has been paid to possible effects on the Tair Carreg Moor SINC, a wetland area adjacent to the eastern side of the application site. Geological investigation has shown that there is no direct sub-surface flow link to the SINC and that, due to the low permeability of the drift deposits, water would not flow into the site from the SINC area. Similarly, analysis of both the natural surface drainage gradients and the Dowlais Free Drainage System channels shows that the proposed scheme would have no effect on the SINC so far as surface water is concerned. (Documents MA 004/4 & 005/5)

148. The requirements of both national and Local Plan policies would be met in respect of both groundwater and surface water implications, which in both cases would be acceptable. The Environment Agency is satisfied on these matters.

Landscape and Visual Impact (Documents MA 008/2 & A14)

149. The present landscape of the site falls into 3 distinct areas: the Western Shoulder overlooking the town, which comprises a complex of tips and the curving line of the disused railway; Open Moorland to the east, with the remains of surface features of previous mining and settlement; and Bryn Cerau Farm to the south, comprising enclosed farmland and the wooded valley of Cwm Golau, but with the farmstead itself outside the site. A large part of the site is

urban common, comprising about 8% of the overall Merthyr & Gelligaer Common, with public rights of access and several confirmed and claimed public rights of way. The present nature of the land is best illustrated by the 3 aerial photographs in Section 1 of Document MA 008/3.

150. Impacts would arise from the site's prominent location, the scale and duration of the scheme, the features created, activities associated with the operations, and the ultimate changes due to restoration. The Western Shoulder would be subject to substantial and continuous change throughout the scheme. The Open Moorland would be altered by the construction of the temporary overburden mounds and later by their removal, and most surface elements of the historic landscape would be lost. Most of the enclosed farmland would be unaffected, and Cwm Golau would be omitted from the operational area.

151. A number of viewpoints are described in the Environmental Statement and illustrated in Core Document CD 003. The best viewpoints are from elevated ground in the surrounding area, particularly from the north and west, where there would be varied views of the void and the 3 overburden mounds. Views from the south would be more limited, and views from the east would be of the northern and eastern overburden mounds.

152. The main purpose of the scheme is to remove the present dereliction and restore the land to beneficial use. The restoration scheme would aim to re-establish the pre-existing landform, restore common grazing land over most of the site, with some wet heathland, acid grassland and wood features, restore water features for drainage, conservation, amenity and stock-watering purposes, restore public access and rights of way to the common, and maintain enclosed fields to the south. The long-term effect on the landscape character and on visual amenity would be a substantial benefit, whilst adverse effects would be temporary. The scheme is brought forward in the context of favourable policies at both national and local level, and there are no objections from the Campaign for the Protection of Rural Wales (Core Document CD 037).

153. Some comment is needed on the Merthyr & Gelligaer Common, an urban common registered under the Commons Registration Act 1965. The public have rights of access over the common "for air and exercise" but those rights are subject to "the right of any person to get and remove mines or minerals or to let down the surface of the … common" (Section 193(5) of the Law of Property Act 1925). Thus Miller Argent has rights to the coal and can lawfully exclude the public to allow them to recover the coal safely. In fact, most of the land is little used for lawful recreation (see July 2004 pedestrian survey in Core Document CD 081) and, in any event 92% of the common would remain available.

154. It has been established in law that the owner of a common may take minerals from the land provided he does not infringe upon the rights of the registered commoners. In this case, Miller Argent has reached agreement with all of the commoners, and none object to the scheme. The remaining area of common would be sufficient for their grazing rights.

Transport (Documents MA 012/2 & A14)

155. Detailed assessments have been made of all transport and traffic implications of the proposed scheme. There would be 2 site access points: Point Y near the western end of the Bogey Road and close to the Mountain Hare roundabout; and point X at the eastern side of the site opposite the Cwmbargoed Disposal Point (see Figure PL05 in Document MA 012/3). Access Y would be used mainly to bring in large items of site plant at the start of the scheme and to take it away again at the end. Access X would be a crossing point for traffic between the

application site and the Cwmbargoed Disposal Point. At peak coal extraction, about 46 lorries per hour would use the crossing point, which would be traffic light controlled.

156. All coal would be transported along this route to the disposal point, where it would be loaded and transported to Aberthaw Power Station by rail. The Ffos-y-fran site is uniquely positioned to be able to take advantage of this facility, which is a strong point in favour of the scheme on grounds of sustainable transport. Some 41 million lorry miles would be saved by this rail transport over the life of the scheme.

157. It is estimated that there would be about one fuel tanker and 5 other delivery vehicles per day visiting the site and that there would be 2 shifts of about 93 operational staff and a further 40 office, contractor, security and other staff travelling in and out of the site. These would use the Cwmbargoed Disposal Point access off Fochriw Road. The only other transportation by road would be of the proportion of waste from the 3 landfill tips that has to be transported to either the Trecatti refuse facility, a distance of about 1.75 km along Fochriw Road, or to a more distant facility for hazardous waste. This is estimated to be between 20,000 and 50,000 cubic metres of waste removed over a period of 6-12 months.

158. Improvements would be proposed to a short section of the Bogey Road in the vicinity of the narrow railway bridge, which would be bypassed, to enable a haul road to be constructed underneath the Bogey Road (see Figure PL05 in Document MA 012/3 and additional Plans B1 & B2). The haul road would enable material to be moved to and from the Southern Overburden Mound without crossing the public highway. Construction of the new section of the Bogey Road would involve its temporary closure for a few days but would make a considerable improvement to its alignment.

159. The highway network in the vicinity of the site is well developed and much of it is to dual carriageway and wide single carriageway standards. Traffic flows are well within design capacity, and the proposals would not impose any significant additional impacts on the network. The existing traffic network would not be compromised by the limited traffic generated by the proposal.

Support by Merthyr Tydfil County Borough Council (Documents 8.1 & 8.2)

The material points are:

160. The Council supports the proposal, subject to suitable planning conditions, and this support is based on 3 lines of reasoning: the longstanding commitment to the East Merthyr Land Reclamation Scheme; planning policy support; and the merits of the current application itself.

161. The commitment of Merthyr Tydfil CBC, its predecessors and other agencies to the 3 phase reclamation scheme, with restoration and aftercare funded by opencast coal extraction, dates back over 16 years. The 3 phases were granted planning permission, and Phases 1 & 2 have been completed and are good examples of how the environment has been improved and associated community benefits gained, including infrastructure and development land. The rationale for the reclamation scheme was to remove this substantial tract of derelict land in the north-eastern part of the Borough. Dereliction lies as much below ground as it does above with numerous recorded shafts, adits (tunnels driven into the hillside), bellpits (shallow vertical excavations with expanded voids at the bottom) and crown holes (surface depressions resulting from ground collapse) complementing the all too apparent spoil and refuse tips.

162. The second matter is that of planning policy. The most recent element of the development plan, the adopted Local Plan, was subject to a rigorous public consultation and adoption

process in 1997 and 1999. The relevant sections of the Local Plan are largely informed by the longstanding commitment to the East Merthyr Land Reclamation Scheme and acknowledges the pivotal role of opencast coal extraction in past and future funding of reclamation schemes. It identifies 79.1% of the application site as derelict (*"land so damaged by past industrial or other development that it is incapable of beneficial use without treatment"*) and includes it in the Priority Reclamation Programme with acknowledgement of the role of opencast coal extraction as a suitable vehicle for the reclamation scheme. The Local Plan Proposals Map describes the application site as the *"East Merthyr Phase III Reclamation Scheme"*.

163. The third line of reasoning is the planning merits of this particular scheme. The current proposal is different from the Phase III scheme approved in 1988 and from the 2 later applications in 1994 and 1999, which were not determined. Although of longer duration than the scheme approved in 1988, it would nonetheless be temporary and would have the following advantages over it:

- it would ensure maximum extraction of coal reserves and avoid sterilization of reserves (116% more coal than the 1988 approved scheme from an excavation area 35% greater);
- it would address the main issue of dereliction (reclaiming 39% more than the 1988 approved scheme), whilst allowing for enhancement of environmentally sensitive areas (unlike normal reclamation techniques);
- it would address archaeological and ecological issues more sensitively in response to additional survey work in these areas (6 times less disturbance to areas of high ecological and archaeological interest than the 1988 approved scheme);
- it has assessed environmental impacts and introduced mitigation measures to minimise the impacts.

164. The Council has formally considered its position on the merits of the application. A detailed report (Core Document CD 037) was presented to a Special Full Council meeting on 30 June 2004, and the Council resolved to support the application subject to conditions and associated environmental safeguards (including those imposed by other bodies and agencies in the form of permits, licences and other approvals) and a financial guarantee to ensure restoration of the site in the event of any default. That report adequately addressed the matters identified by the National Assembly on which it particularly wished to be informed and took into account the many consultation responses and third party representations submitted.

165. No substantive objection was offered by the statutory external consultees. Internally, the Head of Environmental Services maintained his concern on the issue of noise resulting from working after 1900 hours in the evening. However, curtailing working hours to eliminate this would have a disproportionate effect on the duration of the scheme, and the Council considered that this adverse impact would be outweighed by the benefits. Nevertheless, at the inquiry Miller Argent put forward alternative working practices that would enable a noise limit of 42 dB $L_{Aeq\ 1h}$ to be met during evening working (1900 to 2300 hours), and this would allay the Council's environmental health concerns (Document 8/S6).

166. Statutory publicity, publicity by the applicants and objectors, and extensive consultations by the Council in late 2003 produced varied third party responses. Many are considered to have resulted from misinformation, misconceptions and lack of information on the part of the respondents. However, many others expressed clear, relevant concerns, which were addressed in the Council's planning report (Core Document CD 037).

167. Several petitions against the proposal were received, containing a total of some 3400 signatures. With one exception, all were submitted by representatives of the Merthyr Tydfil Anti Opencast Campaign and referred not only to the current application but also to a general objection to any opencast mining in the Merthyr Tydfil area. Objectors claim substantial backing for their campaign. However, as part of its consultation process, in October and November 2003 the Council distributed 26,590 questionnaires to every household in the Borough and received only 1546 responses, representing a 5.8% return rate. Less than half of these responses expressed concern about the scheme and, although "health concerns" were rated the most important issue, "avoidance of costs to residents" and "economic benefits" were rated the second and third most important issues.

168. In contrast to the third party objections it is significant that there are no statutory consultee objections to the scheme. Overall, the Council considers that the proposal would result in lasting environmental improvement and positive benefits for the community as a whole and should be supported.

169. Several other particular matters have been raised by objectors at the public inquiry on which the Council wishes to comment. Firstly, it is confirmed that air quality monitoring has been carried out at Twynyrodyn School since June 2003, and there has been no recorded exceedance of the recommended level for Nitrogen Dioxide. The average level measured has been 23.5 $\mu g/m^3$ compared with the recommended maximum level of 40 $\mu g/m^3$ (Documents 8/S2 & 8/S2A).

170. Secondly, there are currently 11 Sites of Importance for Nature Conservation (SINCs) designated in the Local Plan, none of which lie within the application site. A further 59 possible sites have been identified in preparations for the draft Unitary Development Plan, though clearly not all of these would be taken forward. The Council would not envisage designating any SINCs within the application site. (Document 8/S3)

171. With regard to mineral rights on the site, the Council only owns those for the small area of overlap land between Phases 2 and 3 and, as that land has already been disturbed, it is unlikely to contain any viable mineral reserves. Mineral rights for most of the site rest with Miller Argent, the owner of the land. It has also been suggested that the Council has failed to maximise community benefits from the proposed scheme. However, it is difficult to see how it could have done better. In addition, to repaying the WDA grants used for initial service and road diversions and for culverting the Nant Morlais, the Council has negotiated a wide range of financial and non-financial benefits as part of the scheme. Finally, it is confirmed that the Council has received a letter enquiring about the possibility of developing a brick factory on the site. However, the Council receives many speculative letters of this sort and attributes little significance to it. (Documents 8/S4, 8/S5 & 8/S7)

Other Support for the Proposal

172. Representatives of the Transport & General Workers Union and the Confederation of UK Coal Producers presented evidence in support of the proposal, as did 2 longstanding local residents, Mr Alan Rees, who has lived all his life in Merthyr Tydfil, and Mr Manus Malloy, who has lived in Merthyr Tydfil for 55 years and spent 39 years working in the opencast coal industry.

The material points are:

Transport & General Workers Union (Document 13)

173. The Transport & General Workers Union has negotiating rights in the opencast coal industry and supports the proposed scheme on the basis of the benefits to the Merthyr Tydfil area and the need for coal to meet the Government's energy policy. In supporting the scheme, it has taken account of the health and safety of both the workforce and the local community; indeed, this is one of the T&G's main concerns for all industries. There is a public perception that opencast working is associated with respiratory illness and disease. However, there is no record of anyone suffering from respiratory illness as a result of working on an opencast site.

174. Modern opencast sites in the UK are subject to strict conditions and criteria set out by the various regulatory authorities, and the T&G welcomes this to ensure that developers are accountable to public scrutiny. Dust is one of the matters that is closely monitored, as are noise and blasting operations. Information has recently been made available on complaints received by Celtic Energy over the period 1986 – 2003 at its 3 sites at Margam, Nant Helen and Sellar. 200 complaints were recorded over the 17 years period, which is an average of 4 per year per site and indicates a low incidence of problems. All opencast sites have potential risks to workers. However, the T&G would ensure that properly trained health and safety representatives were elected at Ffos-y-fran, and they would be proactive in promoting the wellbeing of the workers on the site. Health and safety would not be compromised.

175. The proposal would bring economic benefits to the area. The "South Wales Valleys" is amongst the poorest and most disadvantaged regions in the UK and Europe as a result of cumulative job losses over the past few decades from the coal and other traditional manufacturing industries. The Valleys are characterised by high levels of unemployment and economic inactivity, poorly paid jobs and low household incomes. These economic factors are major contributors towards the poor quality of housing, high levels of illness and disability and low levels of educational attainment and vocational qualifications. Unemployment in Merthyr Tydfil is consistently above the Welsh average, and the claimant figure currently stands at 3.2% compared with an average of 2.2%. The long-term unemployment rate is also high. In absolute terms the unemployment levels are currently not unduly high. However, they are masked by the highest rate of sickness related benefit claims amongst working-age men in Britain and, if these figures are taken into account, the real unemployment rate is 28%.

176. The proposed scheme would provide an opportunity to start reversing these figures. It would have the potential to employ 200 workers directly and generate up to 400 more jobs indirectly (based on ratios found at other opencast sites). The vast majority of these would be local labour, and the T&G has gained a commitment from Miller Argent to employ local labour wherever possible. Indeed, it would not make economic sense to do otherwise. The Company has already received a large number of enquiries from local people and would provide a range of training opportunities for people who need them. Miller (one of the partner companies in Miller Argent) has a proven record of working closely with the T&G.

177. Other economic benefits would also be gained. If the scheme did not go ahead the responsibility for relocating the 3 existing landfill sites would fall on the Council at a substantial cost. In addition, the scheme would fund the restoration of the land and pay back the outstanding loan from the Welsh Development Agency, enabling that money to be invested elsewhere to create more jobs. Over the course of the scheme some £70M would be paid in wages, over £10M in business rates and over £6M put into a community fund.

178. The scheme would also have wider implications for the economy of South Wales in relation to the Government's energy policy. The Government has recognised at last that a secure energy supply is important in maintaining a modern economy and that, despite targets to increase reliance on gas-fired power generation and the use of "renewables", coal will continue to play a major role in generation of the Country's energy supply. Flue gas desulphurisation equipment is to be installed at Aberthaw Power Station to ensure that it meets the new emission targets for the foreseeable future. At present, much of the coal used at Aberthaw is imported. However, it was designed to burn Welsh indigenous coal, and the supply of coal from Ffos-y-fran, which is of ideal quality, would help ensure the future of Aberthaw and hence security of employment at other coal production sites in South Wales, which would also be able to continue to supply the power station.

179. In addition to the economic arguments about the sources of coal for Aberthaw, the T&G is opposed to the importation of coal as a matter of principle. At present some 50% of the UK's coal supply is imported from countries such as Columbia and China even though huge resources are known to exist in the UK. Foreign coal is often not subject to adequate controls on health and safety, and its low cost is subsidised by unsafe working practices and disregard for workers' wellbeing. Furthermore, imported coal means exported jobs.

Confederation of UK Coal Producers (Document 14)

180. The market for coal in the UK has been robust in recent years, averaging about 60M tonnes per year since 1997. 90% of demand is for the electricity generating industry, which burned over 53M tonnes in 2003, a substantial increase over its demand only 5 years previously. Electricity generated from coal exceeded that from gas for the first time for many years, reflecting the rising oil and gas prices. However, looking forward, 2 major pieces of European legislation will soon affect UK power generation coal burn. The European Union's Emission Trading Scheme (EUETS) aims to provide a mechanism to reduce carbon emissions from 2005 onwards and is likely to have an adverse effect on the use of coal. A carbon dioxide emissions allowance will be made for each installation, including power stations, and there will be a facility to trade these. However, the EUETS is likely to lead to a reduced level of electricity generation from coal in the future, though it will still remain substantial.

181. The second piece of legislation is the Revised Large Combustion Plant Directive (LCPD), which will place limits on emissions of sulphur dioxide, nitrogen oxides and dust from power stations from 2008 onwards. The UK Government is proposing to implement the Directive through emission limit values (ELVs), which can be achieved by suitable abatement technology, including flue gas desulphurisation (FGD). Some plants have already installed this technology, and RWE Innogy has recently received a Section 36 Consent under the Electricity Act 1989 to install FGD at its Aberthaw Power Station. It intends to finance this by operating at higher load factors, increasing its demand for coal, and over the UK as a whole the demand for UK coal is not expected to fall.

182. The coal at Ffos-y-fran is of a particularly high quality, which makes it more environmentally friendly than some other UK coals, and is of unique characteristics in UK terms and an ideal specification to serve the boilers at Aberthaw Power Station. The decrease of output from South Wales deep mines and opencast sites over past 20 years has made the sourcing of the correct specification of coal for Aberthaw Power Station increasingly difficult. The coal at Ffos-y-fran is an important strategic reserve for the UK energy balance.

183. UK coal production was 28M tonnes in 2003, comprising 16M tonnes from deep mines and 12M tonnes from opencast sites. Production from both has been falling in recent years in Wales and England due to the difficulty of getting planning permissions to access resources, though output in Scotland has been maintained. Allowing for some 2M tonnes a year being supplied into the general industrial and domestic markets, the amount available to the power station market is expected to continue to fall well short of its requirements. Therefore, provided UK production costs are competitive, all production can be sold.

184. At present over 50% of UK coal supplies are imported, mainly from South Africa, Colombia, Australia, Poland, Russia and Indonesia. The international coal price has doubled over the past year because of increased freight costs, a sharp increase in demand in China, India and other markets in South-East Asia, and higher oil and gas prices. Whilst the current high prices may not be maintained, it is unlikely that they will fall back to the lower prices, as the world market has fundamentally changed. At the price levels anticipated in the future the UK coal industry will be viable and will be able to sell all the coal it can produce.

Mr Alan Rees (Document 15 & letters in Document bundle 3)

185. The magnitude of the Aberfan disaster in1966 changed for ever the way the mining industry dictated and influenced the communities of the South Wales Valleys. The legacy of that day has influenced legislation and the way the detailed matters associated with coal extraction are considered nowadays. The Chief Planning Officer's report to the Council (Core Document CD 037) was comprehensive and unbiased and enabled the Council to make an informed decision on this major proposal. The report was openly available to the public and included the results of the borough-wide consultation exercise, which showed that the majority of people were in favour of the scheme. No doubt a major factor in this view was the visual improvements that have occurred as a result of the previous phases of the land reclamation scheme (photographs were included to illustrate this).

186. The development of brownfield land and derelict sites has been identified in both national and local policies, and there is no doubt that the multitude of improvement schemes (large and small) already carried out has instilled a sense of pride and optimism in the affected communities. For many generations the people of Merthyr Tydfil have lived with the aftermath of the town's industrial past and taken the visual evidence of that era for granted. The present statistics on health, education, work inactivity, crime and individual aspirations are matters of despair and, to echo the words of the King, "something must be done".

187. Over the past 2 decades everyone's ambitions to achieve a better standard of living have increased. The removal of a dominant reminder of a wretched past and the emergence of a green and sustainable landscape to take its place would give everyone the belief that Merthyr Tydfil, with its proud heritage, will have a chance to take its place in modern society once again. Merthyr has another advantage to exploit now that the A465 Heads of the Valley road is being improved to dual carriageway standard. It will complete the region's modern transport links to the rest of the Country and enhance prospects for a surge of economic interest in the area. The proposed Ffos-y-fran scheme would provide further encouragement.

188. The apprehension expressed by many people is fully understandable, e.g. dust, noise and blasting. There is also particular concern over risks to contamination of local streams and watercourses and disturbance likely to be caused to the unrecorded underground legacy of past workings. The scheme must include plans to deal with these various matters and be subject to independent monitoring. Subject to these details, permission should be granted for the scheme to go ahead.

Mr Manus Malloy (Document 16)

189. Over the past 10-15 years the opencast coal industry has shown that it is well aware of its social responsibilities when working close to local communities. Phases 1 and 2 of the East Merthyr Land Reclamation Scheme have been good examples of this. Those works were carried out very close to the communities of Dowlais, Penydarren, Penyard, Mountain Hare and Incline Top without any unacceptable impacts on them. Over 400 houses were located within 100 metres of coal working points, 5 schools were within one kilometre (½ mile), and many hi-tech and food industries worked virtually next door. In addition to coal extraction, the Great White Tip included toxic waste, which was successfully dealt with and incorporated in the reclamation scheme.

190. No one would dispute that Phases 1 and 2 were a resounding success. The former dereliction was replaced by an attractive restored landscape, which has since allowed the development of houses and new industry on the land. The community gained from many other benefits ranging from equipment and facilities for local schools to major infrastructure such as the new A4060 road and a new electrical substation nearby. During the works a site liaison committee was set up, and this enabled local people to raise any matters of concern so that they could be dealt with.

191. The opencast coal industry has also demonstrated that it recognises the importance of the environment, and many recent restoration schemes have won awards. Large areas of derelict land have been successfully cleaned-up and restored. The Ffos-y-fran scheme includes restoration proposals prepared in consultation with the various regulatory and advisory bodies for the countryside, nature conservation and archaeological matters, and they adequately reflect the interests of wildlife and the historical environment. The Merthyr Tydfil area was once unspoilt and rich in natural flora and fauna. The proposed scheme would contribute towards the recovery and making good of 2 centuries of industrial damage.

192. At present the land presents dangers to the public due to the deterioration of the relics of former surface and underground workings. In addition to making the land more visually attractive, the proposed scheme would remove or make safe many dangerous, unseen underground voids and surface features. It would provide a far better solution than filling the voids with large quantities of concrete, a method commonly used in the past. It would also be far better than the alternative of cosmetic surface treatment, which would not address the underground dereliction. At other sites where this has been employed ground collapses have continued to occur, and the danger has not been removed.

193. There is a strong case of need for the coal, and Government policy of sustainable energy management includes a case for coal-fired power generation for the foreseeable future on both security and economic grounds. The main pollutants from the burning of coal are oxides of sulphur and nitrogen, and these have been greatly reduced by technological improvements at modern power stations. In addition, clean coal-burn technology has been developed and will enable use to be made of the UK's vast known reserves of coal (at least 200 years). The alternative is an increasing reliance on imported energy in the future.

194. The proposed scheme would provide a valuable energy mineral as well as training and good employment opportunities for a large number of people. Many former local opencast coal workers are currently either out of work or have to travel long distances to work. The scheme would provide an opportunity for them to work locally and contribute to the local economy.

195. Modern opencast coal methods are well regulated and policed, including controls on noise, blasting, dust, fumes and water quality. Miller Argent's Environmental Statement shows that the prescribed standards on these matters would be met, and the remaining concerns of some local people are unfounded and stem from misinformation. Objections to the scheme have been orchestrated by a small group of people but many local people support the scheme, and some have written to the press expressing that support.

196. The health risks from dust have been made a big issue. However, the adequate control of dust is just as important for the site employees and, if it were a health risk, it would manifest itself in the site workers. No such evidence has ever been found. In accordance with normal practice on all opencast coal sites, all site workers would be trained in awareness of environmental and safety matters. Furthermore, extensive studies, including the Newcastle Study, have failed to find any link between opencast coal operations and respiratory health.

197. In conclusion, the scheme would bring to an end 200 years of abuse of the land by the iron and coal industries, substantially improve the landscape at the eastern gateway to Merthyr Tydfil (which is currently seen as a sea of waste tips and is an effective discouragement to tourism), provide opportunities for good local employment (and encourage other industries to the area rather than deter them), and would achieve this at no cost to the taxpayer. Finally, it would be in accordance with the aims of the Local Plan, which includes specific provision for the scheme.

Other Interested Authorities

198. A representative of the Local Health Board (supported by a consultant from the National Public Health Service of Wales – see Document 10) presented independent expert evidence on health matters, and a representative of Caerphilly County Borough Council, the neighbouring Council immediately to the east of the application site, also gave evidence.

The material points are:

Merthyr Tydfil Local Health Board (Document 9)

199. An objective assessment has been carried out of the overall impact of the proposal on the health and wellbeing of the Merthyr Tydfil population. The scheme would be expected to cause both benefits and adverse consequences to health. Benefits would occur as a result of improved employment opportunities for local people and increased financial input into the community as a whole. This would improve material circumstances and reduced deprivation, both important factors in the general health of the community. In the longer term benefits to wellbeing would also accrue due to the improved appearance and state of the land after restoration and the improved opportunities for access to it for leisure purposes. In the short-term, of course, these opportunities would be reduced, though it is not known how much use is made of the common for these purposes at present.

200. The main potential adverse impacts are in regard to air quality and noise. The potential effects on health due to air quality are complex but the main issue is that of fine particulates. Particulate matter in the air has biological effects involving the lungs and heart, causing respiratory symptoms and adverse effects on the cardiovascular system. Fine particles (less than 2µm in size) are more hazardous than larger ones (between 2µm and 10µm), and visible dust (generally larger than 10µm) has less effect. The composition of the particles is also a factor. Particles originating from the earth's crust (as from mining) appear to have less inflammatory potential than the same size particles generated from car engines.

201. In the specific case of asthma, most of the available evidence does not support a causative role for outdoor air pollution. In 1995 the Committee on the Medical Effects of Air Pollution stated that most asthmatics should be unaffected by exposure to levels of non-biological air pollutants as commonly occur in the UK, although a small proportion will experience clinically important effects, such as needing to use their inhaler more. The levels of PM_{10} quoted by the developer for the Ffos-y-fran scheme are well within the levels that commonly occur in the UK, and air quality in Merthyr Tydfil would still be better than in many other towns. However, whilst not found to actually cause asthma, the World Health Organisation (WHO) reported in 2004 that studies show existing asthmatics to be more sensitive to air pollution than non-asthmatics.

202. It is likely that there is a link between long-term exposure and mortality, and the WHO suggests that deaths are advanced for causes such as cardiovascular and chronic pulmonary disease. However, the size of the effect is uncertain. WHO studies have found that short-term exposures are also likely to reduce the life expectancy in individuals who are already sick and near the end of their life span. For the increase in PM_{10} expected to be caused by the scheme statistical analysis indicates that less than one death per year would be brought forward for the population of Merthyr Tydfil, the main risk being to elderly people who were already in bad health. The same WHO studies also indicated an increase in hospital admissions for elderly people with chronic obstructive pulmonary disease and asthma, and analysis for the small increase in PM_{10} levels expected for the current proposal indicate that this would equate to about one extra emergency admission per year (NB – the written evidence reporting 10 per year was corrected at the inquiry).

203. There are many caveats to these projections, which is dependent on the fluctuation of PM_{10} levels, past exposure history, the nature of the particles, and the nature and variability of the population. The length of life lost in deaths brought forward is also unknown. The Committee on the Medical Effects of Air Pollution estimates that for each 1$\mu g/m^3$ change in $PM_{2.5}$ every member of the population might gain/lose 1.5-3.5 days, though this clearly varies depending on the percentage of population affected.

204. Of particular relevance to opencast coal mining is a large study carried out in the north-east of England (the Newcastle Study) into the effects of opencast coal mining on children's health. It found a mean difference of 2.1 $\mu g/m^3$ in PM_{10} levels between communities close to opencast sites and the control communities further away, though the difference varied with higher PM_{10} values higher close to the opencast sites for 63% of the time and lower for 37% of the time, indicating far wider influences on particulate levels in the air. The prevalence of asthma, wheeze, and bronchitis and asthma severity was similar in both types of community, though children in opencast communities were more likely to consult a GP with a respiratory, skin or eye complaint. Small associations between daily respiratory symptoms and daily levels of PM_{10} were found (predominantly not generated by opencast mining), which suggests that the population would benefit from reduced levels of PM_{10}, and the WHO supports the view that reducing air pollution would benefit children's health.

205. Some objectors have referred to criticisms of the Newcastle Study made by Dr Van Steenis. Although some aspects of the study could have been improved with hindsight, it was a very good study and provided good data. The Local Health Board does not share Dr Van Steenis' views and considers that they are without foundation. Similarly, it does not accept the claim put forward by Dr Van Steenis that the incidence of asthma in children near to an opencast site would be increased, and there is no evidence of his work being properly peer-reviewed.

206. Taking these various analyses into account, it is not likely that there would be any noticeable individual adverse health effect due to dust generation at the levels predicted on the application site. However, impacts could be noticeable at the severest end of the spectrum, particularly for ill elderly people. In addition to particulate matter there would be nitrogen dioxide emitted from machinery on the site. However, the levels predicted would fall well within current air quality guidelines and would not raise any concern over impact on health. The other matter of possible impact on health is noise. However, this would be controlled to levels acceptable to the Council's Environmental Health Officer and to working times limited by planning conditions. These arrangements would be acceptable to the Local Health Board.

207. Finally, several matters are suggested for consideration as planning conditions, though it may be more appropriate to deal with them in some other way. Firstly, a high percentage of jobs should be filled by local people. Secondly, monitoring of particulate matter should be carried out throughout the life of the scheme. Thirdly, a Health Impact Assessment should be carried out, though it is acknowledged that this is not a regulatory requirement. Fourthly, population health monitoring could be financed to provide useful data for future consideration. And finally, the Environmental Health Officer's recommendations on hours of work should be reconsidered.

Caerphilly County Borough Council (Documents 11.1, 11.2, 11.3 & 11.4)

208. The CCBC's original statement (Document 11.1) expressed particular concerns about possible effects on the Tair Carreg Moor Site of Importance for Nature Conservation (SINC) arising from both the proposed main void and the provisionally proposed waste cell near the edge of the site close to the SINC. During the course of the inquiry Miller Argent has confirmed that it would intend to dispose of surplus waste materials off the site and that the waste cell would not, after all, be constructed. However, it would still be intended to excavate stone from that area for use as a drainage medium, and concerns about the main void would remain unchanged. CCBC has also had the opportunity to take independent expert advice on technical issues relating to hydrology and hydrogeology and this, together with additional information provided by Miller Argent, has provided assurance to CCBC that reasonable safeguards could be included in the scheme to ensure the SINC would not be adversely affected (Documents 11.3 & 11.4). The Company has entered into a Planning Obligation by Agreement that provides acceptable assurances to CCBC (Document A6), and on this basis CCBC has withdrawn its objection to the scheme (Document 11.2).

209. CCBC's observations on other matters still stand. These argue that: noise, dust and PM_{10} fractions should be suitably controlled and that monitoring should include sensitive locations in the CCBC area as well as Merthyr Tydfil; the construction of the overburden mounds should be properly controlled; CCBC and its residents should be represented on the liaison group; satisfactory restoration should be ensured; and coal transport should be by rail only. These matters should be dealt with by means of suitable planning conditions.

Case for Merthyr Initiative Group (Documents 17.1 & 18.1)

210. The Merthyr Initiative Group is an active group of 12 members with a defined set of aims and objectives to safeguard historical, archaeological, environmental and natural history items in the Merthyr area and to improve the quality of life for present and future generations. (Documents 17.3, 17.4 & 18.2)

The material points are:

Need for Scheme

211. The developer's name for the proposed development is misleading. It is patently clear that its main aim is the working and winning of 10.8M tonnes of coal over a period of 17 years rather than the reclamation of the land. This is reflected in the method and scale of operations. It is unnecessary to excavate to depths of between 40 and 178 metres in order to "make safe" the honeycomb of abandoned old mine workings. Whilst these may be prone to subsidence, there is no evidence of any action being taken against the landowners on account of these hazards or of hazards being signed to protect members of the public. A simpler and less intrusive solution to the safety risks could easily be implemented.

Historic Landscape

212. The registered Landscape of Outstanding Historic Interest of Merthyr Tydfil covers 285 hectares (71%) of the application site, and this represents almost 6% of the total Landscape area. This would be completely lost if the scheme were to go ahead. In addition, many ancient monuments would be lost and the settings of scheduled ancient monuments of national importance would be disturbed. The unique Dowlais Free Drainage System would be further fragmented, and it is noted that CADW's written submission (Document 12) describes this system as unique and "the whole being more than the sum of the parts". The proposed development would be contrary to the aims of both national and development plan policies towards preservation of the historic environment (Sections 6.4 & 6.5 of Planning Policy Wales, Policies EV9, EV10, EV12 & D5 of the Structure Plan, and Policies BH4 & BH5 of the Local Plan – Core Documents CD 009, CD 013 & CD 014 respectively).

Nature Conservation

213. A survey carried out for the Council in 1998 to identify potential areas for additional Sites of Importance for Nature Conservation (SINCs) recommended that a large proportion of the application site met the criteria, and this has not been disputed by Miller Argent. Although not awarded statutory protection, Miller Argent has tailored its proposals to avoid conflict with the Tair Carreg Moor SINC (adjacent to the eastern edge of the site), and similar protection should be given to the rest of the land in view of the 1998 survey.

214. It is common ground that the site is of nature conservation interest, and it supports a complex mosaic of upland habitats comprising areas of improved and unimproved acid grassland, mire, purple moor grass, rhos pasture, dwarf shrub and lichen-bryophyte heath. A broad assemblage of birds and other species frequent the land, including the Great Crested Newt, a European protected species under Annex IV of the Habitats Directive.

215. The Great Crested Newt requires special consideration as a derogation (licence) would be needed before the development could proceed. Certain tests would have to be met before a derogation could be granted, and these tests should be taken into consideration in connection with the current planning application. It is considered that the proposals fail to meet these tests.

Local Plan Policy Conflict

216. The proposals fail to comply with a number of the adopted Local Plan policies. Policy GR1 specifies criteria to be met by development proposals for the reclamation of derelict or unsightly land, including *"The developer must undertake adequate site investigations to establish the exact nature and scale of the reclamation and treatment works required, including the need to retain features of water, wildlife, geological and historic interests identified during the assessment and design of the scheme"*. Whilst an adequate site investigation was carried out, Miller Argent did not investigate the possibility of a smaller coal recovery scheme based on the proposals originally granted permission in 1988. Consequently, the exact nature and scale of the reclamation and treatment required has not been established, and the criterion has not been met. In addition, insufficient attention has been given to the need to retain features of water, wildlife, geological and historic interest and, in particular, to mitigate for damage or loss of these features.

217. Policy NH1 specifies criteria for development in the countryside outside the settlement boundaries, and several of these would not be met. Mineral extraction is not included in the list of examples of forms of development considered appropriate in the countryside in criterion (1). In addition, it would not comply with criteria (2), (3) and (5) because it would have an unacceptable impact on the character of the area, fail to comply with other specific policies, and pose an unacceptable risk to a site with significant nature conservation interests, including the Great Crested Newt. The scheme would also conflict with Policy NH7, which aims to protect the water environment, as it would have an adverse impact on the quantity and quality of groundwater resources, surface water and other water bodies, and would produce additional surface water run-off from the overburden mounds and soil storage areas.

218. Turning to the built heritage, the proposal would conflict with Policies BH3 and BH4 as it would damage certain archaeological interests and settings and listed structures on the site. It would fail to adequately protect the integrity of the settings of the Sarn Howell Ponds and the Timber Aqueduct as integral components of the Dowlais Free Drainage System.

Need for Coal

219. Section 7.6 of Planning Policy Wales provides policy guidance on development control and the economy, and the proposal fails meet many of the criteria specified in paragraph 7.6.2, particularly in respect of various environmental and amenity impacts and in its proximity to residential properties. Whilst it is acknowledged that some of the evidence presented in connection with fuel efficiency is incorrect, the basic principle of the harmful environmental impacts of the use of coal remains. It is reported that flue gas desulphurisation is to be installed at Aberthaw Power Station. However, the process will not reduce emissions of oxides of carbon, a major contributor to greenhouse gas emissions, and no evidence has been put forward of any intentions to implement a carbon sequestration process at Aberthaw. Consequently, the process there will not meet the description or aims of Clean Coal Technology inferred by the developer, and the planned increased coal burn will lead to an increase in emissions of greenhouse gases and contribute towards global warming.

220. Production of coal at Ffos-y-fran for supply to Aberthaw Power Station would be at odds with the National Assembly's action plan on sustainability (see extract in Document 17.2 Appendix 2) and the key issue of climate protection identified in Planning Policy Wales. Planning Policy Wales sets out a clear policy for sustainability and, although energy production from the burning of coal forms part of the Government's energy plan, it should not impair the commitment to sustainability agreed at Kyoto.

221. Minerals Planning Policy Wales is also relevant and states *"Whilst UK coal is available and the generators continue to choose it, UK coal contributes to energy diversity and supply"*. However, the lack of UK coal has currently led to over 50% of coal for power generation being imported at a competitive rate. Evidence has not been provided as to whether the coal from Ffos-y-fran would replace imported coal or coal from other Welsh sources, including Tower Colliery.

General Conclusions

222. The history of implementation of the East Merthyr Land Reclamation Scheme is fundamental to consideration of the proposals. However, consideration should be limited to the 3 phases originally approved and not to the various more recent proposals, which have never been taken through to proper consideration by the local planning authority. Details of a range of beneficial land reclamation schemes have been presented, including Phases 1 and 2 of the East Merthyr scheme. However, the current proposal cannot be described in that way. While the rationale of reclaiming and restoring derelict land can be seen, the price that residents of Merthyr Tydfil would be asked to pay would be too high.

223. There is also concern about misleading information used to influence the decision of the Council members to support the proposed scheme. It is difficult to reconcile the various cost estimates made for the removal and processing of 200,000 cubic metres of waste materials from the former landfill tips on the site. Figures of £6.6M, £9.8M, £11M and £19.5M have all been referred to (Appendices 5 & 6 in Document MA 002/4). Before making their decision Council members received legal advice on the Council's historic liabilities arising from the failed Compulsory Purchase Order and earlier contracts entered into by the Council. These liabilities weighed heavily in the decision to support the proposal and in the consultation exercise with the people of Merthyr Tydfil. The poor public response was symptomatic of the lack of trust that exists between the Council and the people of the town.

224. Phases 1 and 2 were successful and were completed over short periods of time. The approved Phase 3 would have been completed in 8-10 years if it had gone ahead. However, the current proposal would take up to 17 years to implement and would be an unsustainable scheme for the 21st Century. It would fail to adequately protect nature conservation and historical interests, present risks associated with leachate and contamination associated with the partial removal of the 3 landfill waste tips, and present risks of deterioration in the quality and quantity of groundwater resources. It would also fail to address the principles of sustainable development enshrined in national policy. The disadvantages of the proposal outweigh the advantages perceived by the developer and others.

Case for Merthyr Tydfil Anti Opencast Campaign (Documents 19.1 & 20)

225. The Merthyr Tydfil Anti Opencast Campaign is an informal association of people who oppose opencast coal mining close to the residential area of Merthyr Tydfil. It has no constitution or formal list of members.

The material points are:

Introduction

226. The proposed opencast coal site would be too close to residential areas where thousands of people live, and its operation would run for far too long. Dust and fumes would cause unacceptable air pollution, which would be harmful to the health of the local community, and dust and noise would impact on the amenity of nearby residents.

227. Whilst Miller Argent has put forward scientific evidence to show that the lower air quality resulting from the proposed operations would not harm the health of the local community, other scientific evidence is put forward on behalf of the Campaign to show that there is a difference of opinion within the scientific community, which raises considerable doubts about this. The essence of science is that the norm should be challenged. It is not long ago that "experts" told us that asbestos and cigarette smoking were safe! Research on the effects of opencast dust and fumes on the health of nearby communities has to date been inconclusive, and there is sufficient doubt about them that it would be unwise to allow the current proposal to go ahead so close to local communities.

228. The Campaign would have liked to have called on expert witnesses to back-up the references made to various research studies and to represent the views of the Scottish Parliament and the European Environment Agency. However, it could not afford to do so. Consequently, it has been unable to match the expert evidence presented by Miller Argent. However, the evidence presented adequately illustrates the many doubts that exist about the health implications of poorer air quality resulting from opencast operations.

Air Quality

229. Dust emissions from opencast sites vary with the type of operations being carried out. Soil stripping, overburden handling, the loading of dry materials in lorries and vehicle movements on site roads all cause significant dust. At Ffos-y-fran the wider distribution of this in the air would be exaggerated by the elevated position of the site and windy weather conditions. Throughout the operational period it would be likely to cause problems for the communities surrounding the site both in regard to nuisance from visible dust deposition and to health implications due to a deterioration in air quality.

230. Dust suppression measures would be proposed but these would not be fully effective in controlling dust. The only way to be fully effective in avoiding increased airborne dust particles is to have no opencast at all. In addition to dust, the large machines on the site would emit fumes that would further erode air quality. The fuel used for such heavy machinery contains toxic waste oils and solvents, and a single earth-moving machine is capable of releasing up to 145 billion ultra-fine particles per minute. Video footage of work at the former Graweth opencast coal site (shown at the inquiry) clearly illustrated the emission of significant fumes from the site machinery. When one takes into account that the work would be carried out for up to 16 hours per day, 6 days per week for 17-22 years it is clear there would be an astounding compromise of air quality.

231. A further factor affecting air quality would be the planned disturbance of the former landfill waste tips on the site. Toxic particles would be released into the air further exacerbating air pollution problems. It should be remembered that it is National Assembly policy to safeguard and improve the environment, provide clean air, reduce pollution and encourage clean industry. The proposal would fly in the face of such policies and would have a significant

effect on health. It is of interest that in Scotland the latest Consultation Draft of "Scottish Planning Policy (SPP) 16: Opencast Coal" advises that proposals are likely to cause particular difficulty where they are too close to communities or sensitive establishments and that there should be a minimum distance of 500 metres between communities and the site boundary (Documents 19.4 & 19.5). No doubt the Scottish Parliament reached this decision on the basis of sound scientific advice.

Health

232. Over the past few years various studies have been carried out that shed light on the risks to health caused by air pollution and opencast coal working, and reference is made to a number of reports included as appendices in Document 19.1.

233. The D.O.E.'s 1991 report, "Environmental Effects of Surface Mineral Workings", recognises that one of the main potential effects of dust is "health effects due to inhalation, e.g. asthma or irritation of the eyes" (Appendix A of Document 19.1). The 1988 Glynneath Study carried out by Dr Temple, at that time a local GP (NB - the same Dr Temple represented the Local Health Board at the inquiry), found that the incidence of asthma was high in the area and concluded that it was caused by dust from the nearby opencast coal site (Appendix 1). In 1997 Dr Van Steenis, a retired Pembrokeshire GP, published a report on his investigations into the incidence of asthma in children close to Pembroke Power Station, supplemented by further information from other areas close to industrial and waste plants and opencast sites (including a particular study in Derbyshire carried out in conjunction with Ken Coates MEP), and concluded that there was an increased prevalence of asthma in children in such areas. Dr Van Steenis reports that his Derbyshire research has been peer read in both the UK and USA.

234. The Derbyshire study showed a high incidence of asthma inhaler use by children within 5 km (3 miles) of the site. Most of Merthyr Tydfil falls within this radius of the Ffos-y-fran site, and it is estimated (using the percentage factors determined by Dr Van Steenis) that over 1100 infants under 5 years of age would be at risk of becoming asthma victims (Appendix 2i). A further study in support of this argument is that by Douglas into the relationship between opencast coal mines and respiratory morbidity in Lanarkshire in 1997 (Appendix 4). In that study statistical analysis demonstrated a significant association between increased rates of respiratory illness and proximity to an opencast coal site.

235. Miller Argent has placed great reliance on the results of the Newcastle Study (Executive summary in Appendix 3). However, it is subject to 2 major reservations. The first is that the study found that "children in opencast communities were on average exposed to a small but significant additional amount of PM_{10} on average compared to children in Control Communities (2.1 $\mu g/m^3$, 14%)" and that there was an increase in GP consultations for respiratory, skin and eye conditions in those living close to opencast sites.

236. The second reservation is that the integrity of the study as a whole is open to considerable question. Dr Van Steenis has raised extensive doubts about the methodology of that study (see letter to Ken Coates MEP and submission to Government European Communities Committee, both in Appendix 3i), particularly in respect of failure to use peak flow metres, diaries and $PM_{2.5}$ monitors, failure to monitor further than one kilometre (½ mile) from the opencast sites, and in the age groups of the children monitored. He argues that these flaws make the results almost meaningless. One of the people who carried out the research has confirmed at an open conference that the local public health authority set these constraints on the study. With all of these doubts, it is clear that there are serious question marks against the Newcastle Study.

237. It is not disputed that particles under 10 microns in size (PM_{10}) are inhaled or that $PM_{2.5}$ particles penetrate to the bottom of the lungs. This leads to chronic congestion and asthma, and infants and older people are more vulnerable because they have smaller bronchial tubes (in the case of infants) or thickening and narrowing of the bronchial tubes (in the case of older people). These prevent the clearing of congestion in the lungs, which can result in heart problems and cause premature death. More recent research has found that even finer particles can penetrate and damage the brain (Appendix E).

238. In June 2003 a speaker representing the European Environment Agency addressed the World Health Organisation (WHO) Conference on Environment and Health in Budapest. Her presentation argued that reductions in environmental pollution could lead to substantial health benefits in children, with knock-on benefits to health and education budgets. This is yet another example of scientific evidence that supports the case for refusal of the current application. (Document 19.6)

239. Within the scientific community a sea change is taking place. For many years there were no dissenting voices amongst scientists from the perceived norm that opencast mining poses no health risk. This is not the case today. Planning policy has taken account of this in Scotland and England but the Welsh Assembly has yet to follow suit and acknowledge the health concerns over opencast mining near local communities.

240. The National Assembly supports the environmental health profession's initiative to develop a strategic vision. That vision includes: identifying, controlling and preventing current and future risks to health; improving quality of life; tackling ill health and major killers; and support for work within the Local Agenda 21. Merthyr Tydfil's Local Agenda 21 highlights a whole raft of issues that work against the ilk of opencast coal operations and reflect National Assembly policies (Appendix K). Given the National Assembly's commitment to sustainable development, Merthyr Tydfil's health statistics should not be ignored in the planning decision-making process. The proposed development would have a dramatic impact on a large number of local residents and exacerbate the chronic health problems already prevalent. There is no place for a dirty industry like opencast coal in Merthyr Tydfil.

Other Matters

241. Several other matters also need to be mentioned. The first is that of noise. Noise from opencast sites can cause considerable annoyance to people living nearby, and research has shown that this can be the case even if measured levels of noise are no greater than the background noise level. Gardens are widely used for recreational purposes, and during summer months bedroom windows are often left open. Noise from the proposed working would have a detrimental impact on the environment and on the quality of life of people living near to the site. The video shown at the public inquiry clearly indicated that even as far as 500 metres from the Graweth opencast coal site a significant amount of noise could be heard. At Ffos-y-fran noise would be generated for long hours each day, 6 days per week for 17-22 years. This would cause unimaginable stress and loss of amenity.

242. There is also concern about reductions in property values, as several people say they would move away if the scheme were to go ahead. Although devaluation of property is not a material consideration, it should be considered as a component part of the loss of amenity.

243. Finally, it is contended that the Council's consultation exercise with local people did not present a truly representative picture. It gave prominence to the likelihood that, if the scheme did not go ahead, the Council (and hence the rate payers) would be liable for costs of some

£15M. Inevitably, this coloured the response of many people who were concerned about paying such costs. Coupled with a perception of inevitability and lack of confidence in the Council, this caused disenchantment and apathy amongst the people of Merthyr Tydfil and mitigated considerably against a true perception being conveyed by the consultation exercise.

Other Objections to the Proposal

244. Two representatives of the Swansea Friends of the Earth and 13 local residents spoke against the proposed development. Most of the local residents have lived in Merthyr Tydfil for a long time and some all of their lives.

The material points are:

Swansea Friends of the Earth (Document 21)

245. Opencast mining is one of the most environmentally destructive processes occurring in the Country today. It results in irreversible damage to the landscape and ecology, blights local communities, depresses property values and causes health-damaging pollution.

246. The burning of coal and oil are major causes of increased levels of carbon dioxide in the atmosphere, which in turn leads to climate change. It is now the accepted scientific view that climate change is occurring and that it will have significant effects on the environment. For example, it could lead to the loss of a catastrophic number of natural species, and a recent article in a well respected scientific journal estimates that, even for the best case scenario, 9% of species face extinction. We depend on the ecological web for our survival, and it is not sensible to damage it.

247. This is not the only problem caused by climate change. Sea levels will rise and flood ports and agricultural land, and extreme weather events will become more frequent. We must decrease our use of coal and oil, and now that politicians are beginning to realise this, action is likely within the life of the proposed Ffos-y-fran scheme, and its market will fall away.

248. There is increasing evidence that emissions from diesel engines cause adverse effects on health as they produce a range of nasty aromatic chemicals and tiny particles that remain in the air and penetrate the human lungs and blood stream. An opencast coal site employs large numbers of huge machines that use hundreds of gallons of diesel every day. The fumes damage both the environment and the health of local people.

249. Finally, the term opencast restoration is a misnomer. Things are not put back as they were; they are changed. Opencast mining has a poor record in restoration. The natural landscape is dependent on the underlying geology, and this is destroyed by opencast working. At many former sites the natural landscape, vegetation and biodiversity has been destroyed and replaced by a synthetic landscape of green fields and concrete gutters; the Maesgwyn site between Glynneath and Banwen is an example.

250. Difficulties in the translocation of species are also underestimated. At Selar opencast site British Coal claimed they could move the rare Marsh Fritillary butterflies but they quickly died out. At this site it would be intended to translocate Great Crested Newts. However, evidence of successful translocation is poor. A study published in the Herpetological Journal (the society's journal) found that adults were present a year later in only 37% of cases. This is yet another example of the environmental harm likely to be caused should the proposed scheme be allowed to go ahead.

Mrs Vivienne Hadley (Document 22.1)

251. Mrs Hadley has an asthmatic son and for 7 years was secretary of Action with Asthma, a Merthyr based registered charity. Medical texts and the Asthma Society all say that dust is a causative factor in asthma attacks; it causes inflammation of the linings of the lungs and irritation to the throat and eyes. Diesel engine emissions are also harmful; they damage other vital organs as well as the lungs. Issue is taken with the independent evidence presented by the Local Health Board. It was confusing, did not take any account of air pollution caused by diesel fumes, did not correctly reflect the high incidence of asthma in Merthyr Tydfil, and was incorrect in saying that dust does not cause asthma; there is no doubt that it does cause asthma attacks.

252. The proposed scheme would cause increased levels of dust and, in this location on the edge of the Brecon Beacons National Park, air pollution levels would increase to those typical of larger towns. The short-term effects of this would impact on quality of life; the longer-term effects would be detrimental to life expectancy. It is a misnomer to refer to "acceptable levels" of air pollution. No air pollution is "acceptable"; lower levels just take longer to cause harmful effects. There are 5 schools and 2 nurseries close to the site, and no children should be put at risk or forced to endure extra suffering so that the developer can achieve monetary profits. Mrs Hadley has collected over 500 signatures from parents of children at these schools on a petition indicating concern about their children's health and opposition to the opencast scheme (Documents 22.2 & 22.3).

253. There must be doubt about the results of the air quality modelling carried out by Miller Argent. It was based on many assumptions, including weather factors from records at Cardiff even though it is obvious that the weather patterns there are very different from Merthyr Tydfil, and little reliance should be placed on it. In addition, much reliance is placed on the Newcastle Study of the effects of opencast coal operations on the health of local communities. This was limited in range and scale and did not include peak flow measurement, a vital measure of asthma health. It is also unreasonable to place so much faith in a single study. The local residents of Merthyr Tydfil have been unable to afford professional support for their opposition to the opencast scheme. However, their concern and the obvious doubts about Miller Argent's evidence justify a much more thorough investigation.

254. Turning to the other effects that would occur, the main excavation would be a huge crater 350 metres wide, an eyesore that is unnecessary to overcome the current dereliction of the land. The operations would cause nuisance for a period of 17 years, and over that period public access rights to the archaeological features and the common land would be denied. The increased traffic, especially heavy fuel tankers, would increase the dangers on the local roads, including the Mountain Hare roundabout where a fatality recently occurred. That roundabout is close to Twynyrodyn School, and it is clearly of concern that a fuel tanker could be involved in an accident there. There are also doubts about possible transportation of coal by road if the hoped-for supply to Aberthaw Power Station were to fail for any reason (e.g. if the power station were to close). The new A4060(T) road is notorious for fog, ice and snow during winter months. The findings of Miller Argent's traffic assessment are open to question, and a further assessment by an independent expert would have been preferred.

255. Merthyr Tydfil CBC has failed to concern itself with the interests of local people, for example in not requiring a comprehensive, independent health study. It has not acted in a fair and responsible way, and many local people have lost faith in it. When councillors made their

decision to support the proposal they were unduly pressured by the threat of penalty clause payments being incurred in respect the Phase 1 reclamation work if the proposed scheme were not to go ahead. Similarly, the public consultation questionnaire was distributed immediately after the Council's disclosure in the local newspaper that the additional costs would fall on every household. Inevitably, such "blackmail" affected people's responses, though many did not respond. It is also believed that many councillors have been prevented from speaking out against the scheme because of their conflict of interest. The sum of these factors is a picture of covert industrial sabotage against the Town's democratic right to refuse tenure of its mineral resources to a large business consortium and to deny the blight of an offensive industrial process.

Mrs Alison Austin (Document 23)

256. Mrs Austin lives ¼ mile from site and has 2 young children. No amount of reassurance from Miller Argent will convince her that a mining operation of this magnitude would not generate dust, diesel fumes and noise to a level that would risk health and impact dramatically on quality of life. Merthyr Tydfil does not need heavy industry and strip mining to blight this beautiful area. It is the gateway to the Brecon Beacons and will not attract visitors if it is an eyesore. There are many rejuvenation schemes in progress, and these will present a modern face and enable Merthyr Tydfil to attract people and employers. The Town's future does not rely on opencast mining.

257. The need for coal is dwindling and is far outweighed by the needs of the people of Merthyr Tydfil. Many people have been deterred from voicing their objections by concerns about the extra levy that may be imposed on each household to meet the Council's £15M liability if the scheme does not go ahead. A scheme of this scale so close to the population should not be allowed.

Mr Neil Greer (Document 24)

258. The evidence of Miller Argent's health witness should be disregarded as he was one of the Government committee that reviewed the Newcastle Study and so has a vested interest in defending it. The same witness was critical of Dr Van Steenis and of his criticism of the Newcastle Study, even though 2 World Health Organisation (WHO) experts have accepted Dr Van Steenis' theories. Another study going against the findings of the Newcastle Study has been unfairly dismissed on the basis that it was not statistically reliable. Instead, it should be seen as ringing alarm bells as it raises questions on the Newcastle parameters.

259. There is considerable concern over the proposed removal of waste from the 3 former landfill sites, as it is known that they contain hazardous waste. Although this may not be a large percentage, when it is mixed with other waste materials all of the waste must be classified as hazardous waste and be dealt with accordingly. It is not known whether full account has been taken of the recent European Directives prescribing how such waste should be dealt with, and it is considered that the amount of hazardous waste may be much more than stated. If so, either road transport over a considerable distance would be required or it may be reclassified to allow disposal at the Trecatti waste tip.

Mrs Jennie Jones (Document 25)

260. The people of Merthyr Tydfil are recorded as having the worst health in Wales, and dust, fumes and noise from the opencast coal site would make this worse. Previous experience of

living near an area where 2 tips were being moved has shown the problems caused by dust and noise. Dust from Ffos-y-fran would affect children at Gwernllwyd Primary School, Ysgol Santes Tydfil, Twynyrodyn Primary School and Cyfarthfa High School. Children are the future of the community, and great care should be taken to protect their health.

Miss Valerie Williams

261. Miss Williams is a heritage and tourism consultant. Tourism is the largest source of income in Wales, and the proposal would be disastrous for Merthyr Tydfil in the foreseeable future so far as tourism is concerned. The biggest problem in promoting South Wales for tourism is its scarring by past industry, and the opencast site would be an open sore for many years. Although the long-term improvements to the appearance of the land would be acceptable in due course, concerted efforts are currently being made to improve the tourism image of South Wales, and the long operational period of the proposed scheme would prevent Merthyr Tydfil gaining benefit from that. Consequently, it would fall behind in the tourism market.

Mr Leon Stanfield (Documents 26.1 & 26.2)

262. The proposed development would blight Merthyr Tydfil and its people for a whole generation due to its location, scale and long duration. Local opposition is strong but has been muted by reports that, if the scheme did not go ahead, every household would incur extra costs of £700 to meet compensation terms owed to Miller Argent by the Council in order to make the landfill waste tips safe. The arrangement of the consultation questionnaire (Attachment 1 to Document 26.1) emphasised that fear but, despite that, "health issues" were still identified as the main concern. An additional supplement to the Anti Opencast Campaign petition, containing almost 1300 signatures, is submitted (Document 26.3).

263. Due to the number of huge machines involved noise and dust would be the main issues. Although the prevailing wind direction would be away from the town, winds towards the town would still occur quite frequently, as evidenced by experience of smells from the Trecatti waste site next to the application site. Health concerns are increased by the possible impact of diesel particulates mixed with coal and sandstone dust particles. With regard to noise, the Council's Environmental Health Officer advised against allowing evening working on account of the nuisance likely to be caused. Local people remain concerned about this.

264. It is acknowledged that the people of Merthyr Tydfil have poor health in comparison with Wales as a whole. In particular they have a high incidence of respiratory problems. 17.5% of the population suffers breathing problems (ref. the Local Health Board's 2004 Health and Social Care Assessment – extract at Attachment 4 of Document 26.1). That represents some 10,000 people at risk, and it is difficult to see how any effect on such a large number of people can be considered negligible. With such a high incidence of respiratory problems, whether or not Air Quality Standards would be breached is not really the issue; the aim should be to keep the air as clean as possible.

265. Miller Argent has relied heavily on the findings of the Newcastle Study. However, that study is quite dated, and more recent evidence does suggest that air pollution plays a part in respiratory problems. In addition, a recent American study has shown that diesel exhaust particulates are effective transporters of pollen and mould and can reach the deepest parts of the lungs. Although the argument of health concerns is not definitive, the fears of the people of Merthyr Tydfil are genuine. The parents of children at the new primary school, only 500 metres from the site, and the Pila Pala nursery, which is even nearer, are very concerned.

Public fear is an accepted reason for refusal whether or not that fear is based on scientific fact.

266. Much has been made of the risks associated with the dereliction of the land. However, the Inspector who held the 1999 public inquiry into the proposed compulsory purchase order reported that "the extent of the risk to public safety is slight". In comparison, the risks associated with moving the landfill waste tips would be worse. Hazardous waste would have to be transported over long distances and there would be risk of water pollution and releasing foul odours. If left undisturbed the tips would not pose a significant risk (as advised by the Council's Environmental Health Officer – see Attachment 4 to Document 26.1).

267. The visual impact of the work would be significant. It is an elevated site, and the huge overburden mounds (constructed on areas of generally unspoilt land) would be substantial features throughout the working period. The scheme would cast a physical and psychological shadow over the town. It is reported that 70% of the site is derelict land but over time nature has a way of making good man's mistreatment of the environment. Coincidentally, 70% of the land is also classed as an historic landscape. On the topic of the use of coal extraction as an effective means to achieve land reclamation the Inspector who held the compulsory purchase order public inquiry reported: "I believe this is excessive and harmful". It is even possible that the site might be disturbed again even if the proposed restoration were carried out. Miller Argent would not propose to make use of the fireclay or sandstone, which would be returned to fill the void as part of the overburden. A future developer may wish to exploit these resources, as evidenced by the recent interest expressed by Hanson Building Products into possible brick manufacturing on the site (see Attachment to Document 26.2).

268. An economic argument has been put in favour of exploiting the coal. However, the long-term market for coal is questionable. For how long would it compete with cheap imported coal? Would the demand for coal be sustained over the planned period of operation? Would it compete for the same market as Tower Colliery? Although the current National Assembly energy policy includes the continued use of coal, that may soon change. There are also other economic factors that should be taken into account. Potential businesses would be deterred from coming to the town's prime industrial/commercial area at Goatmill Road because of its close proximity to Ffos-y-fran; local property values would fall; health care costs would increase; it would be more difficult to resist population decline; and enforcement of the many controls over the scheme, evidenced by the many planning conditions proposed, would place a heavy burden on the Council with inevitable increased costs.

269. The key issue in this case is whether or not the environmental effects would be acceptable. Merthyr Tydfil lies in a beautiful area and can only meet the challenges of competing with other towns in the South Wales economy if it maintains its attractive environment. The proposed scheme would be substantially harmful to that.

Mr Jeffrey Davies (Document 27)

270. Mr Davies spent 20 years working underground at Merthyr Vale Colliery and suffers from chronic bronchitis and asthma, and his lung capacity has been damaged by coal dust. All of the evidence heard at the public inquiry has not allayed concerns about the proposed scheme. The visit to the Nant Helen opencast site confirmed fears that noise, dust and blasting would be problematic at Ffos-y-fran, which would be a much larger scheme. The evidence presented by Miller Argent on health risks has been subject to challenge and will, no doubt, be proved wrong within the next few years.

Mr Richard O'Neill (Document 28)

271. Mr O'Neill's house is near the Mountain Hare roundabout and about 60 metres from the southern boundary of the site. He is over 65 and suffers from asthma and therefore falls within the population group most at risk from adverse health effects. If the scheme were to go ahead, it would be vital to establish an effective dust monitoring system, as was carried out for Phases 1 and 2, and that this be independently scrutinised. Such monitoring would be equally important for noise, and mobile equipment would be needed to respond to individual incidents of complaint. It has also been stated that a sample of properties within 200 metres of the limit of excavation would be surveyed before work began in order to establish a benchmark should damage occur due to blasting. When the A4060(T) road was built all nearby houses were surveyed, and this should be the case here if the proposal goes ahead.

272. On the subject of the contents of the landfill waste sites, Miller Argent has relied upon its own site investigations. However, it is known that hospital waste, cesspit waste and a range of acids and chemicals were disposed of to these tips. Finally, a plea is made for access to the land to be progressively made available as it is gradually restored and made safe; otherwise local people who currently use the land would be denied access for 17 years or more.

Mr Beresford Bevan

273. Operation of the scheme over a period of 17 years would cause a lot of dust. A building site near Mr Bevan's home has recently illustrated what a nuisance this can be.

Mr Terry Evans (Document 29)

274. Mr Evans lives near the Mountain Hare roundabout, directly opposite the western edge of the site and some 37 metres from the boundary. The bungalow was specially built to accommodate his disabled wife. Regardless of the expert evidence presented by Miller Argent, there is no doubt that the dust and noise control measures would not adequately eliminate problems, especially for dust. Local residents have first-hand experience of Phases 1 and 2, which were much smaller schemes than that now proposed. On this scheme dust problems would be exacerbated by having to handle large quantities of tipped coal waste, and dust problems would run right from the start of the scheme to the end, when the loose material was put back into the void.

275. About 10 years ago a section of the new A4060 road was built close to Mr Evans' house, and that entailed removing a small part of the tip opposite. The operation took about 2 weeks and caused so much dust that you could not see through it to Mountain View. The Ffos-y-fran scheme would run for 17 years, probably longer, and would cause inhuman living conditions for local residents, shortening some of their lives. In these modern times such conditions are not acceptable. In Scotland a 500 metres buffer zone is being applied to opencast sites, and in England there is a similar policy to avoid opencast schemes close to residential areas; why is the health of Welsh people not afforded the same protection? It would be difficult to move away, especially in Mr Evans' personal circumstances. In any case, the prospect of living next to an opencast coal site for 17 years would make nearby houses difficult to sell and would reduce their value.

276. It is ironic that the Council, in conjunction with the Merthyr Tydfil Local Health Board, has recently launched a consultation exercise on a strategy for health, social care and wellbeing for residents of the Borough. Clearly, this huge opencast scheme would be one of the most environmentally destructive processes in Merthyr, yet the Council is supporting it; it seems to

come down to money before health and wellbeing. In conclusion, an opencast scheme of this size and length of time would condemn the people of Mountain Hare to an unhealthy life and premature death, contrary to their human rights.

Mr Tom Roberts

277. Miller Argent's expert witnesses painted a rosy picture of safeguards against effects on local health. Some years ago, experts also denied there was a problem with tobacco. The evidence on the effects of dust should be treated with caution, particularly as so many people would be at risk, including children at nearby schools and nurseries. Dust would be unavoidable from the ripping and blasting operations, and damping-down would not prevent some dust becoming airborne. Once in the air, dust can be transported over long distances, particularly the finer particles that are most hazardous to health.

278. The Government has acknowledged that opencast mining in one of the most destructive activities in the UK. While the experts move on, local people remain and would have to live with the effects of the scheme. Some experts, such as Dr Van Steenis, disagree with the evidence and results of studies put forward by Miller Argent. In the 2003 heat wave Professor Pilling of Leeds University, Chairman of the relevant Government Committee, said that 40% of the increased deaths that occurred were due to poor air quality. Merthyr Tydfil already features at the head of national health statistics, and the proposed scheme would cause further harm to the health of the local population.

Mr David Roberts

279. Contrary to the claims made, there is not an overwhelming economic and environmental case for allowing the scheme to go ahead. It would deter other employers from locating in Merthyr Tydfil and would be detrimental to the town's economic future. Unemployment rates are well above the Welsh average in Merthyr Tydfil and permanent sickness levels are high. Both of these would be exacerbated if the opencast scheme were to go ahead, and there is considerable doubt about how much direct local employment the scheme would achieve. It would also deter tourism development and reduce property values. Clearly, there would be less benefit to the local economy than has been claimed

280. Turning to the broader environmental impact, the health and living conditions of local people would be harmed by dust and noise, and nature conservation would be badly affected. Two of the triggers for asthma are air pollution and anxiety, and the Ffos-y-fran scheme would affect both of these. The heritage aspect of the land should also not be forgotten, and there is a case for retaining it for heritage conservation reasons. Much has been made of safety benefits in clearing the dereliction from the land. However, it is less safe to walk in the Town Centre than on the common! The overriding factor in this case must be the harmful environmental effects over such a long period of time. The scars of the past that enriched "the few" at the expense of "the many" should not be repeated.

Mrs Sally Kahn (Document 30)

281. Mrs Kahn is a parent governor of Twynyrodyn Community School, where she has 2 young children, one of which suffers from a rare, serious kidney disease. The communities of the South Wales Valleys have suffered social poverty and depravation over many generations but more recently have begun to recover as clean air, recreation and clean industries have been developed in the communities. In Merthyr Tydfil the Council promotes the town as a "vision of the future". The proposed scheme would transport the area back a hundred years in time.

282. Twynyrodyn School is located close to the application site, and children there would be subject to dust, diesel fumes and air pollution from the opencast working. All of the children would be subject to the associated health hazards but some children, such as Mrs Kahn's son, would be particularly vulnerable. The working of the scheme would extend over the full schooling period of many children. Should the scheme go ahead, it would be vitally important to ensure proper monitoring of dust and air quality, and it is understood that an automatic weather and air quality monitoring station would be installed at the school. It would be important that the data collected be monitored by someone independent from Miller Argent and that it continue throughout the operational period.

Written Representations (Bundles of letters in Documents 3 & 4)

283. In addition to representations made at the public inquiry, a large number of letters have been submitted by local residents, interested organisations and their representatives. Letters submitted to the Planning Inspectorate (or forwarded by the Council to the Inspectorate) before the public inquiry are contained in the folder marked "Document 3". In addition, Document 4 is a bundle of 7 letters submitted to the Inspector at the public inquiry. Document 3 contains some 60 letters, including one from Huw Lewis AM. 12 of the letters are in support of the proposal, 38 are against, and the remainder are advisory. Of the 7 letters in Document 4, one is an objection and 6 are withdrawing previous objections.

284. The large number of letters submitted gives a clear indication of the strength of feeling amongst the local community and strongly reinforces the matters presented at the inquiry. However, on the whole the letters do not raise issues that are materially different from those recorded above. Therefore, no further summary is presented.

Conditions and Legal Agreements

Legal Agreements

285. Miller Argent and the Council have concluded a legal Agreement that makes certain matters legally binding on the Applicant if the scheme is implemented. These are: a royalty payment of £0.60 per tonne of coal extracted into a Community Benefit Fund controlled by the Council; an additional royalty payment escalator related to increases in coal price; a £15M financial guarantee to ensure restoration of the site should the Company fail; Miller Argent to take on all future liability for the 3 waste tips and to deal with them; and the establishment of a liaison committee with the local community. The Council would grant a licence to access the Council's land (Phases II and III overlap land) to carry out the works. A joint statement on the Agreement is included as Document A12.

286. Miller Argent has also entered into a Planning Obligation by Agreement to Caerphilly CBC (Document A6) in respect of measures for the protection of the Tair Carreg Moor Site of Importance for Nature Conservation (SINC), which lies immediately to the east of the application site in that Council's administrative area. If permission for the scheme were granted, the Company would undertake: not to use the on-site waste cell for disposal of waste from the 3 former landfill tips; to prepare and carry out an agreed hydrological, hydrogeological and ecological monitoring scheme for the SINC; to prepare and implement an agreed strategy to manage surface and groundwater recharge should it impact on the SINC; and to consult with Caerphilly CBC on the production of the Environmental Management Plan so far as it affects that Council.

Conditions (Core Document CD 075)

287. The Statement of Common Ground (Core Document CD 075) contains a suite of draft conditions agreed between Miller Argent and the Council. The same draft conditions are included in the Statement of Common Ground agreed with the Merthyr Initiative Group (Core Document CD 076). These draft conditions formed the basis for detailed discussion at the inquiry, and to avoid confusion the numbering referred to in the following paragraphs is based on the set of draft conditions.

288. The proposed conditions cover the following topics: commencement and duration of works, approved plans and documents, method and direction of working, area and depth of excavations, height of overburden mounds, hours of operation, dust and air quality controls and monitoring, noise controls and monitoring, blasting, highways and parking, transportation of coal, importation and storage of materials, plant and machinery, the Environmental Management Plan, groundwater and surface water drainage, the construction Method Statement, lighting, restoration and aftercare, agricultural water supplies, archaeology, the liaison committee and Environmental Liaison Officer, and the financial guarantee.

289. Condition 12 would specify hours of work as 0700 to 2300 hours on weekdays. Miller Argent originally submitted proposals for hours of 0600 to 2200 hours but the later start was preferred by the Council. The Merthyr Initiative Group and the Merthyr Tydfil Anti Opencast Campaign would prefer hours to revert to 0600 to 2200 hours, whilst local residents would like work to finish at 1900 hours.

290. Condition 15 would specify dust monitoring requirements, and it was suggested that this should continue throughout the term of the scheme. It is noted that the condition would put this at the Council's discretion. It was suggested that more TEOM (instantaneous recording) monitors be included. However, it was explained that these are very expensive both to install and to run, as they need a full weather station to be included. A planning application has been submitted for such an installation at Twynyrodyn School, and that would remain for school use after it ceased to be used in relation to the opencast scheme. The dust monitors would be operated and monitored by a specialist company, and the results would be published on a website.

291. Conditions 16 and 17 would specify maximum noise levels, and Miller Argent now propose that the evening noise levels specified in Condition 16 should be changed to 42dB$L_{Aeq,\ 1hr}$, as recommended in MPG11 (The Control of Noise at Surface Mineral Workings - Core Document CD 019) for night time levels. The Merthyr Initiative Group suggested that the temporary noise level of 70 dB$L_{Aeq,\ 1hr}$ specified in Condition 17 for baffle mound (and similar) construction be reduced to 67 dB$L_{Aeq,\ 1hr}$ as advised in the new MTAN1 on Aggregates. However, it was argued that MTAN1 does not apply to coal extraction, for which MPG11 remains the extant guidance.

292. Conditions 40 and 41 have been requested by Network Rail in the interests of rail traffic safety. Although the land concerned is not within the application site it is under the control of the applicant company. Considerable rationalisation of the conditions covering restoration was agreed, bearing in mind that a detailed Restoration Strategy would be subject to prior approval by the Council. Similar rationalisation of the group of conditions dealing with agricultural matters was also agreed, as they would duplicate controls applied by other conditions.

293. It was agreed that several conditions could be deleted as they would either duplicate controls provided elsewhere or would be unnecessary for other reasons. This applies to Conditions 8, 36, 49, 53, 54, 57.1, 57.3, 57.4, 57.5, 57.6, 60, 62 and 63. Minor alterations were also agreed to a number of other conditions in order to improve their precision and clarity, as follows: 2, 3, 5, 6, 7, 10, 12, 18, 28, 30, 32, 33, 44, 45, 46, 48, 50, 55, 56, 58, 59, 61 and 64.

294. The Local Health Board suggested several additional matters (see Document 9) but Miller Argent argued that they were all inappropriate. The first, that a reasonable percentage of jobs should be filled by local people, would not be enforceable and would probably breach employment legislation. The second, that particulate monitoring be enhanced and the period of monitoring be extended, would be unnecessary as that would be at the discretion of the Council in any case. The third, that a Health Impact Assessment be carried out, would be unnecessary as an assessment has already been carried out and evidence put forward. Finally, the fourth, that population health monitoring be financed by Miller Argent, would not be an appropriate condition for such a planning permission. If it wished, the Council could fund such a study from the Community Benefits Fund.

295. Caerphilly CBC also made comments on conditions (see Documents 11.1 & 11.4). However, it was agreed that these would all be covered by the proposed conditions or by the Planning Obligation entered into by Miller Argent to Caerphilly CBC (Document A6). A local representative enquired about the storage of blasting materials. However, Miller Argent explained that this was covered by separate legislation and regulations.

Conclusions

[The numbers in square brackets indicate the relevant paragraphs of the report.]

296. At the time of the call-in the National Assembly for Wales advised that it particularly wished to be informed about the impact on surface and groundwater resources, the relevant national policies in Planning Policy Wales and Minerals Planning Policy Wales, and policies in the adopted Merthyr Tydfil Local Plan. These policies cover a wide range of matters, and consequently consideration of compliance of the proposed development with the policies has involved attention to the same wide range. Many local residents and their representatives have submitted evidence and views both at the inquiry and in writing and, whilst many matters have been raised, there is no doubt that their main concerns are in relation to impacts on health and living conditions.

297. I have taken all of these factors into account and have dealt with them to a greater or lesser degree, as appropriate. In my view, the main considerations in this application are the benefits of the scheme in terms of land restoration, the provision of coal and economic benefits to the local community, the effects on air quality and health and on the wider aspects of the living conditions of nearby residents, the effects on the water environment, and the effects on archaeological remains and the historic landscape. I shall start by summarising the policy framework and the development plan provisions for the scheme.

Policy Framework

298. It is a requirement of the Town and Country Planning Act 1990 (as amended) that, where an adopted or approved development plan contains relevant policies, an application for planning permission shall be determined in accordance with the plan, unless material considerations indicate otherwise. In this case, the development plan comprises the Mid Glamorgan (Merthyr Tydfil County Borough) Replacement Structure Plan 1991-2006, adopted in August 1996, and the Merthyr Tydfil Borough Local Plan 1996-2006, adopted in May 1999. [45, 49]

299. The Structure Plan provides strategic development plan policies, including specific minerals policies, which aim to avoid unacceptable environmental and amenity effects. Policy EV13 is of particular relevance as it seeks to clear all major dereliction in the County within the planned period and recognises land reclamation as a key step in the regeneration process. It explains that the Mid Glamorgan Regeneration Programme, which includes the East Merthyr Land Reclamation Scheme, has been expanded to include not only dangerous dereliction but also landscape improvement of derelict areas. [16, 45-48]

300. The Local Plan also aims *"to ensure that the majority of the Land Reclamation Scheme is completed within the plan period"* and promotes a pragmatic means of treating the derelict land by financing it through opencast coal extraction in co-operation with a private coal company. Supporting text in the Local Plan explains the successful history of this means in enabling Phases I and II of the East Merthyr Land Reclamation Scheme to be carried out. In addition, Policies GR1 and GR2 make specific provision for Phase III, which is in the Priority Reclamation Programme, to be restored to beneficial use by means of coal extraction. The Phase III scheme, which included the extraction of some 5M tonnes of opencast coal, gained deemed planning permission in 1988 (at the same time as Phase II) but did not proceed because of land acquisition problems. [19, 49, 50, 64, 65]

301. The current proposal is slightly different from that scheme in that it would provide for the extraction of twice as much coal and has different site boundaries to the south and east. However, the coal extraction area would be within the same area of designated derelict land, the whole site would be within the same wider areas of designated derelict land, and the proposal would be in accord with the treatments and after-uses specified in the Plan. In comparison with the previously approved scheme, it would also reclaim as larger area of dereliction and deal with archaeological and ecological issues more sensitively. I conclude that the proposal would be in accord with the Local Plan aims and provisions for Phase III of the East Merthyr Land Reclamation Scheme as expressed in Policies GR1 and GR2. [22, 64, 163]

302. Local Plan Policy GR1 and other policies specify criteria that the proposal would have to satisfy, for example in regard to effects on amenity and the natural and built environment and to restoration and aftercare provisions. Policies of particular note are NH1 (Development in the Countryside), NH5 (Sites of Importance for Nature Conservation, etc.), NH7 (Water Environment), BH3 (Archaeology and Ancient Monuments) and BH4 (Listed Buildings and Structures). These matters are addressed in the paragraphs below. [51-53, 56, 68, 216-218]

303. Planning Policy Wales provides general advice on planning policy, including its fundamental role in delivering sustainable development, and it describes the principles that underpin planning policy. These include putting people and their quality of life at the centre of decision making, showing respect for environmental matters, using the precautionary principle where risks are uncertain, using scientific knowledge to aid decision making, and taking account of all costs and benefits. Minerals Planning Policy Wales is the Assembly's primary minerals policy document and sets out 5 key principles for sustainable minerals development. These aim to provide mineral resources to meet society's needs and avoid sterilisation of resources, to protect areas of importance to the natural and built heritage, to limit the environmental impact, to achieve high standard restoration and aftercare, and to encourage efficient and appropriate use of the minerals. [33-40]

304. With particular regard to coal, the Government's central energy policy is described as ensuring a secure, diverse and sustainable supply of energy at competitive prices. The requirements specified for opencast coal development may be summarised as follows: environmentally acceptable and with no lasting environmental damage; if this is not achievable, then local and community benefits to clearly outweigh the disbenefits; and a high standard of restoration to beneficial and suitable after-use. Together with the development plan policies, these principles provide the structure for consideration of the current proposal. [41]

Benefits

305. There would be a variety of benefits from the scheme, the main ones being the restoration of a large area of derelict land, the extraction of a valuable coal resource and several financial benefits to the local community. It has been a longstanding aim of the Council and its predecessors to rid Merthyr Tydfil of its worst areas of dereliction. 317 hectares (79%) of the application site area is designated as derelict land in the Local Plan, and this would be progressively restored as the coal reserves were worked and the void backfilled. The quality of restoration would be high, and it would be subject to detailed approval by the Council, thus satisfying the relevant development plan and national policy criteria in this regard. [16, 29, 30, 38, 40, 41, 71, 86, 161-163, 171, 186]

306. The dereliction includes 48 known shafts and 39 known adits from former iron ore and coal workings, and there are likely to be more that are not yet known, as well as extensive, unsightly spoil tips on the hillside. Although the last known related human death was over 50 years ago, there is a risk of ground subsidence and collapse, and some 20 sheep were drowned in a recent incident. These demonstrate the potential risks and add to the undoubted substantial visual benefits of removing the surface dereliction from a prominent hillside overlooking Merthyr Tydfil. Of course, this would not be fully realised until the end of the proposed operating period (between 13-17 years), during which elements of the opencast operations would themselves be visible. However, the final restoration would significantly improve the appearance of the land and improve the attractions of the town to tourism and inward investment. [23, 31, 72, 73, 75, 161, 186, 187, 191, 192, 211, 261, 266, 279]

307. It has been suggested that adequate restoration could be achieved with considerably less work, possibly just by modest surface improvements. However, these would have to be financed from the public purse and would not address the below-ground dereliction, which would continue to give rise to risks of accidents in the future. In this context, the existence of the 3 former landfill waste sites should not be overlooked. These lie partially within the proposed main excavation area, and that part would be excavated and either used as hardcore on the site roads or removed to suitable licensed waste tips. The remaining part would be sealed and capped to modern standards. [26, 74, 76, 78, 192]

308. The tips were used by the Council during the 1970s and 1980s and contain non-inert waste, contrary to the terms of the lease. It is accepted that the liability for rectifying this lies with the Council, and cost estimates range from £6.8M to £19.5M. If the scheme were to go ahead, this liability would be removed from the Council and taken over by Miller Argent. Some local residents allege that this was a major factor in the Council's decision to support the scheme and that it also strongly influenced many local people not to oppose it, as they were concerned about the possibility that, as ratepayers, they would incur substantial additional bills in order to meet the liability. I do not know whether these claims are correct or not. However, even if they were, the saving of substantial costs to the Council is a material consideration, and it is entirely appropriate that it should be taken into account. The total saving to the public purse for the restoration of the derelict land and the partial removal and partial rectification of the 3 former landfill tips is estimated to be some £43M. This would be a very substantial benefit resulting from the proposed development. [74, 77, 86, 223, 243, 255, 262]

309. There would be many other economic benefits to the local community. Firstly, the opencast operations would generate some 200 well-paid jobs over a period of between 13-17 years, worth about £67M. Although some local residents were sceptical, there is no reason to doubt that most of these would be filled by local people and would bring significant benefits to the local economy, where there would be an additional indirect benefit. Merthyr Tydfil is a deprived area with one of the highest rates of unemployment in the UK and one of the lowest average household incomes, and such jobs would be welcomed. It has been suggested that the presence of an opencast coal operation would deter other potential employers from investing in the town. However, there is no evidence to support this proposition. It has also been argued that Merthyr Tydfil would fall behind the rest of South Wales in attracting tourism. However, the current widespread areas of dereliction are a major deterrent at present, and the improvement of the appearance of the hillside above the town would have long-term benefits in attracting tourism in due course. I conclude that the proposed scheme would bring significant economic benefits to the local community. [87, 88, 175, 176, 194, 256, 261, 268, 279]

310. Miller Argent would also accept liability for paying back monies originally loaned by the Welsh Development Agency (WDA) to initiate Phases I and II, thus enabling the WDA to recycle the money and invest in other projects in Wales. It would also contribute some £0.6M towards the cost of diverting and upgrading a length of water main that crosses the site, part of a wider scheme planned by Dŵr Cymru Welsh Water. Approximately £1M per annum would be paid in rates in respect of the coal extraction, plant and buildings, and a community benefit fund would be established (run by the Council) with funding from coal royalties of between £6.4M and £10.8M depending on the prevailing coal prices. In addition, Miller Argent propose to develop a visitor/education centre at the Cwmbargoed Disposal Site to explain the scheme and archaeological and ecological features to schoolchildren and other visitors. [86, 89, 90]

311. The total value of benefits to the local economy (and the Council) is estimated to be about £130M. Whilst there has been speculation about the profit that might be achieved by the developer, no factual evidence has been put forward to show that these local benefits would be unreasonable. The value of the benefits accruing to the local economy would be substantial and are a significant factor in favour of allowing the proposal. [91]

312. The other benefit, of course, is in the extraction of the coal itself. Some 10.8M tonnes would be extracted at a rate of between 750,000 and 1,000,000 tonnes per annum. It is planned that its market would be Aberthaw Power Station, which is shortly to be expanded (with increased demand for coal) and improved by the addition of flue gas desulphurisation (FGD) plant that will ensure its emissions meet the latest environmental standards. At present Aberthaw has difficulty obtaining coal that meets the particular specification that it needs, and it relies on imported coal for some 50% of its supplies. The coal from Ffos-y-fran is of ideal quality for Aberthaw, and it would have a ready market there to either meet the increased requirements or replace imported coal without putting at risk the existing market for coal from the Tower Colliery or other South Wales sources. The high quality, low volatile coal from Ffos-y-fran would be blended with existing South Wales supplies of anthracite and would contribute towards the preservation of the coal industry in the area. The owners of the power station have written in support of the proposed scheme. [22, 31, 79, 82, 83, 178, 181, 182, 184, 221]

313. Some objectors have argued that the burning of coal produces greenhouse gases that contribute towards climate change and that more emphasis should be given to developing renewable sources of energy. No one disputes that principle. However, in practice, there is no prospect of renewable sources of energy replacing the use of coal in the foreseeable future, particularly in view of anticipated increases in demand. The projected increased future reliance on imported oil and gas is also causing security of supply to become a matter of some concern. Minerals Planning Policy Wales describes the objectives of the Government's energy policy as ensuring a secure, diverse and sustainable supply of energy at competitive prices, and it recognises that coal contributes to these aims. The 2003 Energy White Paper recognises the enormous coal reserves in South Wales and the technology that now exists to use it in a more environmentally friendly way, including FGD. [81, 178, 181, 182, 193, 219, 220]

314. Aberthaw Power Station is a major source of electricity for a large area of South Wales and will continue to be so for many years. Coal from Ffos-y-fran would make an important contribution to its security, efficiency and sustainability. In this respect, its winning and working as part of the current proposal would be a significant benefit to the general economy of South Wales. It may also be added that the use of rail transport to move the coal from

Ffos-y-fran to Aberthaw is a strong argument in favour of the scheme on grounds of sustainability. [83, 156, 178, 268]

Air Quality and Health

315. The likely effects on air quality and the associated risks to health are the matters of most concern to many of the local resident objectors who appeared at the inquiry. The applicant's estimates of effects on air quality have been prepared in 2 ways: firstly by computer modelling; and secondly, by comparison with data collected for another opencast coal site. The air quality parameters of concern are fine particulate matter (essentially dust) and nitrogen dioxide (emitted from plant engines). [92, 167, 230, 263, 270, 274]

316. The modelling has been based on the layout of the site and its surroundings, the various proposed stages of operation and the types of plant and equipment that would be used for each operation. Conservative assumptions have been made throughout, and the results of the worst-case scenario have been presented. These show predictions of a peak PM_{10} (i.e. fine particles smaller than 10 microns in diameter) rate of 24 $\mu g/m^3$ for a short period of time in the first few months and a maximum annual mean concentration of 22 $\mu g/m^3$ for nitrogen dioxide. These predictions would be well within the statutory air quality objectives set for Wales, which are the achievement of an annual mean for PM_{10} of 40 $\mu g/m^3$ by the end of 2005 and an annual mean of 20 $\mu g/m^3$ (and a daily mean of 50 $\mu g/m^3$ not to be exceeded more than 7 times per year) by 2010 and the achievement of an annual mean of 40 $\mu g/m^3$ for nitrogen dioxide. When one takes into account the conservative assumptions made in arriving at these predictions and that, for most of the time, dust and engine emission levels would be considerably less, the results provide considerable assurance of the limited degree of air pollution that would be likely to occur. [93-96, 99, 229, 230]

317. Comparison has also been made with the results of the Newcastle Study carried out in Northeast England comparing dust levels and health in communities close to and away from opencast coal mining sites. That study found average PM_{10} concentrations between 2.1 and 2.5 $\mu g/m^3$ higher in opencast mining communities than in other similar communities. The assessment carried out for Ffos-y-fran made an allowance of 4 $\mu g/m^3$ for fugitive emissions, almost double that found in the Newcastle Study. Bearing in mind those communities were downwind of the prevailing wind direction (at Ffos-y-fran it would be the opposite) and that rainfall at Merthyr Tydfil is 70% higher than in the study area, 4 $\mu g/m^3$ represents another very conservative assumption fed into the model. [97, 98]

318. Suggested conditions include provision for ensuring that industry best practice would be used to minimise dust and engine emissions. These measures would include the maintenance and spraying of haul roads, dust collection systems for blasting operations, vapour masts, controls on mound construction work in windy weather, and early seeding of mounds, storage and restoration areas. In terms of the use of best practice measures and the achievement of air quality standards, I conclude that the proposal would accord with national and development plan policies. Whilst a slight reduction in air quality would be likely to occur, air quality would still be good and would be maintained well within the national standards. [93, 100, 169, 230]

319. Some objectors have drawn attention to the inclusion of a 500 metre buffer zone around opencast sites proposed in the latest draft of Scottish Planning Policy 16, Opencast Coal, and suggest that Wales should follow suit. In fact, MPPW already advocates the use of buffer zones around mineral workings to avoid conflict with residential areas but advises that their

size will depend on the nature of the particular operation. In the circumstances at Ffos-y-fran, where reclamation objectives for that particular area of land are also involved, the assessment of the possible impacts themselves is an acceptable approach, as relying on broad-brush guideline distances would take no account of the particular local circumstances. [40, 231, 239, 275]

320. Possible implications for the health of the local community as a result of deterioration in air quality have been assessed both by reference to the national air quality standards and by extrapolation of the results of epidemiological studies. Nitrogen dioxide is an irritant to the human respiratory system and can lead to measurable reductions in lung performance in people with asthma and increase the susceptibility of children to respiratory infections. However, the national standards are set at concentrations of air pollutants that can be breathed on a regular basis without significant adverse effects. Although some objectors have made alarming claims about emissions from the large plant that would be used on the opencast site, both the Applicant's expert and the independent experts representing the Local Health Board advise that at these levels nitrogen dioxide would not raise any concern over impacts on health. Consequently, it is concluded that the nitrogen dioxide emissions, predicted to be well below the standard, would be unlikely to cause any significant adverse effects on the health of local residents. [101, 102, 206, 231, 248]

321. Fine dust particles are reported to be one of the pollutants causing the greatest public health impacts in the UK. The effects include premature death through both respiratory and cardiovascular disease and increased hospital admissions and exacerbated symptoms in people with heart and lung disease. Assessment has been carried out in terms of PM_{10} levels although it is the even finer $PM_{2.5}$ particles that are able to penetrate to the deepest regions of the lungs that are the most harmful. However, measurement of PM_{10} includes the finer $PM_{2.5}$ particles, and so is an acceptable means of judging their significance. [103, 104, 200, 237]

322. Whilst predicted PM_{10} levels would fall well within the national standards and so would be generally acceptable in terms of negligible effects on health, it has been argued that any deterioration in air quality would be harmful to the most vulnerable members of the community. The people of Merthyr Tydfil have one of the poorest levels of health in Wales, so this is a matter of particular concern. The findings of the Newcastle Study, which were fully accepted by the Department of Health's Committee on Medical Effects of Air Pollution (COMEAP), were that there was little evidence of association between living near an opencast site and any increased prevalence of respiratory illness, asthma severity or daily symptoms, although children in some of the opencast communities had more GP consultations on respiratory matters. These findings confirmed those of a 1995 study for the Department of Health, which found that there was no convincing evidence that air pollution would cause asthma in people who would not otherwise develop it but that it could exacerbate the symptoms of those already suffering from asthma. [103, 105, 106, 109, 201, 240, 264]

323. Some objectors have referred to other studies, which do not have the same standing and authority as the Newcastle Study, and to criticisms of the Newcastle Study by Dr Van Steenis, a Pembrokeshire GP. These studies and Dr Van Steenis' comments were not held in any regard by the experts who appeared at the inquiry, either on behalf of the applicant company or the independent Local Health Board. Accordingly, I give little weight to them. Objectors also referred to the 1997 report of a study carried out in West Glamorgan into the Acute Effects of Air Pollution on the Respiratory Health of Children (known as the Glynneath Report and carried out in an area containing opencast sites) and argued that that

supported their concerns. However, the Government's COMEAP committee has considered that report and concluded that it did not support any assertion that asthma was more common in areas close to an opencast site than in areas further away. The author of that report, Dr Temple, was one of the representatives of the Local Health Board at the inquiry and confirmed that conclusion. [108, 195, 204, 205, 233-236, 238, 253, 258]

324. The Local Health Board has also carried out a statistical analysis (based on World Health Organisation coefficients) to assess the possible impact of the predicted air quality in terms of effects on the life expectancy of people who are already sick and near the end of their lifespan and in terms of effects on hospital admissions for elderly people with chronic pulmonary obstructive disease or asthma. The overall conclusions of the Local Health Board are that the predicted levels of dust from the proposed scheme would be unlikely to have any noticeable individual adverse health effect but that impacts could be noticeable at the severest end of the spectrum, particularly for ill elderly people. [107, 202, 203, 206, 251]

325. It is pertinent that the small increases in particulate matter likely to be generated at Ffos-y-fran would be less than normal day-to-day variations that occur in any case because of changes in the weather. Miller Argent's expert states that any possible effects on the health of local people would be minimal and far smaller than could be detected by any feasible epidemiological study. Other interested parties have also drawn attention to the lack of attributable effects of opencast working on the health of employees themselves, who one would expect to be exposed to far higher levels of air pollution and dust than residents of nearby communities. This reinforces the general conclusion that effects on the health of most of the community would be negligible. Whilst there is some possibility that the slight deterioration in air quality might affect the health of a small number of people who are already seriously ill, this would be no different than that occurring as a result of normal variations. Therefore, I conclude that its general effect on the health of the community would not be significant. [106, 173, 201, 240, 252]

326. Some local residents have expressed particular concern about possible health effects on children attending schools near the site. Whilst those concerns are genuine and sincerely held, they are not supported by any factual evidence. The accepted evidence indicates that risks to children's health would be negligible. It has been argued that the precautionary principle should be applied. However, this is not justified as there is ample evidence that predicted air quality levels would be well within the range that occurs regularly in the UK and better than occurs in many other towns. [201, 228, 239, 252, 260, 265, 277, 282]

327. There is a strongly held fear on the part of a small number of local residents that they, or their loved ones, would be at serious risk if the scheme were to go ahead. That fear is to be respected and can be a material consideration, whether or not it is supported by scientific evidence. Nevertheless, it does not lead me to change the conclusions I have reached above. [109, 265]

328. Balancing these real and perceived risks to health, the Local Health Board advises that the proposal would result in some benefits to health. Merthyr Tydfil is a deprived area, and there is an acknowledged relationship between poverty and ill health. By bringing jobs and other economic benefits into the local community the scheme would make a contribution towards improvements in general health and wellbeing. In the long-term the improved appearance and state of the land would also have a positive effect on wellbeing. [109, 199]

Other Effects on Residential Amenity

329. The other matters of potential for significant effects on the living conditions of local residents are noise and blasting disturbance. A range of noise mitigation measures would be employed in accordance with good practice, including baffle mounds, controls on hours of work and on particular activities carried out at certain times, routing of site roads, and the use of acoustic enclosures for pumps. Taking these into account, a noise prediction model has been used to assess the worst case situation for each group of nearby houses and each operational regime. This shows that noise levels (as measured at the nearest sensitive properties) would be contained within the limits advised in the applicable national guidance. Account has been taken of existing levels of background noise, and the assessment indicates that for most locations and for most of the time the predicted increases in noise levels would be barely perceptible. [110-113, 241]

330. The Council's Environmental Health Officer originally objected to the applicant's proposal for work to continue until 2300 hours each weekday, as quieter noise levels would be unlikely to be achieved in the evenings in accordance with national guidance. However, Miller Argent subsequently reconsidered its proposed working practices and is now confident that the lower noise levels would be met. This has allayed the Council's environmental health reservations and could be ensured by an appropriate planning condition. I consider this to be an acceptable approach. [114, 115, 165]

331. Turning to blasting, each operation would be designed to reduce ground vibration to a minimum and would be subject to planning conditions that specified maximum levels of ground vibration well below those likely to cause significant nuisance or damage to property. Unlike rock quarries, blasting at an opencast coal site is used merely to loosen the material rather than to fragment and dislodge it. A blast witnessed at another opencast site during the site visit illustrated the limited impact that blasting operations would be likely to have at Ffos-y-fran. I consider that such operations would not significantly affect the amenity of nearby residents. [116, 117]

332. Concerns have also been raised about the presence of hazardous waste within the 3 former landfill waste tips and the possibility of smells being released. However, site investigations indicate that, apart from a few "hotspots", about 95% of the deposited waste is inert ash, shale, and demolition material (which would be used for the site roads) and that most of the rest is degradable domestic waste, which would be removed to the Trecatti waste disposal site nearby. About 1% would be expected to be classed as hazardous waste for separate removal to an appropriate licensed disposal site. These operations would take about 6 months and would be carried out in accordance with the latest good practice and regulatory requirements. The Environment Agency has raised no objections, and I do not consider these proposals would raise any meaningful risk to either the environment or the health or amenity of local residents. [76-78, 231, 259, 266, 272]

Water Environment

333. The National Assembly for Wales has particularly asked to be informed of the effects on surface and groundwater resources. Dealing first with groundwater, most of the excavation would be well above the groundwater reservoirs, and it would only be necessary to dewater the main excavation at its northern end near Dowlais Top over a short period of time near the end of the scheme. At its deepest the floor of the excavation in that area would be 50 metres below the piezometric water surface, and the excavation would have to be dewatered by pumping. This would affect the level of groundwater in the immediate surrounding area but it

would be expected that natural levels would quickly recover when coaling operations have been completed and that part of the void below the water level has been backfilled. [141, 142]

334. There are no known water extraction locations within the area likely to be affected, and it is unlikely that there would be any impact on water supply or the maintenance of water resources. It is also unlikely that the temporary disturbance of the groundwater equilibrium would give rise to any water quality problems. However, groundwater levels and quality would be monitored throughout the scheme, and an artificial recharge or water treatment scheme would be installed if any untoward impact was detected. [143, 144]

335. Turning to surface water, many of the existing ditches and watercourses on the site would be lost and replaced during the operational period by a new flow-collector system, which would contain adequate capacity for surface water drainage, and a network of ponds, flood attenuation lagoons and water treatment areas to reduce peak flood flows from the site and provide control over water quality. Discharges would be subject to consents granted and monitored by the Environment Agency. More natural arrangements would be reinstated as part of the land restoration scheme, and where possible parts of the Dowlais Free Drainage System would be retained. [145, 146]

336. These proposals and impact assessments have not been subject to dispute or to any objection or criticism by the Environment Agency. In my view, the proposed scheme would not have any adverse effects on the quantity or quality of groundwater or surface water resources and would meet the aims of the relevant national and development plan policies in this respect. [140, 217]

Archaeology and the Historic Landscape

337. Although much of the application site is derelict and covered by modern tips and fly-tipping, it contains numerous historical remains including early industrial ironstone and coal crop and patch workings, deep coal and iron mining, and the management of water by the Dowlais Free Drainage System (DFDS). These represent a small element of the once vast industrial landscape around the east side of Merthyr Tydfil. The DFDS is an 18th and early 19th century complex of water collection ditches, canalised natural streams, tunnels and surface reservoirs, built to collect ground and surface water and to deliver it to the Dowlais Iron Works. The mining related features include spoil heaps, shafts, adits, pithead structures and coal tips, and there are also the remnants of tramways and railways on the hill slopes. [14, 119-121]

338. Within the central corridor of the site, Sarn Howell Pond, an element of the DFDS, is a Scheduled Ancient Monument, and a wooden aqueduct over a deep railway cutting is a Listed Structure. In the southern part of the site there are features of a probable Prehistoric settlement, possibly of Iron Age date, and the Ffos-y-fran Deserted Iron Mining Village, another Scheduled Ancient Monument, lies immediately to the south west of the site. All of these would be safeguarded from the proposed works, which have been designed to avoid affecting all of the features of high archaeological value, including most of the DFDS elements. In addition, mitigation measures would include further documentation of the site's features and the eventual re-establishment of much of the affected areas of the DFDS. [56, 119-123]

339. Although some objectors have raised concerns, it is significant that CADW, the Glamorgan Gwent Archaeological Trust and the Countryside Council for Wales do not object to the proposals. Initial reservations expressed by CADW have been resolved by minor changes to the proposals. Some 71% of the site lies within the registered Landscape of Outstanding

Historic Interest of Merthyr Tydfil, which covers a large area of the town and its surroundings. However, this apparent conflict was accepted in the Local Plan, which still designated the land for restoration with coal recovery, and has not caused the statutory consultees to object to the scheme. They acknowledge the wider landscape benefits and the aims of the Local Plan. [67, 124, 127, 212, 218]

340. Planning Policy Wales advises that the historic landscape should be considered in determining planning applications. In line with this guidance, considerable modifications have been made to the earlier Phase III proposals for reclamation of the land in order to minimise and mitigate effects. Planning policy at all levels also seeks preservation of nationally important remains, and this would be achieved by the scheme. I conclude that the proposed scheme would be generally in accord with policy and that it would have a moderate effect on the historic landscape but only minor effects on features of high archaeological value. Appreciation of the DFDS has already been much enhanced by investigations carried out for the scheme, and the Countryside Council for Wales has expressed the view that the mitigation strategy would pay considerable dividends in terms of education and the interpretation of Merthyr's rich historic legacy. [125, 127, 128, 212]

Other Environmental and Amenity Effects

341. Several other impacts warrant consideration. The first is the effect on nature conservation. There are no statutory nature conservation sites or local nature reserves within the site. A designated Site of Importance for Nature Conservation (SINC) lies immediately to the east of the site, within the administrative boundaries of Caerphilly CBC, and that Council originally expressed concern about risks of the proposed scheme affecting that area, particularly as a result of movement of surface or groundwater. However, that concern has been allayed, and Caerphilly CBC has withdrawn its objections. [130, 147, 208]

342. Preparatory work for the draft Merthyr Tydfil Unitary Development Plan has identified a further 59 possible sites for consideration as potential future SINCs, and some of these areas are within the application site. One objector has argued that they should be afforded the same sort of protection as the Caerphilly SINC. However, the Council reports that it would not envisage supporting the designation of any of the potential SINC areas within the current application site and, accordingly, that the findings of the UDP preparatory work should be given little weight. That approach would be in line with national policy guidance on preparatory work for emerging draft plans. [131, 170, 213]

343. The likely effects of the proposal on species and habitats found on the site were assessed in the Environmental Impact Assessment as ranging from "negligible" to "moderate", and the Countryside Council for Wales and the Environment Agency have not raised any objections to the proposal. Great Crested Newts, a protected species, have been identified on the site, and a licence under the Habitat Regulations 1994 would be needed for a "derogation" in order to carry out measures to protect them. Although some objectors have expressed concern about the risks involved in moving newts, the Countryside Council for Wales is satisfied that the favourable conservation status of the species would not be affected, and I consider that the other required tests for "derogation" would be met. In July 2004 the Welsh Assembly Government issued guidance to all planning authorities in Wales that, where protected species occur on a development site, their protection should be assured by a planning condition requiring the necessary granting of a license under the 1994 Regulations before any site clearance works take place. The standard wording prescribed in that guidance has been included in the set of recommended conditions. [132-136, 215, 250]

344. Taken as a whole, I conclude that the proposed development would not cause unacceptable harm to nature conservation and would be in accord with the relevant development plan and national planning policies. [137, 138, 214, 217]

345. The second matter would be that of impact on the landscape and visual amenity. A large part of the site is urban common with public rights of access and several public rights of way. These would be suspended during the course of the operations. However, Miller Argent has the rights to the coal and the right to exclude the public to allow its recovery. The Company has reached agreement with the registered commoners, who would still have access to the remaining 92% of the common. I consider that the impact on the common would be acceptable. [54, 149, 153, 154]

346. The visual impact of the scheme would arise from the site's prominent location, the scale and duration of the scheme, the features created, activities associated with the operations, and the ultimate changes due to restoration. Activities would be clearly visible from viewpoints on elevated ground in the surrounding area, particularly from the north and west, and for the duration of the scheme impacts would generally be detrimental. However, one must bear in mind that one of the main purposes of the scheme, in fact THE main purpose so far as the Council is concerned, is to remove the present dereliction and restore the land to beneficial use. The restoration would aim to re-establish a natural landform and features and a mix of beneficial uses. In my view, the long-term effect on the landscape character and visual amenity would be a substantial benefit to people who live near the site and to the wider community of Merthyr Tydfil. Moreover, it would align with both development plan and national policies. [150-152, 197, 216, 249, 267, 269]

347. The impact of traffic generated by the proposal would be negligible. Some objectors have argued that fuel deliveries would cause increased risks on nearby roads. However, the number of vehicles that would move in and out of the site each day, including fuel deliveries, would be small and would have little effect on the safe flow of traffic on local roads. Current traffic flows are well within design capacity for the road network. All coal would be removed from the Cwmbargoed Disposal Point and be delivered directly to the Aberthaw Power Station by train. The overburden material would be moved between the main excavation area and the various storage areas entirely within the site. To facilitate this a crossing would be constructed underneath the Bogey Road, which would be improved and realigned as part of the construction process. [25, 155-159, 254]

348. Finally, it has been suggested that the value of nearby houses would be affected by their proximity to an opencast coal site. However, any such effects would be temporary. Moreover, in the longer-term, such properties would benefit from the visual improvements to the landscape that the restoration measures would achieve. Consequently, I find no force in this submission. [242, 275, 279]

Conditions

349. A total of 72 suggested conditions were put forward in the Statement of Common Ground, and these were discussed at some length in the public inquiry. Various alterations, additions and deletions were agreed by the main parties, and these are reflected in the Annex of conditions attached to this report. All of these conditions meet the tests prescribed in Welsh Office Circular 35/95, The Use of Conditions in Planning Permissions. They would provide adequate and necessary controls over working methods aimed at minimising and mitigating impacts on the environment and local amenity should the National Assembly resolve to grant permission. [287-296]

Overall Conclusion

350. In reaching my conclusions I have taken into account the requirements of Section 54A of the 1990 Act and the various relevant development plan and national policies. I have also taken into account the Environmental Statement, which was prepared in accordance with the Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999. The scheme includes provision for mitigation measures both in terms of avoiding certain features or areas of land and by means of the proposed use of a wide range of planning conditions to control the way it would be carried out.

351. The scheme would bring substantial benefits both in terms of the restoration of a large area of derelict land at no cost to the public purse and in economic terms. The former has been a longstanding aim of the Council (and its predecessors) for many years, and the development plan makes specific provision for the restoration of this area of land funded by opencast coal extraction. The scheme would remove large areas of unsightly surface dereliction as well as unsafe features of both surface and underground dereliction from former mining use. These are strong arguments in favour of granting planning permission.

352. There would also be economic benefits both locally and on the wider stage. Local benefits would be in the provision of some 200 well paid jobs and the various payments of money towards a community fund, the Welsh Development Agency grant repayment, Council rates and several other matters. The value of these local economic benefits is estimated to be of the order of £130M. On the wider stage, the benefits would be in providing coal suitable for Aberthaw Power Station, on the efficiency and reliability of which a large proportion of the economic activity of South Wales depends. These economic benefits are a strong argument in favour of the proposal.

353. A number of matters are balanced against the benefits. The first is that of the effects of dust and air pollution on the health of people living near to the site. Whilst there would be some deterioration in air quality as a result of the opencast operations, it would be slight, and the air quality in Merthyr Tydfil would still be good and well within nationally accepted standards. It is possible that this slight change might affect the health of a small number of people who are already seriously ill and therefore more vulnerable. However, its general effect on the health of the community as a whole would not be significant.

354. Dust, noise and blasting from operations on the site would have the potential to be detrimental to the living conditions of nearby residents. However, extensive measures would be taken to minimise the creation and spread of dust and to minimise the transmission of noise and the effects of blasting operations. These would be subject to detailed control by means of planning conditions, which would include limiting working hours. On all of these matters I conclude that effects would not be significant or unacceptable.

355. I conclude that surface and groundwater resources would be adequately safeguarded both in terms of quantity and quality. The scheme would have a moderate effect on the historic landscape but would safeguard all features of high archaeological value. It would have a short-term impact on visual amenity but in the longer-term would be beneficial in providing a more attractive landscape. Despite the need to move a number of great crested newts under licensed control, the effect on nature conservation would be acceptable, and traffic effects would be negligible. It is significant that there are no objections to the scheme from any statutory consultees with responsibilities for safeguarding the various matters likely to be affected.

356. Overall, I conclude that the scheme would be in accordance with development plan and national policy and that the benefits would far outweigh the objections. Suitable planning conditions would minimise and mitigate any detrimental impacts. For the above reasons and having regard to all matters raised, I conclude that planning permission should be granted for the proposed development.

Recommendation

357. I recommend that planning permission be granted subject to the conditions detailed in the attached Annex.

Clive Nield

APPEARANCES

FOR THE APPLICANT:

Mr Rhodri Price Lewis QC	Instructed by DLA LLP, Solicitors on behalf of Miller Argent (South Wales) Limited.

He called:

Mr James Poyner, FBEng, FQSi, FIQ, MIExplE, ACIOB	Director, Miller Argent (South Wales) Limited.
Mr Stephen Tillman, BEng, MSc, CEng, MIStructE, MICE	Director, Miller Argent (South Wales) Limited.
Dr Clare Holman, BSc, PhD, MCIWEM, MIAQM, AMCIWM	Senior Associate, Peter Brett Associates, 7 The Crescent, Taunton, Somerset, TA1 4EA.
Prof. Roy Harrison, OBE, BSc, PhD, DSc, FRSC, FRMetS, Hon. MFPH, Hon. FFOM	Department of Environmental Health and Risk, University of Birmingham.
Mrs Sarah Radcliffe, MEngAV, CEng, MIA	Principal Acoustic Engineer, Peter Brett Associates, 7 The Crescent, Taunton, Somerset, TA1 4EA.
Mr Ben Mitchell, CEng, MICE, MCIWEM	Partner, Peter Brett Associates, Caversham Bridge House, Reading, Berkshire, RG1 8DN.
Mr Paul Lacey, BSc, DipTE, CEng, MICE, FIHT	Senior Associate, Peter Brett Associates, 7 The Crescent, Taunton, Somerset, TA1 4EA.
Mr Richard Hughes, BA, MIFA, FRGS	Director, International Heritage Conservation and Management Limited.
Mrs Mary O'Connor, DipLA, MSc, MLI	Director, WynThomasGordonLewis Limited, 21 Park Place, Cardiff, CF10 3DQ.
Mr Richard Puttock, BSc, MSc, FGS	Partner, Peter Brett Associates, Caversham Bridge House, Reading, Berkshire, RG1 8DN.
Mr Roland Edwards, BSc, MSc, DIC, CGeol, CEng, MICE, MIHT, FGS, Eur Ing	Independent Consulting Engineering Geologist.
Mr Keith Jones, BSc, PhD, MIBiol, CBiol	Director of Environmental Services, RPS Planning, Transport and Environment, Mallams Court, 18 Milton Park, Abingdon, Oxon, OX14 4RP.

Mr Michael Sant, BA, FRTPI	Chairman, Harmers Limited, 39 Lambourne Crescent, Cardiff Business Park, Llanishen, Cardiff, CF14 5GG.

FOR THE LOCAL PLANNING AUTHORITY:

Mr Alistair Norman Davies, BSc, DipTP, MRTPI	Head of Planning, Merthyr Tydfil CBC.

FOR ORGANISATIONS AND PEOPLE SUPPORTING PROPOSAL:

Mr David Brewer, BA, ACMA	Director General, Confederation of UK Coal Producers, Confederation House, Thornes Office Park, Denby Dale Road, Wakefield, West Yorkshire, WF2 7AN.
Mr Gareth Jones	Regional Industrial Organiser, Transport & General Workers Union, 1 Cathedral Road, Cardiff, CF11 9SD.
Mr Alan Rees	9 Buckland House, Caedraw Road, Merthyr Tydfil, CF47 8HG.
Mr Manus Malloy	1 Durham Close, Shirley Gardens, Heolgerrig, Merthyr Tydfil, CF48 1SL.

FOR OTHER INTERESTED AUTHORITIES:

Dr Gwen Lowe MB, BCH, MPH, MRCGP, MFPH	Acting Local Public Health Director, Merthyr Tydfil Local Health Board, The Business Centre, Triangle Business Park, Merthyr Tydfil, CF48 4TQ.
Dr Mark Temple MA, MB, BCHIR, MPH, MRCGP, MFPH	NHS Consultant in Public Health Medicine.
Mrs Ruth Amundson, BA	Principal Planner Minerals, Caerphilly CBC, Council Offices, Pontllanfraith, Blackwood, NP12 2YW.

FOR INTERESTED OPPOSITION GROUPS:

Mr Anthony Chaplin	Representing the Merthyr Initiative Group, 10 Andrews Close, Heolgerrig, Merthyr Tydfil, CF48 1SS.
Canon Steve Morgan	Representing the Merthyr Tydfil Anti Opencast Campaign (Secretary – Mr S P Brown, 11 Salisbury Close, Heolgerrig, Merthyr Tydfil, CF48 1SD)
	24 Penybryn View, Incline Top, Merthyr Tydfil, CF47 0GB.
Mr Roy Jones	Chairman of Swansea Friends of the Earth, The Environment Centre, Pier Street, Swansea, SA1 1RY.
Mr Neil Jones	Biodiversity & Countryside Campaigner, Swansea Friends of the Earth, Ditto.

INTERESTED PERSONS OPPOSING PROPOSAL:

Mrs Vivienne Hadley	16 Hampton Street, Twynyrodyn, Merthyr Tydfil, CF47 0RR.
Mrs Alison Austin	10 Llwyn-yr-eos, Bradley Gardens, Incline Top, Merthyr Tydfil, CF47 0GD.
Mr Neil Greer	3 Hodges Street, Penydarren, Merthyr Tydfil, CF47 9NX.
Mrs Jennie Jones	19 Llwyncelyn Close, Ynysfach, Merthyr Tydfil, CF48 1AH.
Miss Valerie Williams, BA, MEd	1 Parfitt Terrace, Merthyr Tydfil, CF47 0PL.
Mr Leon Stanfield	1 St Johns Close, Cefn Coed, Merthyr Tydfil, CF48 2PE.
Mr Jeffrey Davies	47 Mardy Street, Mountain Hare, Merthyr Tydfil, CF47 9LD.
Mr Richard O'Neill	10 Mountain View, Mountain Hare, Merthyr Tydfil, CF47 0UX.
Mr Beresford Bevan	Ty Coed, Penheolferthyr, Mountain Hare, Merthyr Tydfil, CF47 0LF.
Mr Terry Evans	Windy Ridge Bungalow, Mount View, Mountain Hare, Merthyr Tydfil, CF47 0UX.
Mr Tom Roberts	7 Brickfield Crescent, Twynyrodyn, Merthyr Tydfil, CF47 0DW.

Mr David Roberts	29 Maes-y-Garreg, Cefn Coed, Merthyr Tydfil, CF48 2RG.
Mrs Sally Kahn	33 William Street, Twynyrodyn, Merthyr Tydfil, CF47 0RG.

INQUIRY DOCUMENTS

Documents	1.1-1.8	Lists of persons present at the inquiry on each day.
Document	2	Folder containing Letter of Notification, list of persons notified, press notification and details of site notices.
Document	3	Bundle of letters submitted to the Planning Inspectorate by third parties, including local residents and their representatives.
Document	4	Bundle of further letters submitted at Inquiry.
Document	5	Schedule of Core Documents.
Document	6	Schedule of Evidence presented to Inquiry by Applicant Company.
Document	7	List of Additional Documents submitted by Applicant Company at Inquiry (prefixed "A").
Documents	8.1-8.2	Mr Davies' Summary and Statement of Evidence on behalf of Merthyr Tydfil CBC.
		<u>Series of Additional Notes</u>
		S1 – Noise as a material planning consideration.
		S2 – Air quality, especially dust monitoring.
		S2A - Air quality, especially nitrogen dioxide monitoring.
		S3 - Sites of importance for nature conservation (SINCs).
		S4 - Council's minerals interest.
		S5 - Maximum benefits from land.
		S6 - Night-time working noise limit of 42 dB(A) Leq 1 hour.
		S7 – Brick factory possibility.
Document	9	Dr Lowe's Statement of Case and Evidence.
Document	10	Dr Temple's statement concerning his occupation and status.
Documents	11.1-11.4	Caerphilly CBC's original Statement of Case, explanatory letter dated 10 September 2004, Response to Miller Argent's Rebuttal, and Addendum to Response.

Document	12	CADW's written statement, submitted 28 July 2004.
Document	13	Mr Gareth Jones' Statement (on behalf of the Transport & General Workers' Union).
Document	14	Mr Brewer's Statement (on behalf of the Confederation of UK Coal Producers).
Document	15	Mr Rees' Statement of Evidence, with attached photographs.
Document	16	Mr Malloy's Statement of Evidence with Appendices.
Documents	17.1-17.6	Mr Chaplin's Statement of Evidence, Object 1 (on behalf of the Merthyr Initiative Group); Appendices, Object 2; Aims and Objectives of the Group; List of Group Members; and extracts S1 and S2 from Inspector's report on Winchfawr West Inquiry.
Documents	18.1-18.2	Mr Chaplin's Closing Submission and comment on Inquiry Rules.
Documents	19.1-19.6	Canon Morgan's Statement of Evidence with Appendices (on behalf of the Merthyr Tydfil Anti Opencast Campaign); an introductory statement; details of Canon Morgan and Mr Brown (Secretary of Campaign); and additional papers on Draft Scottish Planning Policy SPP16 - Opencast Coal, issue of SPP16 for public consultation, and Professor McGlade's WHO address.
Document	20	Canon Morgan's Closing Submission.
Document	21	Mr Roy Jones' Statement of Evidence (on behalf of Swansea Friends of the Earth).
Documents	22.1-22.4	Mrs Hadley's Statement of Evidence, petitions and letter of complaint.
Document	23	Mrs Austin's Statement.
Document	24	Mr Greer's Statement and attachments.
Document	25	Mrs Jennie Jones' Statement with attached photographs.
Documents	26.1-26.3	Mr Stanfield's Statement with attached documents, addendum notes and petition.
Document	27	Mr Jeffrey Davies' Statement with attachments.
Document	28	Mr O'Neill's Statement with attached letter dated 28 June 1996.
Document	29	Mr Terry Evans' Statement with attached photographs.
Document	30	Mrs Khan's Statement with attached photographs.
Documents	31.1-31.3	Itinerary for site visits and lists of persons attending each day.

EVIDENCE PRESENTED BY APPLICANT

Document	MA 001/1	Mr James Poyner – Summary of Evidence.
Document	MA 001/2	Mr James Poyner – Statement of Evidence.
Document	MA 001/3	Mr James Poyner – Figures, Drawings and Appendices.
Document	MA 001/4	Mr James Poyner – Rebuttal Statement, Details of Miller Mining Testimonials and Awards.
Document	MA 001/5	Mr James Poyner – Rebuttal Statement, Recent Ground Collapses.
Document	MA 001/6	Mr James Poyner – Rebuttal Statement, Dust Suppression Units.
Document	MA 002/1	Mr Stephen Tillman – Summary of Evidence.
Document	MA 002/2	Mr Stephen Tillman – Statement of Evidence.
Document	MA 002/3	Mr Stephen Tillman – Figures.
Document	MA 002/4	Mr Stephen Tillman – Appendices.
Document	MA 002/5	Mr Stephen Tillman – Rebuttal Statement, Community Benefit.
Document	MA 003/1	Mr Richard Puttock - Summary of Evidence.
Document	MA 003/2	Mr Richard Puttock - Statement of Evidence.
Document	MA 003/3	Mr Richard Puttock – Appendices.
Document	MA 003/4	Mr Richard Puttock - Rebuttal Statement.
Document	MA 003/5	Mr Richard Puttock – Errata of Statement of Evidence.
Document	MA 004/1	Mr Ben Mitchell - Summary of Evidence.
Document	MA 004/2	Mr Ben Mitchell - Statement of Evidence.
Document	MA 004/3	Mr Ben Mitchell – Appendices.
Document	MA 004/4	Mr Ben Mitchell - Rebuttal Statement, Tair Carreg Moor SINC Hydrology.
Document	MA 004/5	Mr Ben Mitchell – Statement of Clarification in relation to Planning Policy for Hydrology.
Document	MA 005/1	Mr Roland Edwards - Summary of Evidence.
Document	MA 005/2	Mr Roland Edwards - Statement of Evidence.
Document	MA 005/3	Mr Roland Edwards – Appendices.
Document	MA 005/4	Mr Roland Edwards – Drawings.
Document	MA 005/5	Mr Roland Edwards - Rebuttal Statement, Tair Carreg Moor SINC Hydrogeology.

Document	MA 005/6	Mr Roland Edwards - Rebuttal Statement.
Document	MA 005/7	Mr Roland Edwards – Errata identified in Statement of Evidence.
Document	MA 006/1	Mr Richard Hughes - Summary of Evidence.
Document	MA 006/2	Mr Richard Hughes - Statement of Evidence.
Document	MA 006/3	Mr Richard Hughes – Reference Documents, Figures and Appendices.
Document	MA 006/4	Mr Richard Hughes - Rebuttal Statement.
Document	MA 006/5	Mr Richard Hughes – Erratum Statement of Evidence.
Document	MA 006/6	Mr Richard Hughes – Agreed Note of Meeting with CADW on 27 August 2004, with covering CADW letter.
Document	MA 007/1	Dr Keith Jones - Summary of Evidence.
Document	MA 007/2	Dr Keith Jones - Statement of Evidence.
Document	MA 007/3	Dr Keith Jones – Figures and Appendices.
Document	MA 007/4	Dr Keith Jones – Response to Evidence of Caerphilly CBC on Ecology and Nature Conservation.
Document	MA 007/5	Dr Keith Jones – Response to Evidence of Merthyr Initiative Group on Ecology and Nature Conservation.
Document	MA 007/6	Dr Keith Jones – Errata to Statement of Evidence.
Document	MA 007/7	Dr Keith Jones – Biodiversity and Opencast Coal Mining (RSPB Document).
Document	MA 007/8	Dr Keith Jones – Extract from English Nature Report 575 on Effectiveness of Great Crested Newt Projects in England 1990 – 2001.
Document	MA 008/1	Mrs Mary O'Connor - Summary of Evidence.
Document	MA 008/2	Mrs Mary O'Connor - Statement of Evidence.
Document	MA 008/3	Mrs Mary O'Connor – Submitted Documents.
Document	MA 008/4	Mrs Mary O'Connor – Errata Statement of Evidence.
Document	MA 009/1	Mrs Sarah Radcliffe - Summary of Evidence.
Document	MA 009/2	Mrs Sarah Radcliffe - Statement of Evidence.
Document	MA 009/3	Mrs Sarah Radcliffe – Appendices.
Document	MA 009/4	Mrs Sarah Radcliffe – Evening Noise Limits.
Document	MA 010/1	Dr Claire Holman - Summary of Evidence.
Document	MA 010/2	Dr Claire Holman - Statement of Evidence.

Document	MA 010/3	Dr Claire Holman – Appendices.
Document	MA 010/4	Dr Claire Holman - Rebuttal Statement.
Document	MA 010/5	Dr Claire Holman – Errata Statement of Evidence.
Document	MA 010/6	Dr Claire Holman – Rebuttal Statement on Fuel Consumption.
Document	MA 011/1	Prof Roy Harrison - Summary of Evidence.
Document	MA 011/2	Prof Roy Harrison - Statement of Evidence.
Document	MA 011/3	Prof Roy Harrison - Rebuttal Statement.
Document	MA 011/4	Prof Roy Harrison – Qualifications.
Document	MA 012/1	Mr Paul Lacey - Summary of Evidence.
Document	MA 012/2	Mr Paul Lacey - Statement of Evidence.
Document	MA 012/3	Mr Paul Lacey – Appendices.
Document	MA 013/1	Mr Michael Sant - Summary of Evidence.
Document	MA 013/2	Mr Michael Sant - Statement of Evidence.
Document	MA 013/3	Mr Michael Sant - Rebuttal Statement.
Document	MA 013/4	Mr Michael Sant – Supplementary Statement.

ADDITIONAL DOCUMENTS SUBMITTED BY APPLICANT

Document	A1	Opening Submission on behalf of Miller Argent.
Document	A2	Notes on progressive access and access to Scheduled Ancient Monuments during operations.
Document	A3	Note on train movements for carrying coal during operations.
Document	A4	Note on abandonment of option to construct waste cell on site.
Document	A5	Note on noise levels during daytime operations.
Document	A6	Planning Obligation by Undertaking to Caerphilly CBC.
Document	A7	Note from Mr G Brown of RWEnpower PLC on thermal efficiency of Aberthaw Power Station.
Document	A8	Response to statement by Mr Neil Jones of Swansea Friends of the Earth.
Document	A9/1	COMEAP statement on acute effects of air pollution on respiratory health of children in West Glamorgan.
Document	A9/2	Email from HSE re. occupational asthma in OCC mining.
Document	A10	Response to video shown by Canon Morgan.

Document	A11	Response to suggestion that proposed scheme would be twice the size of Nant Helen Opencast Coal Site.
Document	A12	Joint statement with Merthyr Tydfil CBC on Legal Agreement.
Document	A13	Details of Council vote at meeting on 29 June 2004 on whether or not to support scheme.
Document	A14	Closing Submission on behalf of Miller Argent.

CORE DOCUMENTS

Document	CD 001	Ffos-y-fran Land Reclamation Scheme – Planning Application and Supporting Information, May 2003.
Document	CD 002	Ffos-y-fran Land Reclamation Scheme – Environmental Statement, May 2003.
Document	CD 003	Ffos-y-fran Land Reclamation Scheme – Environmental Statement Figures and Drawings, May 2003.
Document	CD 004	Ffos-y-fran Land Reclamation Scheme – Environmental Statement Appendices, May 2003.
Document	CD 005	Ffos-y-fran Land Reclamation Scheme – Non Technical Summary, May 2003.
Document	CD 006	Ffos-y-fran Land Reclamation Scheme – Transport Assessment, 16 April 2003.
Document	CD 007	Ffos-y-fran Land Reclamation Scheme – Transport Assessment Appendices, 16 April 2003.
Document	CD 008	Merthyr Tydfil County Borough Council Improvement Plan 2003-2006, dated 2003.
Document	CD 009	Planning Policy Wales (PPW), March 2002.
Document	CD 010	"A Better Quality of Life. A Strategy for Sustainable Development for the United Kingdom", 1999.
Document	CD 011	Planning: Delivery for Wales, July 2003.
Document	CD 012/1	Minerals Planning Policy Wales (MPPW), December 2000.
Document	CD 012/2	Minerals Planning Guidance (Wales) Planning Policy Consultation Draft, November 1999.
Document	CD 013	The Mid Glamorgan (Merthyr Tydfil County Borough) Replacement Structure Plan 1991 – 2006, adopted 10 August 1996.
Document	CD 014	The Merthyr Tydfil Borough Local Plan [1996 – 2006], adopted 8 May 1999.

Document	CD 015	The Merthyr Tydfil Biodiversity Action Plan, adopted July 2002.
Document	CD 016	The Merthyr Tydfil Countryside Strategy and Action Programme 1997 -2002, adopted March 1998.
Document	CD 017	Minerals Planning Guidance Note No. 2 – Applications, Permissions and Conditions, 1998.
Document	CD 018	Minerals Planning Guidance Note No. 7 – The Reclamation of Mineral Workings, March 1989.
Document	CD 019	Minerals Planning Guidance Note No. 11 – The Control of Noise at Surface Mineral Workings, March 1993.
Document	CD 020	Planning Policy Guidance Note 14, Development on Unstable Land, Annex 2: Subsidence and Planning (which replaced Minerals Planning Guidance Note 12 – Treatment of Disused Mine Openings and Availability of Information on Mined Ground, which is now cancelled), 2002.
Document	CD 021	Technical Advice Note (Wales) 5 – Nature Conservation and Planning, November 1996.
Document	CD 022	Technical Advice Note (Wales) 11 – Noise, October 1997.
Document	CD 023	Technical Advice Note (Wales) 15 – Development and Flood Risk, March 1998. (now superseded)
Document	CD 024/1	Technical Advice Note (Wales) 15 – Development and Flood Risk Consultation Draft, July 2003.
Document	CD 024/2	Technical Advice Note (Wales) 15 – Development and Flood Risk, July 2004. (final version)
Document	CD 025	Planning Policy Guidance 25: Development and Flood Risk, July 2001.
Document	CD 026	Technical Advice Note (Wales) 18 – Transport, July 1998.
Document	CD 027	Technical Advice Note (Wales) 21 – Waste, November 2001.
Document	CD 028	UK White Paper on Energy, February 2003.
Document	CD 029	The Merthyr Tydfil County Borough Council Unitary Development Plan 2000 -2015 (Pre-Deposit Consultation and Issues Report), September 2000.
Document	CD 030	Merthyr Tydfil LANDMAP – Landscape Assessment, August 2002.
Document	CD 031	Historic Landscape Characterisation: Merthyr Tydfil Part 1 and 2: Landscape Characterisation and Management (GGAT Report No. 2003/009), January 2003.

Document	CD 032	The Register of Landscapes, Parks and Gardens of Historic Interest in Wales, Part 2.1 Landscapes of Outstanding Historic Interest (1998 – 2001).
Document	CD 033	"Learning to Live Differently" – Consultation on the review of the Sustainable Development Scheme, October 2003.
Document	CD 034	The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, dated 14 March 1999.
Document	CD 035	The Use of Conditions in Planning Permissions (Welsh Office Circular 35/95), July 1995.
Document	CD 036	Countryside and Rights of Way Act, 2000.
Document	CD 037	Planning Officer's Report to the Special Council Meeting on 30 June 2004, Item No. 05 including Errata sheet.
Document	CD 038	Schedule of Consultee responses, written representations and correspondence – Volume 1 (2003/2004).
Document	CD 039	Schedule of Consultee responses, written representations and correspondence – Volume 2 (2003/2004).
Document	CD 040	Schedule of direct correspondence with the National Assembly for Wales. (2003/2004)
Document	CD 041	The Propagation of Noise from Petroleum and Petrochemical Complexes to Neighbouring Communities, CONCAWE, 1981.
Document	CD 042	BS 5228, Noise and Vibration Control on Construction and Open Sites, Part 1: Code of Practice for Basic Information and Procedures for Noise and Vibration Control, 1997.
Document	CD 043	BS 5228, Noise and Vibration Control on Construction and Open Sites, Part 3: Code of Practice Applicable to Surface Coal Extraction by Opencast Methods, 1997.
Document	CD 044	BS 5228, Noise Control and Vibration Control on Construction and Open Sites, Part 4: Code of Practice for Noise and Vibration Control applicable to Piling Operations, 1992.
Document	CD 045	BS 4142 Method for rating industrial noise affecting mixed residential and industrial areas, 1997.
Document	CD 046	Air Quality Strategy for England, Scotland, Wales and Northern Ireland, 2000.
Document	CD 047	Air Quality Strategy for England, Scotland, Wales and Northern Ireland – Addendum 2003.
Document	CD 048	Air Quality Regulations (Wales) 2000.
Document	CD 049	Local Air Quality Management Technical Guidance LAQM.TG (03) (Chapter 6, Review and Assessment of Nitrogen Dioxide), 1995.

Document	CD 050	Local Air Quality Management Technical Guidance LAQM.TG (03) (Chapter 8, Review and Assessment of PM_{10}), 1995.
Document	CD 051/1	The Environmental Effects of Dust from Surface Mineral Workings, Volume 1: Summary Report and Best Practice Guides, 1995.
Document	CD 051/2	The Environmental Effects of Dust from Surface Mineral Workings, Volume 2: Technical Report, 1995.
Document	CD 052	Minerals Planning Guidance Note No. 3: Coal Mining and Colliery Spoil Disposal (revised) March 1999, Annexes.
Document	CD 053	Process Guidance Note 3/5 (04), Secretary of State's Guidance for Coal, Coke, Coal Product and Petroleum Coke, 2004.
Document	CD 054	Geo-environmental Ground Investigation – Hoover, Merthyr and Tip 13 Landfills, Ffos-y-fran, East Merthyr Tydfil – July 2003 – by Peter Brett Associates.
Document	CD 055	CEN leachability tests (EN 12457-3:2002) - Characterisation of waste – Leaching – Compliance tests for leaching of granular waste materials and sludges – Part 3, 2002.
Document	CD 056	Guidance on National Interim Waste Acceptance Procedures, Version 1.2, External Consultation Draft, 18 August 2002.
Document	CD 057	Guidance on the Disposal of Contaminated Soils – Environment Agency, Version 3, April 2001.
Document	CD 058/1	Drinking Water Quality Standards as defined in the Water Supply (Water Quality) Regulations 1989.
Document	CD 058/2	The Surface Waters (Abstraction for Drinking Waters)(Classification) Regulations 1996.
Document	CD 059	Part IIA of the Environmental Protection Act 1990.
Document	CD 060	Environment Agency – Guidance on Assessment of Risks from Landfill Sites – External Consultation Version 1.0, May 2004.
Document	CD 061	The Contaminated Land (Wales) Regulations 2001.
Document	CD 062	PPC Application for a Landfill Permit – Regulatory Package Version 2.0 references, 2000.
Document	CD 063/1	Waste Strategy 2000 for England and Wales, Part 1, 2000.
Document	CD 063/2	Waste Strategy 2000 for England and Wales, Part 2, 2000.
Document	CD 064	Land Drainage Act 1991.
Document	CD 065	Water Resources Act 1991.
Document	CD 066	Welsh Office Circular 19/88 Control of Pollution Act 1974.

Document	CD 067	Ffos-y-fran Land Reclamation Scheme draft Restoration Strategy, 2004.
Document	CD 068	Ffos-y-fran Land Reclamation Scheme Environmental Management Plan (framework), 2004.
Document	CD 069	The 1988 Planning Consent for the East Merthyr Land Reclamation Scheme (EMRS).
Document	CD 070	P.G. Langdon-Davies Decision of Commons Commission on the Gelligaer & Merthyr Common under the Commons Registration Act 1965, 8 June 1993.
Document	CD 071	Planning for Coal – A Code of Practice. Jointly prepared by the Planning Officer's Society, the Welsh Planning Officer's Society and the Confederation of UK Coal Producers, 1996.
Document	CD 072	Energy Policy – Key Issues for Consultation. Response by The Coal Authority.
Document	CD 073	Glossary of Terms.
Document	CD 074	Town and Country Planning Act 1990, Section 247 – Stopping Up and Diversion of Highways and Section 257 Application for Public Path Stopping-up Order.
Document	CD 075	Statement of Common Ground between Miller Argent & Merthyr Tydfil County Borough Council.
Document	CD 076	Statement of Common Ground between Miller Argent & the Merthyr Initiative Group.
Document	CD 077	Consultation Draft Technical Advice Note 8 – Renewable Energy, July 2004.
Document	CD 078	English version of the Miller Argent community flyer.
Document	CD 079	Welsh version of the Miller Argent community flyer.
Document	CD 080	Question and Answers community leaflet.
Document	CD 081	Survey of use of the FLRS common land, 2004.

PLANS

Plans	A1-A3	Application Plans FLRS/PA1, PA2 & PA3 showing application site area, location, and comparison with phases of East Merthyr Reclamation Scheme and related proposals.
Plan	B1-B2	Plans 11992/308/001 B and 002 A, showing proposed improvements to the Bogey Road near narrow bridge, submitted by Applicant.

Annex – Recommended Conditions

COMMENCEMENT OF WORKS

1. The development to which this permission relates shall commence not later than the expiration of 5 years beginning with the date of this permission.

   REASON

   To comply with Section 91 of the Town and Country Planning Act 1990 and prevent any protracted delay in the start of works.

2. Written notification of the date of commencement of development shall be submitted to the Planning Authority 56 days BEFORE commencement.

   REASON

   In the interests of visual and residential amenity.

DURATION OF WORKS

3. All coal extraction shall cease within 15 years 3 months from commencement of development.
4. Final restoration shall be completed within 17.5 years from commencement of development, and aftercare shall be undertaken for a period of not less than 5 years upon certification of completion of each phase of the progressive restoration scheme.
5. Any building, plant, machinery, hardstanding or other works associated with the coal extraction (or any discrete phase thereof) shall be removed off site within 42 days of completion of restoration and the affected areas shall be reinstated in accordance with a scheme to be submitted to and approved in writing by the Planning Authority. The scheme shall be submitted no later than 56 days prior to cessation of mineral extraction, (or any discrete phase thereof).

   REASON

   To minimise the duration of the development hereby approved to protect residential amenity.

APPROVED PLANS/DOCUMENTS

6. The development to which this permission relates shall be carried out in accordance with the details shown on the submitted drawings and in accordance with the submitted Environmental Statement and supporting documents, unless subsequently amended with the written approval of the Planning Authority.

REASON

For the avoidance of doubt as to the extent and nature of the development hereby approved.

INSPECTION OF APPROVED PLANS/DOCUMENTS

7. From the commencement of development to completion, a copy of this planning permission, including all documents hereby approved and any other documents subsequently approved in accordance with this permission, shall be permanently maintained and available for inspection at the site office/offices.

REASON

To ensure the operators of the site and any other appropriate officers have ready access to the relevant documents on site as required, to avoid ambiguity as to the nature and extent of this permission.

METHOD OF WORKING

8. No development shall commence until a Method of Working Statement has been submitted to and approved in writing by the Planning Authority. Any works undertaken shall be fully in accordance with the approved scheme, which shall include the siting, design and external appearance of all surface structures, details of fencing, and the working method and treatment of overburden, soil and soil-forming material storage areas, and all other embankments, bunds and mounds.

REASON

To ensure satisfactory implementation and completion/restoration of the scheme.

AREAS OF EXCAVATION FOR COAL EXTRACTION

9. The surface areas of coal extraction shall not extend beyond the orange pecked lines as indicated on Plan FLRS/PA1 (Planning Application Site Area).

REASON

To define and limit the surface area of the consented development, to protect residential amenity and other acknowledged interests.

DEPTH OF WORKING

10. No coal extraction shall take place below the Lower 4 Feet (basal) seam for the principal extraction area, below the Hafod seam in the northeast coal extraction area, or below 10 metres (below existing ground level) in the southwest and southeast coal extraction areas (as indicated on Plan FLRS/PA1).

REASON

To define the vertical extent of this consent, to limit the effect of the approved development, to protect the hydrogeology and to protect residential amenity.

DIRECTION OF WORKING

11. The direction of working shall be south to north, as indicated on Plans FLRS/ES3/1 - 4.

REASON

The direction of working, south to north, lessens the potential impact upon residential amenity and results in earlier reclamation for those residential areas closest to the development.

HEIGHT OF OVERBURDEN MOUNDS

12. The northern overburden mound shall not exceed 475m AOD.

The southern overburden mound shall not exceed 410m AOD.

The eastern overburden mound shall not exceed 465m AOD.

REASON

To ensure that the visual impact of the overburden mounds is not greater than assessed, in the interests of visual amenity.

HOURS OF OPERATION

13. Except in emergencies (i.e. circumstances in which the operator has reasonable cause for preventing injury to persons or serious damage to property), in order to maintain the safe operation of the site (notification of which shall be given to the Planning Authority as soon as is practically possible) or unless the Planning Authority has agreed otherwise in writing, no operations (i.e. any physical works including the starting/warming/revving of any internal combustion engine, motor vehicle or other machinery), other than water pumping or servicing to water pumps or environmental monitoring, shall be carried out at the site, except between the following times:-

- Hours of operation (other than those activities specified below):

  Monday – Friday 0700 – 2300 hrs.

  Saturday 0700 – 1700 hrs

- Hours of coal haulage:

  Monday – Friday 0700 – 1900 hrs.

  Saturday 0700 – 1300 hrs.

- "Time Windows" within which blasting is permitted:

  Monday – Friday 1000 – 1300 hrs, 1400 – 1600 hrs.

  Saturday 1000 – 1300 hrs.

- Hours for removal of Existing Waste Tips:

  Monday – Friday 0800 – 1900 hrs.

  Saturday 0800 – 1300 hrs.

- Hours for the formation and removal of baffle mounds and the stripping and replacement of soils within a 300 metre radius of any residential dwelling:

  Monday – Friday 0800 – 1900 hrs.

  Saturday 0800 – 1300 hrs.

No work shall be undertaken on Sundays or Public/Bank Holidays.

REASON

To protect residential amenity.

DUST

14. No development shall take place until a detailed scheme and programme of measures to suppress dust and a programme of air quality monitoring have been submitted to and approved in writing by the Planning Authority. The mitigation measures shall be based upon those set out in the Environmental Statement accompanying the application. Such mitigation/suppression measures shall be implemented in accordance with the approved scheme.

15. To assist and mitigate any potential effects of dust nuisance, adequate dust suppression measures are to be employed using Best Available Technology Not Entailing Excessive Cost (BATNEEC) for the monitoring and control of dust which may arise directly or indirectly as a result of site activities.

    The approved scheme shall ensure that:

    - A sufficient number of spraying units are provided and maintained in efficient working order so as to ensure that haul routes and other areas traversed by vehicles are kept damp during dry weather.
    - Spraying vehicles have an adequate water supply at all times.
    - There is regular and effective maintenance of haul roads.
    - The exhausts and through-body exhaust systems of plant vehicles are such as to prevent exhaust gases being emitted downwards.
    - Effective dust collection systems are fitted to all blast hole drilling machines before such machines are operated.
    - Prior to blasting, all arisings from blast hole drilling are bagged and disposed of safely.
    - Tipping or removal of overburden is to temporarily cease or be relocated within the overburden storage area when the Planning Authority considers that wind strength and direction may result in a significant dust nuisance.
    - Construction of baffle mounds is to temporarily cease or be relocated when the Planning Authority considers that the wind strength and direction may result in significant dust nuisance.
    - A sufficient number of vapour masts are to be provided and maintained where necessary, so as to ensure that an effective vapour can be produced at any point in the site.
    - Baffle bunds are to be sealed and seeded as soon as practicable after they have been constructed in order to minimise wind blown material affecting adjoining properties.

REASON

To protect the amenities of residents from the potential effects of dust arising from the development approved.

AIR QUALITY

16. An air quality monitoring scheme shall be undertaken as approved in writing by the Planning Authority. This shall include:

- Baseline monitoring to establish background levels of dust and particulates which must be carried out prior to commencement of operations.
- Dust monitoring to be carried out at suitably agreed locations within the community using dust deposition gauges or sticky pads to identify nuisance dust.
- A weather station shall be set up and operated for the duration of the project at Cwmbargoed DP to measure (a) rainfall; (b) wind speed; (c) wind direction and (d) temperature. Such information to be made available to the Planning Authority on request.
- PM_{10} and $PM_{2.5}$ monitoring to be undertaken using a methodology agreed in writing by the Planning Authority. Such monitoring to be carried out prior to commencement of works and continue for a minimum period of 12 months after coal winning commences. If it is established such monitoring is not required as a result of site activities after such a period, the monitoring shall then cease, subject to the written agreement of the Planning Authority.

REASON

To protect the amenities of residents from the potential effects of dust arising from the development approved.

NOISE

17. (a) With the exception of those activities cited in conditions 18 and 22 below, noise arising from operations shall NOT exceed the following $dBL_{Aeq,\ 1hr}$ by reference to the following specific noise monitoring locations.

Ref No	Location	0700-1900 HRS	1900-2300 HRS
1	Blaen Dowlais	55	42

2	Japonica Drive	54	42
3	Mount View	55	42
4	Incline Side	55	42

(b) A scheme for monitoring noise levels shall be submitted to and approved in writing by the Planning Authority prior to commencement of works. The monitoring shall be undertaken in accordance with the approved scheme.

18. During Baffle Mound construction and removal, soil stripping and removal of soil heaps, noise levels shall not exceed a daytime noise level of 70 $dBL_{Aeq, 1hr}$ over periods not exceeding eight weeks in one year.

19. Efficient silencing equipment shall be fitted to and used by all vehicles and machinery on site and shall be efficiently maintained in accordance with the manufacturer's recommendations.

20. All haul roads in direct line of sight and within 500 metres of any residential dwelling shall be adequately screened, where practicable, to attenuate noise levels.

21. Equipment operating on a 24 hour basis such as pumps shall be placed in acoustic enclosures and positioned away from noise sensitive locations where practicable.

22. The rating level of noise emitted from such pump enclosures shall not exceed the existing background noise level by more than 0 $dBL_{Aeq, 1hr}$ at the nearest noise sensitive locations.

REASON

To protect residential amenity.

BLASTING

23. At all times, blasting shall be designed so that the ground vibration measured as peak particle velocity (PPV) shall not exceed 8mm per second at any residential or similar sensitive property. However, the design limit shall ensure that the ground vibration for at least 95% of all blasts in any 20 week period shall not exceed a PPV of 6mm per second.

24. Blasting shall be limited to four blasts a day between the hours of 1000 to 1300 and 1400 to 1600 hours (two blasts per time window). Blasting shall not be carried out on Sundays, Bank/Public Holidays, nor in the hours of darkness.

25. Vibration monitoring stations are to be placed at locations to be approved in writing by the Planning Authority. All monitoring data is to be made available to the Planning Authority on request.

26. No blasting shall be carried out within the 300m Blast Exclusion Zone indicated upon Drawing No. MMAG/BLAST/01.

REASON

To protect the amenities of the local environment, including residential amenity.

27. The level of vibration at the railway boundary shall not exceed a maximum peak particle velocity of 12mm/sec.

REASON

To maintain the integrity of the railway infrastructure.

HIGHWAYS

28. There shall be no vehicle access to or from the public highway for the approved works other than at the designated access points "X" & "Y" indicated on the submitted Plan FLRS/PA1.
29. Other than at the indicated crossing point there shall be no movement of plant on the public highway without the express consent of the Planning Authority. Access point "X" shall only be used for crossing the highway and no vehicles shall be permitted to turn onto the highway at this point.
30. Use of access point "Y" shall be confined solely to the entry and exit of plant and support vehicles and shall not be used for general access of personnel or other vehicles.

31. No development shall commence until a scheme has been submitted to and approved in writing by the Planning Authority indicating full engineering details of access points "X" and "Y" and details of traffic controls of access point "X". The access works shall be completed in accordance with the approved scheme before other development commences.
32. The internal road leading off access point "X", together with the access point to Cwmbargoed Disposal Point opposite access point "X", shall be surfaced to a standard approved in writing by the Planning Authority before coal extraction commences, for a distance and width of not less than 100 x 6.0 metres. The same shall also be applied to access point "Y" but for a distance and width of not less than 50 x 6.0 metres.
33. A scheme for facilities for wheel cleansing shall be submitted to and approved in writing by the Planning Authority before any construction works commence on site. The facilities shall be provided in accordance with the approved scheme before the main earthworks commence.
34. A scheme for all associated highway engineering works required shall be submitted to and approved in writing by the Planning Authority prior to commencement of such works.

REASON

In the interests of highway safety and residential amenity.

PARKING

35. A scheme for parking all employee vehicles shall be submitted to and approved in writing by the Planning Authority before any construction works commence on site. Parking shall be provided in accordance with the approved scheme on implementation of the development.

REASON

In the interests of highway safety.

TRANSPORTATION OF COAL

36. All vehicles shall enter the highway from the site in a clean condition.

REASON

To ensure that vehicles entering the highway from the site do not deposit deleterious material on the highway which could prejudice highway safety.

37. No coal shall be transported from the site except to the Cwmbargoed Disposal Point for onward transmission by rail.

REASON

To define the means of coal transportation, to ensure onward transmission by rail, in the interests of highway safety, residential amenity and sustainability.

IMPORTATION OF MATERIALS

38. No waste material (controlled or otherwise) or minerals for blending purposes shall be imported to the site, except with the advance written approval of the Planning Authority.

REASON

To clearly define the extent of this permission in order to prevent development on a scale or of a nature not envisaged and not considered acceptable for planning purposes, particularly amenity, at the time that the planning application was determined, but allowing for the continuation of current authorized activities at the existing rail siding within the application site.

PREPARATION/STORAGE OF MATERIALS

39. No materials, including minerals excavated from the site, shall be stocked on site other than within the designated areas on the approved plans, other than those necessary for enabling works.

REASON

To protect residential amenity.

PLANT AND MACHINERY

40. Cranes and jibbed machines, used in connection with the works, must be so positioned that the jib or any suspended load does not swing over railway property, or within 3 metres of the nearest rail if the boundary is closer than 3 metres.

41. All cranes, machinery and constructional plant must be so positioned and used to prevent the accidental entry onto railway property of such plant, or loads attached thereto, in the event of failure.

REASON

For the safety of rail traffic.

ENVIRONMENTAL MANAGEMENT PLAN

42. Prior to the commencement of each phase of development, an Environmental Management Plan (EMP) shall be submitted for the written approval of the Planning Authority for each phase of the development. The EMP shall be implemented in accordance with the approved scheme, save as otherwise specified in specific conditions.

REASON

To protect the environment.

GROUNDWATER

43. Prior to the commencement of work on the former landfill sites, a site investigation report shall be provided to the Planning Authority detailing the potential for ground/groundwater contamination at the three former landfill sites within the development boundary. This shall include an assessment of risk to the aquatic environment together with appropriate site specific values for the re-use of material on site and a methodology for the screening of unsuitable materials.

REASON

To prevent pollution of the aquatic environment.

44. Details of a groundwater monitoring scheme shall be submitted to and approved in writing by the Planning Authority prior to development commencing. This shall include the location, number and depth of monitoring wells as well as the frequency of monitoring of groundwater levels and quality, together with determinants for analysis, to cover the periods prior to, during and after excavation and restoration.

REASON

To protect groundwater resources.

45. If during the development any contamination of a nature not previously identified is encountered, representative samples shall be tested to determine the nature and extent of the contamination in order to evaluate the risk it might present to controlled waters. If the contamination could materially affect controlled waters at/below the site and cannot be dealt with by methods outlined in the Method Statement, then no further development in the relevant area (unless otherwise approved in writing by the Planning Authority) shall be carried out until the developer has submitted, and obtained written approval from the Planning Authority for, an addendum to the Method Statement. This addendum to the Method Statement must detail how this unsuspected contamination shall be dealt with and shall be implemented prior to continuation of development.

REASON

To ensure that the development complies with approved details in the interests of protection of Controlled Waters.

CONSTRUCTION PHASE WORKS

46. No development approved by this permission shall commence until a detailed Method Statement(s) describing the works to be undertaken and details of any necessary pollution prevention measures during the construction phase, has been submitted to and approved in writing by the Planning Authority. The Method Statement(s) must identify as a minimum:

- all fuels, oils and chemical storage facilities.
- details of surface water drainage arrangements to be installed to intercept and treat contaminated surface water run-off.

- details of measures to ensure there is no polluting discharge from haul roads and disturbed areas; and
- details of the nature, type and quantity of materials to be imported on-site.

REASON

To prevent pollution of the aquatic environment.

FOUL AND SURFACE WATER DRAINAGE

47. Development shall not commence until a scheme for disposal of foul sewage has been submitted to and approved in writing by the Planning Authority. The scheme shall be implemented as approved.

48. No development approved by this permission shall commence until detailed plans for a comprehensive drainage and lagoon system to intercept and treat surface water run-off from the area have been submitted to and approved in writing by the Planning Authority. The system shall be installed in accordance with the approved scheme.

REASON

To prevent pollution of the water environment.

ILLUMINATION

49. Before development commences a scheme shall be submitted to and approved in writing by the Planning Authority indicating the position, design, type and hours of operation of all illumination facilities to be employed at the site and the measures to be incorporated to minimise glare and nuisance. The lighting scheme as approved shall be implemented for the duration of the development and removed upon completion of the development.

REASON

To minimise undue glare and distraction in the interests of residential amenity and highway safety.

RESTORATION

50. No development shall commence until a Restoration Strategy for the restoration and management of the site has been approved by the Planning Authority. Such a scheme shall detail the sequence and phasing of backfilling and reclamation showing clearly their relationship to the working scheme and shall include appropriate landscape mitigation and

restoration, taking into account the historic landscape character, features of ecological interest and intended after-use of the land.

REASON

To protect and conserve the heritage and biodiversity value of the site.

51. The site shall be reclaimed (progressively) in accordance with the Restoration Strategy.

52. In the event of a cessation of winning and working of coal prior to the achievement of the completion of the approved Restoration Strategy, which in the opinion of the Planning Authority constitutes a permanent cessation within the terms of paragraph 3 of Schedule 9 of the Town and Country Planning Act 1990, a scheme for approval shall be submitted in writing to the Planning Authority within 6 months of the cessation of winning and working and shall include details of reclamation and aftercare. The approved scheme shall be fully implemented within 3 years (excluding any aftercare) of the written approval, unless otherwise approved in writing by the Planning Authority.

REASON

To enable the Planning Authority to adequately control the development and to ensure that the land is restored to a condition capable of beneficial use and in the interests of amenity.

AFTERCARE

53. An aftercare scheme for each phase of the restoration, requiring that such steps as may be necessary to bring each phase of the land reclaimed to the required standard for use for agriculture, amenity and conservation, shall be submitted for the written approval of the Planning Authority not later than 6 months prior to the completion of restoration (including soil spreading) of each phase.

REASON

To comply with the requirements of Schedule 5 of the Town and Country Planning Act 1990 and to ensure that the reclaimed land is correctly husbanded and to bring the land to the standard required for agricultural, amenity, and conservation use.

AGRICULTURAL WATER SUPPLIES

54. The developer shall ensure that any flow of water used for agricultural purposes that is adversely affected by the development is reinstated in a satisfactory manner, including the provision of alternative supplies during the course of operations.

REASON

To ensure that agricultural use is maintained.

ARCHAEOLOGY

55. No development shall take place until a "Programme of Archaeological Work" has been submitted to and approved in writing by the Planning Authority. The programme shall be implemented as approved.

56. The applicants shall retain an archaeologist approved by the Planning Authority, who shall undertake a "Watching Brief" of recognised archaeological features throughout the excavation and restoration period.

REASON

To protect or record the archaeological features on site, in accordance with the provisions of the 1979 Ancient Monuments and Archaeological Areas Act, and Welsh Office Circular 60/96 ("Planning and the Historic Environment - Archaeology").

PROTECTED SPECIES

57. Where any species listed under Schedules 2 or 4 of the Conservation (Natural Habitats, etc.) Regulations 1994 is present on the site in respect of which this permission is hereby granted, no works of site clearance, demolition or construction shall take place in pursuance of this permission unless a licence to disturb any such species has been granted in accordance with the aforementioned Regulations and a copy thereof has been produced to the local planning authority.

REASON

To safeguard the protected species within and around the application site.

LIAISON COMMITTEE

58. Before development commences, the developer shall establish a Liaison Committee, the composition of which shall be approved in writing by the Planning Authority. The purpose of the Liaison Committee shall be to ensure that the local community has an understanding of the work being carried out and that the developer and contractor are aware of local community concerns.

REASON

To ensure all stakeholders are properly represented, to protect residential amenity.

ENVIRONMENTAL LIAISON OFFICER

59. Prior to commencement of works on site, an Environmental Liaison Officer shall be appointed to oversee soil stripping/storage, the restoration scheme, habitat recreation and landscape works. The role, functions, experience and professional requirements of the Environmental Liaison Officer shall be approved in writing by the Planning Authority beforehand.

REASON

To ensure that the site is reclaimed in an acceptable manner to a condition capable of beneficial afteruse, in the interests of visual amenity, the public benefit and residential amenity.

FINANCIAL GUARANTEE

60. No development shall commence until a parent company guarantee backed by suitable covenants to a maximum value of £15,000,000 is provided to the Planning Authority, pursuant to the Mid Glamorgan Act 1987, in respect of the restoration, landscaping and aftercare works approved by this permission.

REASON

To safeguard the restoration of the site in the interest of amenity.