

National Assembly for Wales
Petitions Committee

The Incineration of Waste

December 2012



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Petitions Committee

The Incineration of Waste

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Petitions Committee

The Petitions Committee was established on 15 June 2011. Its role is to consider all admissible petitions that are submitted by the public. Petitions must be about issues that the National Assembly has powers to take action on. The petitions process enables the public to highlight issues and directly influence the work of the National Assembly. Its specific functions are set out in Standing Order 23.

Current Committee membership



William Powell (Chair)
Welsh Liberal Democrats
Mid and West Wales



Russell George
Welsh Conservatives
Montgomeryshire



Elin Jones
Plaid Cymru
Ceredigion



Joyce Watson
Welsh Labour
Mid and West Wales

Previous Committee Members



Bethan Jenkins
Independent Plaid Cymru Member
South Wales West

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Chair's foreword

The Petitions Committee considers a wide range of issues and has many petitions presented to it. During recent months, the Committee has considered three separate petitions concerning the way we deal with waste in Wales.

This is clearly an issue that people feel passionately about. The Committee is encouraged by the dedication of those petitioners who continue to seek more efficient and more sustainable ways for us to live within our own ecological footprint here in Wales. We thank the petitioners for bringing this issue to the Committee.

The Petitions Committee investigation of this issue has prompted some very in-depth and technical responses on both sides of the argument. This committee report does not seek to interpret the data or to second-guess the expert advice given to the Minister on this issue. Rather, it seeks to find a way forward on this issue that addresses the petitioners' concerns, and recognises that the Welsh Government and local authorities need to find a reliable way to deal with the relentless stream of waste. The Committee has no doubts that debate around this issue will continue for some time.

Finally, I place on record my thanks to everyone who responded to our consultation or gave oral evidence to the Committee. Your efforts are very much appreciated. One aspect that all respondents and witnesses agreed on is the need for us to find an ecologically sound and sustainable way for us to deal with our waste in Wales. I hope the petition system has allowed petitioners to feed in their experiences and that their voices will be heard now and in future consideration of this issue.

William Powell AM,
Chair of the Petitions Committee

The Committee's Recommendations

The Committee's recommendations to the Welsh Government are listed below, in the order that they appear in this Report. Please refer to the relevant pages of the report to see the supporting evidence and conclusions:

Recommendation 1. The Committee recognises that market forces will dictate what waste technology is affordable to local authorities but recommends that the Welsh Government does its utmost to ensure that the 70% target is met by 2025. (Page 13)

Recommendation 2. The Committee recommends that the Welsh Government ensures that local authorities are not impeded by long term contracts in meeting the 70% target by 2025. (Page 13)

Recommendation 3. The Committee recommends that the Welsh Government seeks opportunities to support emerging waste treatment technologies that could, in time, offer a viable alternative to incineration. (Page 15)

Recommendation 4. The Committee recommends that the Welsh Government considers the feasibility of contributing to a comprehensive study, in association with appropriate stakeholders, to explore any potential health risks that could be associated with the release of very small particles from incinerators. (Page 21)

1. Introduction

1. In November 2011, the Petitions Committee was presented with a petition stating:

"We call upon the National Assembly to urge the Welsh Government to review:

- Prosiect Gwyrdd, which is against WAG policy of localised facilities, and allow our councils to choose their own waste technology and waste management procurement;
- The flawed Wales Waste Survey that only gave people a 2 choice option on waste disposal;
- By 2020, make it illegal to burn recyclable waste which would promote councils to recycle."

2. The petition was presented by Terry Evans and collected 21 signatures. An associated petition collected a further 13,286 signatures.

3. The petition was in three parts, but the Committee's consideration was focused on the third part of the petition and included the principle of burning recyclable waste, its effect on recycling, and possible concerns regarding the effects of incineration.

2. Prosiect Gwyrdd

4. Part one of the petition suggested that Prosiect Gwyrdd was against Welsh Government policy of localised facilities. The petition suggested that local authorities were currently unable to choose their own waste technology and waste management procurement.

5. The Committee put these concerns to the Minister for Environment and Sustainable Development. He told the Committee:

“I would say that we have been technology-neutral in our approach, and we have made that clear in a number of documents, such as our collections blueprint, which is part of our waste strategy and waste policy. Of course, the WLGA is part of our programme board and steering group, so it has been integrally involved in the development of this policy, and we work in close partnership.”¹

6. The WLGA told the Committee:

“The position that the Welsh Government has taken is that in light of all available evidence it has come up with a blueprint, which it believes is the best way of dealing with this issue. It has told local authorities, ‘we would like you to adopt these ways of working. If you think that there are better ways of doing it, we are happy to listen to those proposals, but we would need to be satisfied that what you are proposing is at least as good as what we have in our blueprint’.”²

7. The Committee is therefore satisfied that local authorities do indeed have the flexibility to choose the waste technology they prefer. Although we are aware that the Welsh Government has stated that Energy from Waste (EfW) with Combined Heat and Power (CHP) technology has the greatest potential to make a positive impact on climate change in comparison with other residual waste treatment technologies.³

8. The WLGA also told the Committee:

¹ National Assembly for Wales, Petitions Committee, RoP [2-5] 27 March 2012

² *ibid* [155]

³ Welsh Government - [Residual Waste Treatment Programme \[accessed 24 October 2012\]](#)

“...we are now seeing authorities collaborating on their waste proposals. By working with other partners, there was a more affordable way forward that spreads the risks. By working together, they achieve economies of scale and can share risks.”⁴

9. The Committee is therefore also satisfied that local authorities have chosen to work together and are therefore able to manage procurement of waste technology in a way that is appropriate for them.

⁴ National Assembly for Wales, Petitions Committee, RoP [160] 27 March 2012

3. The Wales Waste Survey

10. The Wales Waste Survey referred to in the petition is understood to be the *Public Attitudes to Waste in Wales* survey of 1030 adults undertaken by GfK NOP ⁵ on behalf of Waste Awareness Wales in 2010/11. The petition claims that the survey only gave two options for waste disposal, one of which was incineration.

11. The WLGA told the Committee that it is misleading to suggest that there are alternatives to land filling that do not involve burning. The WLGA listed Advanced Thermal Treatment; Pyrolysis; Gasification; Mechanical and Biological Treatment; and Energy from Waste as alternatives to land filling that involve burning.

12. The Committee notes the petitioners' concerns regarding the survey, but is unconvinced that a review of this survey will make a significant difference to the understanding of, or attitudes to, waste disposal techniques.

⁵ GfK NOP is a market research company.

4. The Burning of Recyclable Waste Post-2020

13. The petition calls for it to be made illegal to burn recyclable waste after 2020. It claims this would encourage councils to recycle.

14. The Welsh Government strategy *Towards Zero Waste* sets ambitious targets for recycling in Wales. Statutory targets have been set that require 70% of municipal waste to be recycled by 2025. Interim targets have been set to ensure that the 2025 target will be met. Wales is the only UK country to have such statutory targets.

15. The Welsh Government consulted in March 2011 on the need to increase significantly the recycling of waste produced by businesses. The Collections, Infrastructure and Markets Sector Plan has been amended in light of the consultation.

16. The Welsh Government funds Waste Awareness Wales to engage with the public and communicate effectively regarding the need to reduce, reuse and recycle.

17. However, as it stands even those local authorities with high recycling rates will have residual waste left over that traditionally has gone to landfill. The Committee applauds all efforts to reduce that residual waste stream but recognises that there remains a need to dispose of non-recyclable rubbish at this time.

18. In order to consider the effects of the incineration of waste, the Committee held oral evidence sessions with the petitioners; the WLGA and representatives of Prosiect Gwyrdd; the Chartered Institute of Environmental Health; the Environmental Services Association; the Minister for Environment and Sustainable Development; Friends of the Earth; and Professor Howard of the University of Ulster. During those oral evidence sessions the Committee considered a variety of issues concerned with the incineration of waste.

Recyclable and Non-recyclable Waste

19. We are all aware of the mantra “Reduce, reuse and recycle”. However, even if the Welsh Government’s ambitious target of a 70% recycling rate is achieved by 2025 there will still be a residual waste stream of non-recyclable material.

20. The petition does not suggest that non-recyclable material should not be incinerated, but calls for the burning of recyclable material to be made illegal by 2020. Petitioners told the Committee that their concerns stem in part from long-term contracts that local authorities enter into in order to secure incineration facilities. One petitioner, Mr Rob Hepworth, told the Committee that some local authorities are entering into 25 year contracts for incineration. He asked:

“...would you be willing to commission a commercial service like that for 25 years while technology is developing? There are clear doubts about a number of aspects, not just in relation to health, but also the effect on recycling and carbon emissions. The alternative technology, mechanical biological treatment, in particular, is cheaper and more flexible and does not involve 25 year contracts.”⁶

21. Petitioners were concerned that while work is being undertaken to increase recycling rates, a time will come when the recycling rates cannot be increased because of the need to supply a certain amount of waste to the incinerator, as set out in the contract. The Committee put this concern to the Minister for Environment and Sustainable Development, who recognised it as an issue but suggested that, to a certain extent, it was an issue that we would have to continue to contend with as:

“Whichever way you deal with residual waste will in part be determined by the market that is there, by the commercial operators and by their requirements in terms of their own operations. So, there are many factors that come into play. That is the nature of the market with which we have to contend, no matter what policy we have for residual waste.”⁷

22. To some degree the collaboration of local authorities will help to alleviate this issue as it will take a smaller percentage of the combined waste of several local authorities to meet the contractual obligations with the incinerators than if just one local authority had commissioned the facilities.

23. We are presently 13 years away from Towards Zero Waste’s target of 70% recycling. If 25-year contracts are being entered into at this

⁶ National Assembly for Wales, Petitions Committee, RoP [138] 27 March 2012

⁷ *ibid* [245]

time, there will be a significant period for the contracts to run after the 70% target is in place. However, given the Welsh Government push towards reducing waste and recycling where possible, the Committee is not convinced that legislation is necessary at this time to dissuade local authorities from burning recyclable waste. It feels that it is more appropriate at this time for the Welsh Government to monitor the progress being made and to encourage and enable local government to find sustainable, environmentally friendly solutions.

The Committee recognises that market forces will dictate what waste technology is affordable to local authorities but recommends that the Welsh Government does its utmost to ensure that the 70% target is met by 2025.

The Committee recommends that the Welsh Government ensures that local authorities are not impeded by long term contracts in meeting the 70% target by 2025.

Alternatives to Incineration

24. The petitioners suggested to the Committee that there were more appropriate ways to dispose of non-recyclable waste than incineration. Their preferred solution is Mechanical Biological Treatment (MBT). However the Minister for Environment and Sustainable Development told the Committee that one local authority had formed a view that MBT was unaffordable for them and so had preferred to collaborate with other local authorities to secure incineration facilities.

25. The Director of Policy for the Environmental Services Association told the Committee:

“All technologies have their pros and cons. What we tend to find with MBT is that it is not a full solution. With an MBT plant, you can normally get out around 10% recyclates from the waste that goes in. You are left with a number of residues, one of which is an organic residue known in the trade as compost-like output, or CLO. It is called that because it does not meet quality standards of normal compost; it has some contaminants in it...The other residue is often either landfilled itself—so, you are still using landfill—or, in some cases, turned into fuel for other EfW plants...The other issue with MBT that needs to be factored in is that it is quite an energy-intensive process.

Energy-from-waste plants produce energy to heat homes or to produce electricity. For an MBT Plant, you require electricity to run the processes. So, if you're interested in the carbon impact, you have to factor that in.”⁸

26. The Minister for Environment and Sustainable Development told the Committee:

“We used an accepted model to test energy-from-waste technology against other potential methods of dealing with residual waste, which showed that energy-from-waste technology was the best solution from climate change perspective.”⁹

27. Friends of the Earth Cymru told the Committee that they preferred MBT technology because:

“You can have shorter contracts—if you look at what is happening in Bristol and Avonmouth, they have a seven-year contract with an option to add another seven years...MBT is flexible and modular, so it can respond to variations in waste arisings and in waste types. Also, you can improve the technology as time goes on.... To come back to the point about long contracts of 25 to 30 years, we are going to end up with facilities that create a demand for waste that just is not there. Recently, we had an example in Stoke of the incinerator company levying a £650,000 fine against the council because it is not supplying enough waste.”¹⁰

28. Friends of the Earth Cymru also told the Committee that Eunomia, which is a well-respected research and consultancy company that has worked for the Welsh Government, has produced the paper, “*A Changing Climate for Energy from Waste*”, which compared different waste options, concluding that the most efficient MBT is much more climate efficient than incineration, and is a cheaper and more flexible model.

29. Clearly there are strong arguments on both sides. The Committee has neither the capacity nor the expertise to make recommendations in favour of one technique or the other but it feels

⁸ National Assembly for Wales, Petitions Committee, RoP [217 - 218] 27 March 2012

⁹ *ibid* [256]

¹⁰ National Assembly for Wales, Petitions Committee, RoP [107-118], 1 May 2012

that it is important that discussions on the merits of all options are revisited regularly whilst the technology is still developing.

30. The Committee shares the petitioners' concerns that local authorities will be locked into long contracts that will demand a higher level of residual waste than is naturally produced as recycling rates continue to improve over time.

31. Such long contracts could also be a danger to other emerging technologies that are unable to secure funding from local authorities when they are locked into contracts with energy-from-waste providers.

32. The WLGA told the Committee:

“Adopting technologies without a ‘track record’ would also carry a level of risk that would be unacceptable for authorities who – notwithstanding their success with recycling and composting – are dealing with a regular and unrelenting stream of residual waste.”¹¹

33. The Committee sympathises with this concern but would not want to see, over time, emerging technologies being dismissed because of nervousness around their ability to deal with the "regular and unrelenting stream of residual waste"¹² which could result in innovative new technology stalling before it can create its own "track record".

The Committee recommends that the Welsh Government seeks opportunities to support emerging waste treatment technologies that could, in time, offer a viable alternative to incineration.

Health and the Environment

34. Petitioners and others who wrote in response to the Committee's consultation on this issue suggested that waste incineration was a danger to health and to the environment.

35. The petitioners told the Committee that new research published in Italy in 2011 shows:

¹¹ National Assembly for Wales, Petitions Committee, [Consultation Responses \(WLGA\)](#) [accessed 24 October 2012]

¹² *ibid*

“...significant relationships between exposure to incinerator emissions and stomach, pancreas and other forms of cancer. There is a steady flow of such findings... One is reminded, perhaps, of the steady flow of evidence on the damage, some years ago, of smoking on health, which were initially resisted officially, but eventually accepted in full.”¹³

36. However the Environment Agency Wales and the Welsh Local Government Association stated that no study has shown conclusively that there is a link between incinerator emissions and public health. The operation of waste incineration facilities is regulated under the *Environmental Permitting (England and Wales) Regulations 2010* and the Waste Incineration Directive. According to the Welsh Government, the directive ensures that the gases (flue gases) produced by the facility and released into the air meet “strict controls”. This is designed to protect human health and avoid damage to the environment. The Welsh Government also states that emission levels set by the directive are currently a lot stricter than those for coal fired power stations.¹⁴

37. One respondent to the consultation told the Committee:

“...waste incineration is a source of serious toxic pollutants, – dioxins, furans, acid gases, particulates, heavy metals and they are all dangerous to human health. Waste incineration contaminates the water we drink, the food we eat and the air we breathe.”¹⁵

38. Another respondent told the Committee:

“The policy termed Prosiect Gwyrdd, favours incineration. This brings with it massive health concerns that seems to be given little thought by those favouring this approach. There are now more and more medical studies being undertaken worldwide that outline the very serious adverse health consequences of living near or downwind of waste incinerators.”¹⁶

¹³ National Assembly for Wales, Petitions Committee, RoP [120], 27 March 2012

¹⁴ Welsh Government, [Energy from waste](#) [accessed 24 October 2012]

¹⁵ National Assembly for Wales, Petitions Committee, [Consultation Responses \(Dr Steenis\)](#) [accessed 24 October 2012]

¹⁶ National Assembly for Wales, Petitions Committee, [Consultation Responses \(Gerald Mahoney\)](#) [accessed 24 October 2012]

39. However another respondent told a Committee that DEFRA's report, *"Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes"* stated that:

"...published epidemiological studies of the health of communities living in the vicinity of incinerators failed to establish any convincing links between incinerator emissions and adverse effects on public health; specifically no impact was demonstrated on the incidence of cancer, respiratory health symptoms or reproductive outcomes."¹⁷

40. Whether founded or not, it is clear to the Committee that there are concerns regarding the effects on health of incineration. It is reasonable then that more should be done to explore the issue.

41. The majority of fears about public health stem from the fact that waste which is incinerated does not simply disappear, but is reconstituted as ash, both residual ash that is left in the bottom of the incinerator and flue ash.

42. Residual ash is classed as special waste and is therefore subject to requirements, standards and protections which regulators such as the Environment Agency ensure are met. Petitioners who responded to the Committee's consultation were concerned that this ash was toxic and would leak into the environment, either via the flue or when the bottom ash was being transported and stored.

43. The Committee asked Professor Howard whether sufficient research was being done to determine a clear effect on health. He answered:

"We are dealing with mixtures from different sources, and we are dealing with diseases that are known to have many different factors that can influence their onset. I personally do not think that enough work has been done on the basic science. For example, on the particles coming from a municipal waste incinerator, from what we know about the different inputs going into the waste incinerator, as a toxicologist, I would predict that they would be more toxic than the particles coming out of a conventional power station,

¹⁷ National Assembly for Wales, Petitions Committee, [Consultation Responses \(Central Wales Waste Partnership\)](#) [accessed 24 October 2012]

because there are heavy metals and synthetic plastics such as PVC, all of which will contribute. A study has never been done to compare the toxicology of the particles coming out of the municipal waste incinerator as opposed to a conventional power source. The technology to do that, namely the experimental paradigms to allow us to do that, is in place and has been for a decade or more, but a study has never been done, so there are a lot of missing data.”¹⁸

44. The Professor suggested that the research should take no more than two or three years to carry out, but it would be expensive and would need the collaboration of a number of different agencies.

45. Until such definitive research is carried out, the Committee feels that people will continue to speculate on what they feel to be the unproven risks to health. The result of such speculation can only be continued protest and resistance to every proposed incinerator.

46. The project manager for Prosiect Gwyrdd, Mr Williams, told the Committee:

“On the residual ash, there are two elements. One is the bottom ash, and our aim with that is to ensure that we have 100% recycling, meeting the appropriate standards. That will meet civil engineering standards and be utilised in road construction as a substitute secondary aggregate. We are confident that that will be achieved safely and in an environmentally friendly way. The other element is fly ash, which is about 3% or so. That is hazardous due to its alkalinity. Lime is added as part of the process to neutralise some of the acid gases, and then it goes through a filter so that the majority of the material that comes out is lime, but it also contains the majority of the particulates that would otherwise go into the environment. That is classed as hazardous; not by nature of its toxicity, but by the nature of its residual alkalinity.”¹⁹

47. Petitioners told the Committee that they felt that the bottom ash would not be used for aggregate in the future as there seems to be a

¹⁸ National Assembly for Wales, Petitions Committee, RoP [14], 29 May 2012

¹⁹ National Assembly for Wales, Petitions Committee, RoP [180], 27 March 2012

surplus of ash to meet demand. Their suggestion is that the toxic ash will go to landfill.

48. Prosiect Gwyrdd told the Committee:

“We want to see all materials recycled, so we are pushing hard for recycling and have just put a recycling clause in for this material. The current proposals are that it is likely that this material will be packaged and taken to a Cheshire salt mine to be stored. What we are looking to put into the process is this: if it is stored, it will be stored in such a way that, when recycling technologies become available, we might be able to recycle it. The idea is that it will be subject to transport and all those issues, but it is a small amount of material and we are pushing to ensure that it is recycled for maximum environmental benefit.”²⁰

49. The fact that Prosiect Gwyrdd ash is destined for a Cheshire salt mine does seem to back the petitioners’ assertion that at least some of the ash cannot be used for highway aggregate at this time. Although the amount of ash needing storage will be far lower than the amount of rubbish currently going to landfill, the toxicity of the ash being stored is of concern. Mr Williams told the Committee that the ash would equate to approximately 3% of the material being incinerated.²¹ This may seem like a very small amount, but over a 25 year period – the length of a typical contract – that could add up to a sizeable amount of toxic ash.

50. Petitioners and respondents to the consultation were also concerned about flue ash. Modern incinerators have high-quality filters that are designed to reduce substantially the amount of ash entering the atmosphere. Mr Farrow, the Director of Policy for the Environmental Services Association, told the Committee that approximately one percent of the material that goes into the plant will end up as ash in a flue filter.²² Such ash would be removed from the filter and transported to a hazardous landfill site.

²⁰ National Assembly for Wales, Petitions Committee, RoP [181], 27 March 2012

²¹ Ibid [180]

²² Ibid [202]

51. Petitioners and respondents to the Committee's consultation were concerned about the very small particles that will not be stopped by such filters. Professor Howard told the Committee:

"...it is accepted, for instance, that there is no safe level of exposure to particles of less than 2.5 microns in diameter. We know that [incineration plants] will contribute to the local loading of that sort of particle. So, there is still work to be done and, in the meantime, I would suggest that, on a precautionary basis, it would be better not to add more plants to the list."²³

52. Friends of the Earth Cymru expressed a similar sentiment:

"...in respect of environmental and human health, we would advocate the precautionary principle. If there is any risk to environmental and human health, the precautionary principle should be taken into account and fully investigated. We should not accept that an absence of proof is good enough."²⁴

53. The "Stop Newport Incinerator Campaign" told the Committee that the "precautionary principle" should be used in the field of waste disposal:

"...just as it is already used (including by WAG) with other aspects of sustainable development."²⁵

54. The Committee recognises that many studies have failed to show a link between incineration and health risks. Furthermore, the Committee recognises that when making policy decisions in this area, the Minister will have taken advice from experts in the field and that the Environmental Permitting regulations should protect human health and avoid damage to the environment. However, it is clear that the concerns remain very real to the people of Wales who will be living in the vicinity of the incinerators. As long as those fears remain, there will be strong resistance by the people of Wales to new incinerators.

55. The costs of carrying out a study on the scale described by Professor Howard may be prohibitive to the Welsh Government at this

²³ National Assembly for Wales, Petitions Committee, RoP [19] 29 May 2012

²⁴ National Assembly for Wales, Petitions Committee, RoP [126] 1 May 2012

²⁵ National Assembly for Wales, Petitions Committee, [Consultation Responses \(Stop Newport Incinerator Campaign\)](#) [accessed 24 October 2012]

time. However, the Committee feels that such a study could go a long way towards alleviating the fears of anti-incineration groups in Wales. For this reason, the Committee would encourage the Welsh Government to work with the UK Government, the EU and other stakeholders to consider the feasibility of carrying out a large-scale study.

The Committee recommends that the Welsh Government considers the feasibility of contributing to a comprehensive study, in association with appropriate stakeholders, to explore any potential health risks that could be associated with the release of very small particles from incinerators.

Witnesses

The following witnesses provided oral evidence to the Committee on the dates noted below. Transcripts of all oral evidence sessions can be viewed in full at

<http://www.senedd.assemblywales.org/mgIssueHistoryHome.aspx?Ild=1310>

27 March 2012

Rob Hepworth	Chair, Stop Newport & Monmouthshire Incineration Campaign
Haydn Cullen Jones	Vice Chair, Stop Newport & Monmouthshire Incineration Campaign
Tim Maddison	Spokesperson, South Wales Without Incineration
Matthew Farrow	Director of Policy, Environmental Services Association
Julie Barratt	Director, Chartered Institute for Environmental Health
John Griffiths AM	Minister for Environment and Sustainable Development, Welsh Government
Jasper Roberts	Deputy Director Waste and Resource Efficiency Division, Welsh Government
Dr Andy Rees	Head of Waste Strategy Branch, Welsh Government
Tim Peppin	Director of Regeneration & Sustainable Development, WLGA
Rob Quick	Senior Reporting Officer, Prosiect Gwyrdd
Mike Williams	Director, Prosiect Gwyrdd

1 May 2012

Julian Kirby	Waste Specialist, Friends of the Earth Cymru
Haf Elgar	Campaigner, Friends of the Earth Cymru

29 May 2012

Prof Vyvyan Howard	
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List of written evidence

The following people and organisations provided written evidence to the Committee. All written evidence can be viewed in full at <http://www.senedd.assemblywales.org/mgIssueHistoryHome.aspx?Ild=2294>

Organisation

Abergavenny & Crickhowell Friends of the Earth

Caerphilly County Borough Council

Cardiff Against the Incinerator

Central Wales Waste Partnership

Chartered Institute of Environmental Health

Chartered Institute of Wastes Management

Chepstow Friends of the Earth

Councillor Anne Blackman

David John Jones

David Roman

Dr Dick van Steenis

Environment Agency Wales

Friends of the Earth Cymru

Gerald Mahoney

Greenpeace

Prosiect Gwyrdd

South Wales Without Incineration Network

Stop Newport Incinerator Campaign

United Valleys Action Group

Vale of Glamorgan Council

Viridor

Vyvan Howard

WD Prosser

Welsh Environmental Services Association

Welsh Local Government Association

