

PROOF OF EVIDENCE HEALTH DR ANDREW BURONI

On behalf of Britaniacrest Recycling Limited

In relation to an appeal against the decision of West Sussex County Council to refuse planning permission for a proposed Recycling, Recovery and Renewable Energy Facility and Ancillary Infrastructure at Wealden Brickworks, Horsham

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Health Proof of Evidence
1.0
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SUMMARY

- S.1 West Sussex County Council does not seek to defend its objection on public health grounds, and in the absence of any regulatory authority health objection, the scope of my proof of evidence is focused on responding to the health concerns raised by consultees, namely:
- i. communicating how and where the complex, multidisciplinary nature of health is inherently assessed and addressed through the UK regulatory planning and permitting process;
 - ii. repeating the conclusions provided within the Population and Health Environmental Statement Chapter; providing additional commentary where appropriate to set these conclusions into further context; and
 - iii. responding to Ni4H's sole remaining health objection on the perception of risk.
- S.2 Areas outside of the scope of my proof include the regulatory assessment criteria/thresholds; the detailed methodology or assumptions applied within each of the technical disciplines within the Environmental Assessment; and any other matters that are not part of this planning application.
- S.3 All of the project specific health hazards raised within the third-party consultee representations are addressed within the regulatory planning and permitting process set to protect the environment and health, and have been adequately assessed within the submitted Population and Health Environmental Statement Chapter. It is on this basis why Ni4H limits the health objection within their statement of case (para 6) to the public perceptions of risk, as opposed to any material risk directly attributable to the proposed project.
- S.4 Overall, having reviewed the Environmental Statement and supporting information, and acknowledging the regulatory process and responsibility of regulatory authorities, it is my professional opinion that the submitted Environmental Statement is compliant with all environmental standards set to protect health, and that changes in environmental health pathways do not present a concentration or exposure sufficient to quantify any measurable adverse health outcome to local communities. This conclusion is further supported in that Public Health England, the Environment Agency, Horsham District Council Environmental Health and the Director of Public Health raised no formal objections on public health grounds; that West Sussex County Council does not defend its objection on Public Health

Grounds; no third-party representation presents any evidence to suggest that any adverse health outcome directly attributable to the proposed development is possible, and Ni4H focuses solely on risk perception.

- S.5 While it is generally accepted that the perception of potential risk is a factor that should be taken into account in the decision making process, it is not reasonable to place significant weight on such perceptions where they are unsupported by any technical evidence, and have been propagated by misinformation, as is the case here. To clarify, while Ni4H does not present any evidence of actual health risk and limits its formal health objection to risk perception, Ni4H continues to publicise that the development would have an unacceptable impact on public health including on the webpage seeking input to the petition (CD121) and reasons to object (CD122). Ni4H are thereby fostering the health concern they seek to apply as reason to object, despite the evidence submitted to the contrary; knowing that West Sussex County Council will not defend its objection on health grounds, and that Public Health England, the Environment Agency, Horsham District Council Environmental Health and the Director of Public Health raised no formal objections on public health grounds.
- S.6 It is the case that the only way to address risk perception, is through the factual investigation and dissemination of robust information. While such information has been provided in the Population and Health Chapter of the Environmental Statement, Ni4H has not sought to comment on it, and it has not been contested by any party, this appeal provides a means to further respond to community concerns.
- S.7 It is my professional opinion that potential health risks are inherently and thoroughly assessed and addressed through the regulatory planning and permitting process; the Population and Health Chapter submitted tests the evidence base and the position of Public Health England, and no evidence has been presented to question the findings of the Population and Health Chapter, or establish any credible basis to the perceived risk to health.

1 INTRODUCTION

Qualifications

- 1.1 My name is Dr Andrew Buroni. I am the Technical Director of Health at RPS responsible for Health and Social Impact Assessment services. I hold a BSc with honours in Biological Sciences, an MSc in Environmental Impact Assessment (EIA), and a PhD in international Health Impact Assessment (HIA) methods and best practice. I have received formal training in Environmental Health Impact Assessment at the Caribbean Environmental Health Institute by the Pan American Health Organisation and Health Canada, and I am a Fellow of the Royal Society of Medicine and the Royal Society for Public Health.
- 1.2 I provide specialist advice to the public and private sector clarifying potential health and social outcomes, separating perceived impacts from actual risk, assessing the distribution, significance and likelihood of potential health outcomes, and providing bespoke Health Action Plans geared to addressing existing burdens of poor health and inequality, and improving community health.

Experience

- 1.3 I am a leading, internationally recognised expert with over 20 years of health assessment experience within two mainstream environmental and planning consultancies. I have designed, led assessments and provided evidence at oral hearing, public inquiry and issue specific hearing to some of the most complex planning focussed examples of HIA. I have an extensive catalogue of HIA project examples ranging from airport expansions; surface mines; waste and mineral development frameworks and oil and gas; through to new nuclear power stations and the UK nuclear geological disposal facility; windfarms; gas fired and biomass power stations; national electric grid infrastructure; and strategic planning and urban expansions. This has included the development of HIA guidance and best practice for the UK onshore oil and gas industry, the development of a transport and health resource for the UK Department of Health and Department for Transport and an electromagnetic field (EMF) health evidence base for EirGrid, peer reviewed by the inaugural chairman of the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the former WHO EMF topic lead. I am a HIA framework advisor to Public Health England, a health technical advisor to the

Environmental Protection Agency in Ireland and a Technical Advisor to the Public Health Wales WHO Collaborative Centre.

1.4 With specific regard to energy from waste (EfW) project experience:

1. I designed and led the HIA of the Wales national waste strategy, investigating and informing each waste management option under consideration, including the development of a local authority HIA resource and guidance to inform every EfW HIA in the country.
2. I undertook the HIA of the Brighton & Hove, East Sussex, and Lancashire Waste and Mineral Development Frameworks, and provided health input to the Buckinghamshire Waste Strategy.
3. I provided input to the Waste and Resources Action Programme (WRAP) guidance on the health effects of EfW.
4. I researched and led the HIA of the Arc21, Dublin, Brig y Cwm, Runcorn, Rufford, Lostock, Suffolk, Exeter, Norfolk, Cheshire, Preston and Tipperary EfW's, including provision of evidence at public inquiry and oral hearings.
5. I undertook the HIA of Public Health England's new science hub and on-site clinical waste incinerator.
6. In 2015, I was invited to be a temporary advisor to the WHO on the health effects of waste management alongside a select group of international experts to share and discuss the latest evidence at the United Nations building in Bonn. The outputs of the event informed the WHO's input to the European Environment and Health Process (EHP), initiated in the late 1980s by European countries to eliminate the most significant environmental threats to human health.

1.5 During the course of this work, I have had the privilege to work alongside leading, internationally recognised and respected toxicological experts as well as leading epidemiological researchers on the subject of EfW and health

2 BACKGROUND/CONTEXT

2.1 The effect on public health (with particular reference to air quality) has been initially identified as a potential main matter in the Inspector's notes following the pre-inquiry meeting. I have considered the position expressed in regulatory and statutory consultee responses with regard to potential health impacts. Upon a review of these responses, it is noted that:

1. West Sussex County Council originally objected to the application on six grounds, of which number 5 was "The development would have an unacceptable impact on public health, contrary to Policy W19 of the West Sussex Waste Local Plan 2014" (CD072). However, this claim was never supported; was contrary to the evidence provided; and the independent expert opinion of Public Health England, the Environmental Health Officer and Director of Public Health, and has now been withdrawn.
2. West Sussex County Council will not be providing a health proof of evidence or expert witness at inquiry (CD153).
3. No objection has been raised by the Environment Agency, subject to the inclusion of planning conditions set out in their response. While a permit to operate exists for the site's current operations, a new permit or variation to the existing permit will not be issued unless the Environment Agency are satisfied that all environmental hazards have been addressed, and the facility does not constitute a significant risk to health (CD044 & CD045).
4. No objection has been received from Public Health England, who have provided recommendations to the planning authority. Their response further communicates the purpose of the regulatory environmental permitting process, set to protect the environment and health, for addressing perceptions of risk (CD059).
5. No objection has been received from the Director of Public Health, who states that the potential effects on public health are considered within the 'population and health assessment'. The Director of Public Health has not identified any additional issues, and requests consideration of Public Health England's recommendations (CD060).

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6. No evidence has been submitted to challenge or counter the conclusions outlined within the Population and Health Chapter of the Environmental Statement.
 7. No objection has been raised by Horsham District Council Environmental Health, provided that the facility is constructed and runs in accordance with the specifications set out in the air quality assessment (CD043).
 8. Warnham Parish Council, Colgate Parish Council, Forest Neighbourhood Council and Horsham Denne Neighbourhood Council have expressed general, non-specific health and wellbeing concerns relating to the proposed application (CD069, CD068, CD071 para 7.28, and CD070 respectively).
 9. North Horsham Parish Council object on the grounds of there being insufficient evidence of no adverse effect on the health and wellbeing of local residents (CD064).
 10. Ni4H objects on Public Health grounds, but only on perception; the justification for any credible risk within their statement of case or website is absent. It's focus instead being on fostering and communicating the public perception of risk (CD121).

2.2 On the above basis, I conclude that Public Health England, West Sussex County Council, the Director of Public Health, Horsham District Council Environmental Health, and the Environment Agency are content that potential health issues are inherently addressed through the regulatory planning and permitting process, and do not raise any objections on health grounds. Furthermore, the West Sussex County Council Statement of Case and Officers Report make it clear that all tangible environmental parameters with the potential to impact upon health have been satisfactorily addressed, they do not intend to raise public health as an issue at public inquiry and will not be providing a health expert witness (CD153).

2.3 Only North Horsham Parish Council and Ni4H object on health grounds. However, neither party's position is based on any tangible risk directly attributable to what is proposed, focusing instead on hazards already addressed through the regulatory planning and permitting process, and public perceptions of risk.

2.4 While NI4H does indicate that evidence will be forthcoming within their proof of evidence "showing that these concerns are neither irrational nor unfounded" (CD128 para 31), it does imply that the position they have taken, the information they have provided, and the steer they have placed on their website and petition

regarding an unacceptable risk to public health (CD121), has to date, never been grounded in fact. This would have inevitably played a part in fostering the perceived health risk that forms NI4H's main public health objection.

- 2.5 Of the third party written representations, a range of general public health concerns have been raised, alongside concern for changes in air quality, noise and transport, as advocated by Ni4H and its Chairman.

3 SCOPE OF EVIDENCE

- 3.1 In the absence of any regulatory authority health objection, or any evidence submitted by any party or individual that might question the accuracy and conclusions of the health assessment submitted, the scope of my proof of evidence is focused on responding to the health concerns raised by consultees and third party written representations, namely:
1. communicating how and where the complex, multidisciplinary nature of health is inherently assessed and addressed through the UK regulatory planning and permitting process;
 2. repeating the conclusions already provided within the Population and Health Environmental Statement Chapter, and providing additional commentary where appropriate to set these conclusions into further context; and
 3. responding to Ni4H's objection on the public perception of risk.
- 3.2 Areas outside of the scope of my proof include the regulatory assessment criteria/thresholds (being a matter for national and European environmental policy); the detailed methodology or assumptions applied within each of the technical disciplines within the Environmental Assessment (better addressed by the relevant expert witnesses); and any other matters that are not part of this planning application (being matters beyond the influence of this decision- making process).

4 PLANNING, PERMITTING AND HEALTH

- 4.1 It is important to emphasise that the founding principle and purpose of the planning process is to investigate potential environmental effects that may pose a credible risk to health at an early stage where there is scope for prevention and mitigation. Equally, environmental permitting exists to regulate industrial processes and ensure they operate within defined limits set to protect the environment and health.
- 4.2 In the same way that medicine has different branches (e.g. oncology, radiology, paediatrics), given the complex and multidisciplinary nature of health, planning necessarily separates individual health pathways into environmental and socio-cultural disciplines. Each discipline has their own regulatory requirements and technical expertise to investigate and assess each potential health pathway.
- 4.3 As detailed in Chapter 1 (Introduction) of the Environmental Statement (CD029), the application was conducted in accordance with planning requirements, where the scope was defined and agreed with all the statutory consultees and regulatory authorities, and each technical discipline within the Environmental Statement outlines the discipline-specific legislative requirements, policies and guidance they have applied set to protect the environment and health.
- 4.4 For clarity:
1. Noise and Vibration (Chapter 8 of the Environmental Statement and addressed within the corresponding Technical Note by Ms Hirst) is an environmental health pathway which investigates the potential impact of construction and operational noise upon the environment and community health and wellbeing to discipline-specific legislation set to protect the environment and health.
 2. Traffic and Transport (Chapter 6 of the Environmental Statement and addressed within the corresponding Technical Note by Mr Archibald) is a socio-cultural and environmental health pathway that investigates the impact of changes in transport flow and nature upon local road networks, safety, public access and community severance.
 3. Ecology and Nature Conservation (Chapter 12 of the Environmental Statement) is an environmental and socio-cultural health pathway that investigates the potential impact to local fauna, flora and areas of conservational value for current and future communities

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4. Landscape and Visual Resources (Chapter 5 of the Environmental Statement and addressed within the corresponding Proof of Evidence by Ms Demmar) is a socio- cultural health pathway that investigates the potential impact upon visual amenity, important to community wellbeing and health.
 5. Hydrology and Flood Risk (Section 10 of the Environmental Statement) is an environmental health pathway that investigates the potential effect on surface water, including the risk of flooding and potential impacts on water quality and public water supplies from construction, operation and decommissioning activities, assessed to discipline-specific legislation set to protect the environment and health.
 6. Hydrogeology and Ground Conditions (Chapter 11 of the Environmental Statement) is an environmental health pathway which investigates the potential effect on groundwater quality, resources (private and public water supplies) and pollution risk to discipline-specific legislation set to protect the environment and health.
 7. Archaeology and Cultural Heritage (Chapter 9 of the Environmental Statement) is a socio-cultural health pathway that investigates the potential impact upon local heritage important to wellbeing at a national, regional and local level, assessed to discipline- specific legislation, guidance and best practice.
 8. Air Quality and Odour (Chapter 7 of the Environmental Statement and addressed within the corresponding Technical Note by Mr Smyth) is an environmental health pathway which investigates construction and operational emissions to air, assessed to discipline-specific legislation to be protective of the environment and health.

4.5 However, it is recognised that each of these disciplines are technical in nature, geared for the regulatory planning process and are not particularly transparent to the public and local communities. On this basis, and in keeping with the amended EIA Regulations, the additional topic of Population and Human Health was included within Chapter 13 of the Environmental Statement, which draws from and builds upon each of the technical disciplines relevant to health.

4.6 On the above basis and as part of the planning process, all credible environmental health pathways directly attributable to the proposed development (including all of those raised by Ni4H and through the written representations) have been appropriately scoped, agreed with statutory consultees and assessed to discipline

specific legislation, policy, guidance and best practice set to protect the environment and health.

- 4.7 Equally, as explained in the Public Health England response (CD059), the environmental permitting regime provides an integrated approach to pollution control from the operation of industrial and waste activities through preventing emissions into air, water or soil where practicable. Where prevention is not possible, the environmental permitting regime controls and minimises emissions to achieve a high level of protection for the environment and human health.
- 4.8 All process emissions and wastes are therefore regulated through the environmental permit. The proposed development would neither obtain nor retain a permit to operate should it not demonstrate compliance with environmental standards set to protect the environment and health to the regulatory authority's satisfaction.
- 4.9 It should be reiterated that at this stage: all statutory requirements (subject to conditions) have been satisfied; all tangible environmental and socio-economic aspects have been assessed and are not being challenged by any regulatory authority; and the project has been recommended for approval by planning officers. No health objections have been raised by any of the regulatory authorities or statutory consultees.

5 HEALTH ASSESSMENT

Overview

- 5.1 This section of my proof of evidence signposts to the assessment performed, repeats the conclusions drawn, and offers additional context to address wider health concerns.
- 5.2 As detailed below, the population and health assessment considered tangible changes directly attributable to key activities with the potential to influence health during construction and operation of the proposed development, including:
- the potential health risk from changes in emissions to air;
 - the potential for community disruption from noise and vibration; and
 - the potential health risk from additional road movements (risk of accidents and injury).

Air Quality and Health

Construction

- 5.3 As detailed in paragraph 13.8.2 to 13.8.4 of the Environmental Statement, activities with the potential to impact upon local air quality include ground clearance and excavation, vehicle and fixed plant emissions, deliveries of construction materials and earthwork activities.
- 5.4 The assessment concludes that construction related emissions are not expected to materially differ from that of the site's current use, or be of a type, concentration, duration or exposure level sufficient to result in any measurable adverse health outcome. Furthermore, mitigation measures detailed in Chapter 7 (Air Quality and Odour) and those implemented through the Construction Environmental Management Plan would sufficiently control any potential sub-clinical effects such as annoyance from dust deposition. Therefore, there would be no significant effect to health from changes in construction emissions to air.

Operation

- 5.5 As detailed in paragraph 13.9.2 to 13.9.8 of the Environmental Statement, the potential change in local air quality has been modelled and clearly demonstrates that the facility will operate well within objective thresholds set to be protective of health. The Population and Health assessment goes a stage further and applies

the relevant quantitative exposure response coefficients collated by the Committee for the Medical Effects of Air Pollution to set potential and perceived risk into context.

- 5.6 However, even when considering the maximum annual mean process contribution at any receptor, when disregarding the low burdens of poor health locally, and when assuming that the facility is operating at the maximum long-term emission limit permitted under the Industrial Emissions Directive, the absolute change in concentration and exposure at any location are still orders of magnitude lower than what is required to quantify any adverse health outcome.
- 5.7 Such a result is to be expected for a facility that is designed to control hazardous emissions to air, and has demonstrated that it would remain significantly within air quality objective thresholds set to be protective of the environment and health.
- 5.8 Given operational emissions are not of a concentration or exposure sufficient to quantify any measurable impact to health, and remain well within air quality objectives set to be protective of health, the conclusion drawn within the Population and Health Chapter of the Environmental Statement remains valid, and are further corroborated by Public Health England, the Environment Agency, Horsham District Council Environmental Health, and the Director of Public Health in their consultation responses.
- 5.9 No party or individual has contested the findings of the Population and Health assessment, and no party presents any evidence to the contrary. On this basis, I consider the health assessment to be proportionate and robust.

Noise and Health

Construction

- 5.10 As detailed in Chapter 2 (Site Description) of the Environmental Statement, construction would take place on Monday to Friday between the hours of 07.30 and 19.00, and on Saturday between the hours of 08.00 and 16.00. As a result, there is no risk of sleep disturbance to sensitive receptors within the study area, and no associated health risks.
- 5.11 Furthermore, any noise generation would be controlled through applying good construction practices detailed in the Construction Environmental Management

Plan, would be temporary and not of an extent, duration or magnitude to quantify any measurable impact on health (auditory or non-auditory).

Operation

- 5.12 As detailed in Chapter 2 (Site Description) of the Environmental Statement, the proposed development would operate 24 hours per day, 7 days a week except during shutdowns for maintenance activities. Waste would normally be received between 07:00 to 18:00 on Mondays to Saturdays. As detailed in Chapter 8 (Noise and Vibration), the maximum predicted increase in ambient sound level from on-site activities is +1 dB, experienced at 11 Station Road during the hours of 23:00 and 07:00.
- 5.13 As the total volume of waste imported to the site would be the same as is currently permitted for the existing Waste Transfer Station/Materials Recycling Facility, the proposed development would not materially impact upon noise generated from traffic flows. As detailed in Chapter 8 (Noise and Vibration), the maximum predicted increase in ambient sound level from road traffic would be +1.6 dB, experienced at Link 2: Langhurstwood Road between Site Access and Mercer Road.
- 5.14 As a result, noise generated from the facility and associated traffic movements will not be of an extent, duration or magnitude to quantify any measurable impact on health, and is typically lower than what is considered a perceptible change.
- 5.15 No party or individual has contested the findings of the assessment and does not present any evidence to the contrary. On this basis, I consider the health assessment to be proportionate and robust.

Traffic and Health

Construction

- 5.16 As detailed in paragraph 13.8.7 of the Environmental Statement, potential health pathways associated with changes in road traffic movements include increased risk of road traffic accident and injury, community severance and exposure to vehicle exhaust emissions and noise.
- 5.17 Chapter 6 (Traffic and Transport) has investigated the potential impact of these movements upon local capacity and any subsequent risk of community severance, visual impacts, pedestrian delay, pedestrian amenity and safety. The assessment concludes that for these health pathways, the relative change in any type of vehicle

movements would not be of a magnitude, timing or duration sufficient to establish a significant effect, and any residual temporary disruption is to be managed through a dedicated Construction Transport Management Plan.

- 5.18 Given the potential health impacts from changes in construction traffic are temporary and are addressed through design and a dedicated Construction Transport Management Plan, it is concluded that there would be no significant construction traffic impacts to health.

Operation

- 5.19 Once operational, the total volume of waste imported to the site would be the same as is currently permitted for the existing Waste Transfer Station/Materials Recycling Facility. On this basis the proposed development would not materially impact upon current traffic flows or associated health pathways. The potential operational transport related health impact is therefore considered to be negligible.
- 5.20 No party or individual has contested the findings of the assessment and does not present any evidence to the contrary. In my professional opinion, I consider the health assessment to be proportionate and robust.

Health Assessment Conclusion

- 5.21 All credible health concerns raised have been addressed in the original application where the sole remaining health issue is an undefined and unsupported perception of health risk, despite uncontested evidence to the contrary within the application, and contrary to the professional opinion of Public Health England, Horsham District Council Environmental Health, the Environment Agency and the Director of Public Health.

6 PERCEPTION OF HEALTH RISK

Overview

- 6.1 Existing pre-conceptions surrounding energy from waste facilities can engender a wide range of perceived health risks, and can be further heightened by ‘risk actors’ and ‘risk mongers’. Risk actors, through their actions, shape perceptions and responses to public risk and risk mongers distort perceptions fostering community concern, that if not appropriately addressed can create unnecessary stress and anxiety and encourage poor decision-making (CD150). The only way to address such perceptions of risk (aka fear) is through the factual investigation and dissemination of robust information.
- 6.2 In the past, the perception of risk and the myriad of subjective and intangible factors that surround them were generally not effectively addressed through the regulatory assessment process, which concentrates on changes in environmental and socio-economic conditions directly attributed to what is proposed, and is structured to comply with planning requirements and expectations. For this reason, to improve transparency for a far more engaged public, and to more effectively communicate how and where health is inherently assessed and addressed through the regulatory planning and permitting process, the EU EIA Directive was amended to include a Population and Health requirement. This has subsequently been transposed into the member states legislative requirement, and in this instance, culminated in the Population and Health Chapter of the Environmental Statement.
- 6.3 The Population and Health Chapter of the Environmental Statement provides a robust assessment of the health pathways associated with the proposed project supported by an appropriate scientific evidence base for each assessment protocol. The assessment is therefore intended to inform decision making, but is also intended as a source of information to help address and alleviate local community concerns and perceived risk through the assessments provided.
- 6.4 Following a review of the third party written responses, it is clear that a range of general health concerns persist. However, they are largely non-distinct (i.e. “there is a risk to human health”), and tend to misinterpret the concept of hazard and risk. All of the concerns shared are already assessed and addressed within the Environmental Statement, and none of the written representations present any new

evidence that would undermine the conclusions drawn in the Population and Health Chapter of the Environmental Statement.

Hazard and Risk

- 6.5 A common factor associated with many community health concerns raised on any planning application, is a misunderstanding of the terms hazard and risk, and how they are addressed through planning and permitting in the UK.
- 6.6 In its simplest form, a hazard is any agent with the potential to cause harm, and a risk is the likelihood of harm occurring.
- 6.7 A hazard by itself does not constitute a risk; it is only when there is a hazard source, a receptor (i.e. a person or population) and a pathway of exposure connecting the two that there is any potential for risk to health.
- 6.8 Community health concerns can manifest when the source-pathway-receptor concept is either ignored or misapplied to infer a risk where there may be no potential. This is typically where a source and a receptor are presented with no credible pathway of exposure to infer a risk, and can even occur where neither a source nor credible pathway exist.
- 6.9 Where a source-pathway-receptor linkage exists, it is then the nature of the specific hazard source, and the magnitude and concentration of exposure that will define what that risk is. This is true of all physical, chemical and biological agents and is the primary mechanism to protect the environment and human health through the regulatory planning and permitting process.
- 6.10 The objective and outcome of the planning process is that the source-pathway-receptor linkage is either removed by design, such that there is no potential for health risk (avoidance), or where this is not possible, the regulatory regime controls and minimises emissions in order to achieve a high level of protection for the environment and human health (mitigation).
- 6.11 On this basis, design and the EIA process serves to sever the source-pathway-receptor linkage, thereby removing and reducing potential risk. It is then the purpose of environmental permitting to test and validate the protection of the environment, where a permit to operate will be issued and can be retracted by the regulator if this is not the case.

NI4H Risk Perception

- 6.12 As per paragraph 6 of their Statement of Case (CD128), Ni4H’s sole remaining health objection is that “there is a public perception that the facility will harm public health”, and as per paragraph 30 of the Statement of Case, Ni4H intends to rely on an analysis of this public perception to form the basis to their health objection.
- 6.13 This is a legitimate point, but it is also the reason the Population and Health Chapter within the Environmental Statement was commissioned from the outset of the project: to explore, assess and address community health concerns through an open and transparent process.
- 6.14 If such an analysis is simply to count the number of objectors and to list the nature of their objections, without considering how and where such objections have already been assessed and addressed within the Environmental Statement, then it adds nothing to our understanding that this perception of risk is felt strongly by a number of objectors.
- 6.15 Furthermore, While NI4H does indicate that evidence will be forthcoming within their proof of evidence “showing that these concerns are neither irrational nor unfounded” (CD128 para 31), it does appear that the position they have taken, the information they have provided, and the steer they have placed on their reasons to object and petition website regarding an unacceptable risk to public health (CD122 & CD121), has to date, never been grounded in fact. Be it due to folly or be it deliberate, this is the very definition of a ‘risk monger’ (CD150) and would inevitably have played a part in distorting public perceptions and fostering community concern that forms NI4H’s sole remaining public health objection.
- 6.16 Ignoring how such actions would have undermined the integrity of the Ni4H petition, steered public perceptions before seeking their response, and not being a representative sample of the local community, the petition is still unlikely to identify any credible project specific risk that isn’t already assessed and addressed within the Environmental Statement.
- 6.17 If such analysis is intended to reinforce Ni4H’s opinion that risk perception, even if unsubstantiated, is sufficient to reject permission. This too is inaccurate and misleading.

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- 6.18 The Inspector's decision on the Keypoint Incinerator Public Inquiry (Appeal ref: APP/U3935/W/18/3197964) stated by Ni4H is outdated and inaccurate; the final decision (CD118) (06/06/2019) is as follows:
- “The Appellant’s agreement to the establishment of a CLG would also provide a vehicle through which accurate information about emissions from the proposal, together with the risk of potential harm, could be disseminated to the local population. Together these should be able to allay the health fears of most people living in the area. I can therefore give only **minor weight** to the perceived public health issue.”*
- 6.19 The Inspector in the same case noted that there had been an orchestrated distribution of misinformation in the residential areas close to the appeal site in order to galvanise overall opposition against the proposal. As a consequence of that campaign, many local residents were genuinely concerned about the potential impact of emissions on health. Without such a campaign it must be probable that genuine concern would be much less likely than if misinformation were not orchestrated in this way, or in other words, misinformation about fear is very likely to create fear.
- 6.20 In this type of situation it is helpful that an independent process undertaken by public and statutory bodies is available to be consulted, provide reassurance and address the type of real, tangible and/or unsupported fear felt by some members of the community. Indeed it is part of the function of the planning process, where a measure of local opposition is not unusual and something that the planning system is well placed to weigh, in reaching its judgement on whether a project should proceed. This is what happened in this case as was set out clearly in the officer's report to the planning committee. West Sussex County Council agrees that there is no basis to refuse consent for this proposal on health grounds or perception of health risk grounds.
- 6.21 Further examples of applications where similar concerns have been raised are presented in Table 1. It should be noted that these concerns have not materially affected the planning decision for any of the referenced cases. It can therefore be concluded that unsubstantiated risk perception is not a sufficient reason to reject planning permission, and that the findings of the Population and Health assessment for the proposed development should reasonably address these community health concerns.

Table 1: Details of relevant previous applications and planning decisions

Case	Date	Context	Decision
Keypoint Renewable Energy Centre, Land at Thornhill Road, Swindon	6 June 2019	Concern regarding air pollution and subsequent perceived risk to health	I discuss the impact of the emissions on health in paras. 84-94 & 98 above. I agree that it is a material consideration that should weigh in the balance against the proposal. However, the introduction of an SCRF would substantially reduce emissions and to levels significantly below the ceiling required to satisfy the EP regime. The Appellant's agreement to the establishment of a CLG would also provide a vehicle through which accurate information about emissions from the proposal, together with the risk of potential harm, could be disseminated to the local population. Together these should be able to allay the health fears of most people living in the area. I can therefore give only minor weight to the perceived public health issue. [CD118 paragraph 148]
Javelin Park EfW, Gloucestershire	16 January 2015	Concern regarding perceived risk to health	The Secretary of State has carefully considered the inspector's assessment on this matter set out at IR1232-1248 and he too concludes that minimal weight should be attributed to the claimed land use consequence of the perceived harm to health and that limited weight should be given to this issue in the planning balance (IR1249). [CD117 paragraph 43]
Lostock Energy from Waste – Fuelled Generating Station	2 October 2012	Public concerns about perceived health impacts and increase in dioxin in abnormal operating conditions	[...] the Secretary of State is satisfied that a robust regulatory framework exists under the UK's pollution prevention regime, which is separate and distinct from the consenting/planning regime, for dealing promptly and effectively with such incidents, as the Dumfries case to some extent demonstrates. In sections 16.34 - 16.49 of her report, the Inspector provides her conclusions on perceived health impact of the proposal, stating in section 16.44 that there are "well established processes for dealing with emissions and the

Case	Date	Context	Decision
			<p>release of pollutants in abnormal operating conditions” (through the environmental permitting process). It is also noted in section 14.2 of her report that the Environment Agency has not raised objections to the proposal and that compliance will be required with the Waste Incineration Directive and the revised Waste Framework Directive when determining the Environmental Permit. Furthermore, national policy, as set out for example in paragraph 4.10.3 of EN-1 and the relevant sections of the Waste Strategy for England 2007, clearly state that decision makers should work on the assumption that the appropriate pollution control regimes will be properly applied and enforced by the regulator. [CD120 paragraph 7.20]</p>
Sinfin Lane EfW, Derby	21 September 2012	Concern regarding air pollution and subsequent perceived risk to health	<p>Paragraph 27 of PPS10 says that planning authorities ‘should work on the assumption that the relevant pollution control regime will be properly applied and enforced’. This is the basis that I have approached the question of the effect of emissions from the stack on air quality. I am satisfied that the environmental permit has been issued after a detailed examination of the plant and its capabilities, the processes and controls involved and the likely impacts upon the environment and health. I am also satisfied that the permit provides the mechanism for controlling and monitoring emissions. [CD123 paragraph 96]</p>
Ardley EfW Oxfordshire	15 December 2010	Concern regarding air pollution and subsequent perceived risk to health	<p>The Secretary of State agrees with the Inspector’s reasoning and conclusions with respect to the impact of the appeal scheme on air quality, as set out at IR16.23 – 16.25. He has had regard to the fact that there are no objections on air quality, pollution or related health grounds from the</p>

Case	Date	Context	Decision
			Council, Cherwell District Council, Natural England, the Food Standards Agency, the Health Protection Agency or the Environment Agency (IR16.25). He agrees that the proposal's impacts on air quality and health would be insignificant and acceptable (IR16.25). [CD119 paragraph 17]

6.22 On the above basis, Ni4H has never substantiated the health risks they have posted on their website (CD122) and briefing material prior to seeking petition input (CD121); they have not commented on the Population and Health Chapter that addresses all of the concerns they have raised; contrary to the reasons to object posted on the Ni4H website, the Ni4H statement of case does not raise any tangible health risks attributable to what is proposed (CD128); yet they continue to cling to having some evidence to back the claims come inquiry.

6.23 Such behaviour undoubtedly preys on emotion, distorts public perceptions and creates the needless fear, stress and anxiety that drives Ni4H's sole remaining reason to object on health grounds, unfounded fear.

7 CONCLUSION

- 7.1 As detailed above, all of the project specific health hazards raised within the third-party consultee representations are inherently addressed within the regulatory planning and permitting process set to protect the environment and health, and have been adequately assessed within the submitted Population and Health Environmental Statement chapter.
- 7.2 Overall, having reviewed the Environmental Statement and supporting information, and acknowledging the regulatory process and responsibility of regulatory authorities, it is my professional opinion that the submitted Environmental Statement is compliant with all environmental standards set to protect health, and that changes in environmental health pathways do not present a concentration or exposure sufficient to quantify any measurable adverse health outcome to local communities.
- 7.3 This conclusion is further supported in that Public Health England, the Environment Agency, Horsham District Council Environmental Health and the Director of Public Health did not raise any formal objections on public health grounds, and no third-party representation presents evidence to suggest that any adverse health outcome directly attributable to the proposed development is possible.
- 7.4 While it is generally accepted that the perception of potential risk is a factor that should be taken into account in the decision making process, it is not reasonable to place significant weight on such perceptions where they are unsupported by any technical evidence. This is particularly the case where the perception of risk has been fostered unreasonably by an orchestrated campaign of misinformation.
- 7.5 In this case, the technical evidence has been provided in the form of a Population and Health Chapter in the Environmental Statement (Chapter 13). This means that evidence was provided as part of the independently prepared Environmental Statement to address potential health risks. That information was consulted upon alongside the planning application, during its determination and has not been contested.
- 7.6 West Sussex County Council consulted with the independent bodies listed above and each of the relevant bodies confirmed they have no objection to the application subject to this appeal on health grounds. There is no credible evidence that has been submitted by any party suggesting that there is a potentially significant

adverse effect on health as a result of the type of technology proposed, or at this location.

- 7.7 This appeal provides a further opportunity to consider the evidence on perception of health impacts and a further reassurance, if it were needed, that any concern is not supported by the evidence and is therefore unfounded.
- 7.8 Moreover, the type of technology envisaged requires an environmental permit and will be regulated by the Environment Agency during its operation. The Environment Agency will not issue a permit unless it is satisfied that a high degree of protection of human health will be provided in operation. The Environment Agency has the power to take enforcement action and ultimately to withdraw the permit if it is not satisfied that the facility is being operated to the appropriate standard.
- 7.9 On this basis, it is my professional opinion, there is no evidence to support the rational perception of risk to health, and reassurance can be provided to those that hold such a perception, that both risk and the perception of risk has been properly considered as part of the planning process. It is also reassuring that the ongoing regulatory process will provide a high degree of protection to people and the environment.