



Consultee Response to CERC Environmental Permit Application

Consultee
St.Dennis Anti Incinerator Group (S.T.I.G.)

Community Concerns



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1. KEY FAILURES

SITA's application to the Environment Agency for a permit to operate a mass burn incinerator is fundamentally flawed and therefore a permit should not be issued.

The key failure areas of the application within this section are:

- Failure to address levels of local deprivation.
- Failure to address social inequalities.
- Failure to address health inequalities.
- Failure to address the 'proximity principle'.
- Failure to address inadequacy of data modelling.
- Failure to address topography.
- Failure to address changes to landscape topography.
- Failure to address St. Dennis micro-climate.
- Failure to address emission exceedances.
- Failure to address exceedances and 'critical loads'.
- Failure to address persistent exceedances.
- Failure to address combined effects.
- Failure to address cumulative effects.
- Failure to address synergistic effects.

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- Failure to address pre-existing pollution.
- Failure to address waste content (MSW).
- Failure to address waste content (C&I).
- Failure to address PM 2.5's and nano-particles.
- Failure to address 28 mile emission zone.
- Failure to address emission zone of plume.
- Failure to address climate change.
- Failure to address CO2 emissions.
- Failure to address the Stockholm Convention.
- Failure to address Dioxins, Furans and heavy metals.
- Failure to address operational monitoring.
- Failure to address accidental exposures.
- Failure to address local fire-cover.
- Failure to address airport flight-path.
- Failure to address transportation of hazardous waste.
- Failure to address ozone levels.
- Failure to address pH levels of water courses.

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- Failure to address farming issues.
- Failure to address agricultural issues.
- Failure to address food-chain exposure.
- Failure to address Dioxin testing.
- Failure to address the public perception of 'Cornish food'.
- Failure to address the public perception of Cornwall as a tourist destination.
- Failure to address effects on Cornwall's economy resulting from public perception.
- Failure to address pre-existing local health issues.
- Failure to address childhood asthma.
- Failure to address the precautionary principle.

Community Concerns**2. INTRODUCTION**

- 2.1 The village of St. Dennis and the surrounding areas are in the most deprived quartile of the country.
- 2.2 The residents are already suffering from the adverse effects of social, economic, health and environmental inequalities.
- 2.3 There appears to be a callous policy of building Mass Burn Incinerators in deprived areas, no doubt in an effort to conceal any arising health and environmental effects as results of pre-existing circumstances.
- 2.4 It is polluting the poor and promoting social and environmental injustice.

Community Concerns**3. QUESTIONS ARISING FROM COMMUNITY CONCERNS**

- 3.1 Given that Restormel has the lowest amount of domestic waste per household sent to landfill, and the 2nd highest collection rate for recycling in the County, is it not both unjustifiable and unfair to site a Mass Burn Incinerator in this district?
- 3.2 The planning application states that two systems - ADMS and AERMOD - were considered for determining data modelling for the proposed Mass Burn Incinerator. Despite the fact that the AERMOD system produced higher readings, ADMS was the system chosen for modelling in this instance. Given that the application consistently quotes a 'worst-case scenario' for exposure, surely the higher readings produced by AERMOD would give a better idea of what this scenario would be and therefore should have been the preferred system?
- 3.3 Given that the lower reading ADMS modelling system was used and minimal and inadequate air/pollution monitoring was undertaken and twin-stacks were treated as one emission source and meteorological data from Camborne (36km away from build site) was used in preference to that of St. Dennis, and the fact that any modelling scenario is only as good as the data imputed (rubbish in = rubbish out), what confidence can anyone have in the 'predictions' put forward by SITA in their application?
- 3.4 The data provided in the planning application assumes the Mass Burn Incinerator will be operated under optimal conditions at all times. With emission exceedances typical in the industry, this is both a little shortsighted and overly optimistic. This being the case, what confidence can the population have that their health and their environment will not be adversely affected by the proposed development?
- 3.5 What effect will emission exceedances have on the "critical load" at SAC's, SSSI's and CWR's?
- 3.6 What will the cumulative effect of persistent exceedances be in terms of both human and ecological environments?
- 3.7 What are the effects of such exceedances combined with general operating emissions and pre-existing pollution sources?

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- 3.8 What are the cumulative effects of exceedances, general operating emissions and pre-existing pollution sources?
- 3.9 The 'chemistry of emissions' is dependant on the waste being burnt. The planning application does not include a 'dirty MRF', therefore the content of the waste being burnt will be unknown. The SITA incinerator in Edmonton seriously breached emission limits on at least two occasions due solely to the waste content (incineration of a large quantity of vinyl wallpaper and PVC credit cards). The Cornwall waste contract allows SITA to import Commercial and Industrial waste from anywhere, and it could contain any number of potentially polluting materials. What are the implications of these factors in terms of Cornwall's human and ecological environments?
- 3.10 PM 2.5's and nano-particles are ignored ("all assumed to be PM 10 for this assessment"). Given the insidious nature of particles of this size, is this an attempt to skew data in SITA's favour and an abrogation of the duty of care in regards to the human and ecological environment that any company of good conscience should feel towards the community it wishes to operate in?
- 3.11 Twin stacks of 120 metres (396ft) have a possible 'emission zone' of 28 miles. This being the case, should not SITA have taken into consideration a far wider area than was covered in the Environmental Statement and planning application as a whole?
- 3.12 With a plume of 'up to' 221 metres, could not this make the 'emission zone' a possible 78 miles and therefore the robustness of SITA's Environmental Statement even more doubtful?
- 3.13 Incinerators are well known producers of Dioxins, recognised as the one of most carcinogenic substances known to science. The Stockholm Convention forbids any increase in the production of Dioxins and the UK is a signatory of this Treaty. If this application is granted and the Mass Burn Incinerator is built, Dioxins will inevitably be produced and therefore will not Cornwall be in contravention of the Treaty?
- 3.14 Due to limited monitoring, 99% of the time, the levels of Dioxin emissions are unknown. Spot monitoring of emissions of Dioxins and Furans and heavy metals represent a major cause for concern because twice yearly monitoring means that if excessive emissions did occur between measurements being taken, the operator, the regulator and the public

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would be unaware of the incident. What are the implications of this factor on the human and ecological environments of St. Dennis (and Cornwall in general)?

- 3.15 In 2005, Nottingham's Eastcroft Incinerator breached its Dioxin limits. Spot sampling was being done at the time and the emissions were 9 times higher than the emission limit allowed. De Fre and Wevers 1998 study showed that continuous monitoring could produce figures 30 to 50 times higher than that of spot monitoring. Combining the two observations for a worst case scenario, the actual emissions could have been 450 times higher than the emission limit for a six month period. What would be the implications for the human and ecological environment of Cornwall given these factors?
- 3.16 Given the toxicity and persistence of Dioxins in the environment, should not serious questions be raised about the level of rigour applied to modelling and enforcement?
- 3.17 Has any consideration been given to the synergistic effects (on both the human and ecological environment) of pre-existing pollutants and new ones created by the Incineration process?
- 3.18 What of accidental exposures caused by a major incident at the facility such as a fire or explosion?
- 3.19 St. Dennis Fire Service operates under Retained Fire-Fighter status (as do most of the stations in Cornwall). There is just 1 Major Appliance and 1 Minor Appliance (similar to the type that SITA will have based on site) located at St. Dennis Fire Station. A major incident at the Mass Burn Incinerator will require attendance by not just the St.Dennis unit but, potentially, St. Columb, St. Austell and Wadebridge units. This could lead to vast swathes of the County essentially being without Fire Cover, as other more distant units attempt to 'pick-up' the slack created by mass attendance at the Incinerator incident. There could be significant loss of life due to house fires and road traffic accidents (RTA's). Given that the facility will be full of combustible material and there will be 44,000 litres of fuel and tonnes of flammable chemicals on site at all times, a major incident could be devastating to both the human and ecological environment. What are the implications of this fact?
- 3.20 There appears to be no reference to compliance with DSEAR(2002) regulations, is this acceptable?

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- 3.21 As the site is on the flight-path to Newquay Airport, and the 396ft twin-stacks could pose a threat to low flying air-traffic in poor weather/visibility conditions, what would be the consequences of a Civilian Aircraft clipping or crashing into the Incinerator stacks?
- 3.22 11,000 tonnes of hazardous waste will be produced every year. As it currently stands, it is intended that this be transported by road to landfill in Gloucestershire (approx. 200 miles away). What thought has been given to the numerous potential environmental disasters that could occur at any point along the transportation route?
- 3.23 What would be the effect on the environment of St. Dennis, if it was necessary to have a Hazardous Waste Landfill Site (HWLS) here? As no doubt, the 'proximity principle' would be applied here, and as the waste arising was from 'St. Dennis', it would be deemed appropriate to site the HWLS there too?
- 3.24 What consideration has been given to the fact the ozone of St. Dennis is poor and there is a "significant failure" regarding the ph levels of local water courses. What effect will additional pollutants derived from the Incineration process have in these areas?
- 3.25 What consideration has been given to the potential for change to the local topography arising from future work carried out by Imerys and Goonvean etc? This could have a significant effect on the local landscape features. Were enquiries made to Imerys and Goonvean about possible future plans and, if so were any such scenarios modelled?
- 3.26 Clay dust is a very visible fixture of our village life and is a source of constant nuisance. Cars, windows, plants and washing are frequently covered in it. What studies have been carried out in respect of clay dust and Incinerator emissions and any co-mingling that may occur?
- 3.27 What are the possible effects of toxic emissions impregnating deep into the fabric of clothes and bedding that is hung-out to dry in people's gardens?
- 3.28 What are the potential cumulative effects on a breast-feeding infant, breathing polluted air, wearing polluted clothing and sleeping on polluted bedding?

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- 3.29 Has any consideration been given to the fact that livestock drink from standing troughs, and these may contain contaminants from Incinerator emissions, and as such will serve as another ingestion exposure route leading on to food chain consumption?
- 3.30 Little consideration appears to have been given in regards to Dioxin contamination of dairy herds. There have been incidents of exposure to cattle grazing near Incinerators in France, resulting in thousands of litres of milk being destroyed. What are the implications for Cornish dairy herds and the wider public perception of the safety of the milk produced?
- 3.31 Will a regime of regular testing be implemented in regards to the Dioxin levels in:-
- 3.31.1 Dairy herds?
 - 3.31.2 Beef herds?
 - 3.31.3 Sheep herds?
 - 3.31.4 Pig farms?
 - 3.31.5 Crops?
 - 3.31.6 Vegetables - grown below and above ground?
 - 3.31.7 Any other food path that may be affected?
- 3.32 Would any such tests also be made accessible for members of the public who have concerns about 'home-grown' produce?
- 3.33 What would be the consequences to the farming industry as a result of adverse test results?
- 3.34 Would compensation be available for those who suffer as a result of contamination and who would foot the bill for this?
- 3.35 If anyone in the food production and processing industries was affected to such an extent that their business was forced to close, would they be compensated and by whom?
- 3.36 What about job losses and the effects on the wider economy resulting from the perceived effects of the incinerator?

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- 3.37 Food production and manufacturing are major players in Cornwall's economy. It therefore seems wholly inadequate that SITA only contacted 38 firms (receiving 21 replies). From this 'survey' SITA have determined that Cornwall's food industry has no problem with an Incinerator as "they have no protocols for operating near to an Incinerator". Unless a firm was already operating near to such a facility, why would it need any such protocols?
- 3.38 What about the possible effects to the Cornish economy if its Tourist Industry suffered as a result of the public perception of Incineration?
- 3.39 The Health aspects of the application give much cause for concern. The 'survey' carried out by Ben Cave Associates is laughable in its inadequacies. The village Doctors Practice and School refused to take part in the survey. Just 42 people in the village were spoken to, in an unannounced drop-in visit at ClayTAWC. Surely anyone wanting to effectively survey a community about its health would at the very least of advertised their presence in order to guarantee a wider survey demographic?
- 3.40 Any 'health data' supplied by CIOSPCT will be a general picture at district level not a specific representation of the St. Dennis area (otherwise it would fall foul of the data-protection act). St. Dennis suffers from high levels of respiratory illness (including asthma and COPD), digestive diseases and cancers, probably as a result of existing levels of pollution. As none of these specific local factors (or indeed any others) were considered in the HIA, how can any weight be given to SITA's assertion that their Incinerator will not exacerbate existing problems?
- 3.41 Monitoring equipment (Osiris CAP) at Primrose Cottage in Little Treviscoe, from August 2002 to March 2003, showed that there were 79 exceedances for PM 10's in an 8 month period. Again this is from existing pollution sources. What are the implications to the human and ecological environment of adding Incinerator emissions and their (inevitable) exceedances into the equation?
- 3.42 With regards to PM 10 monitoring, SITA considers that the monitors at St. Dennis CP School were the "most significant source of data". However, monitoring equipment was only in place for one year and 46 days of this data was not recorded. Despite this inadequacy, the monitors at the School were shown to have exceeded the PM 10 limit on 5 occasions. It is not outside the bounds of reason that the monitors at the School could have exceeded the PM 10 limits for any or all of these 'lost' 46 days (51 possible exceedances), therefore far exceeding the UK Air Quality

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Standard of 35 per year. This is with existing pollution sources, what are the implications of adding Incinerator emissions (with stacks that will be just 61 metres above the height of the School) with regards to PM 10 (and therefore PM 2.5 and smaller) levels at the School?

- 3.43 Clay Country has the highest rate of Childhood Asthma in the County, again no doubt, as a result of existing pollution. Should any permitting authority of good conscience tolerate any further environmental degradation for the residents in the area?