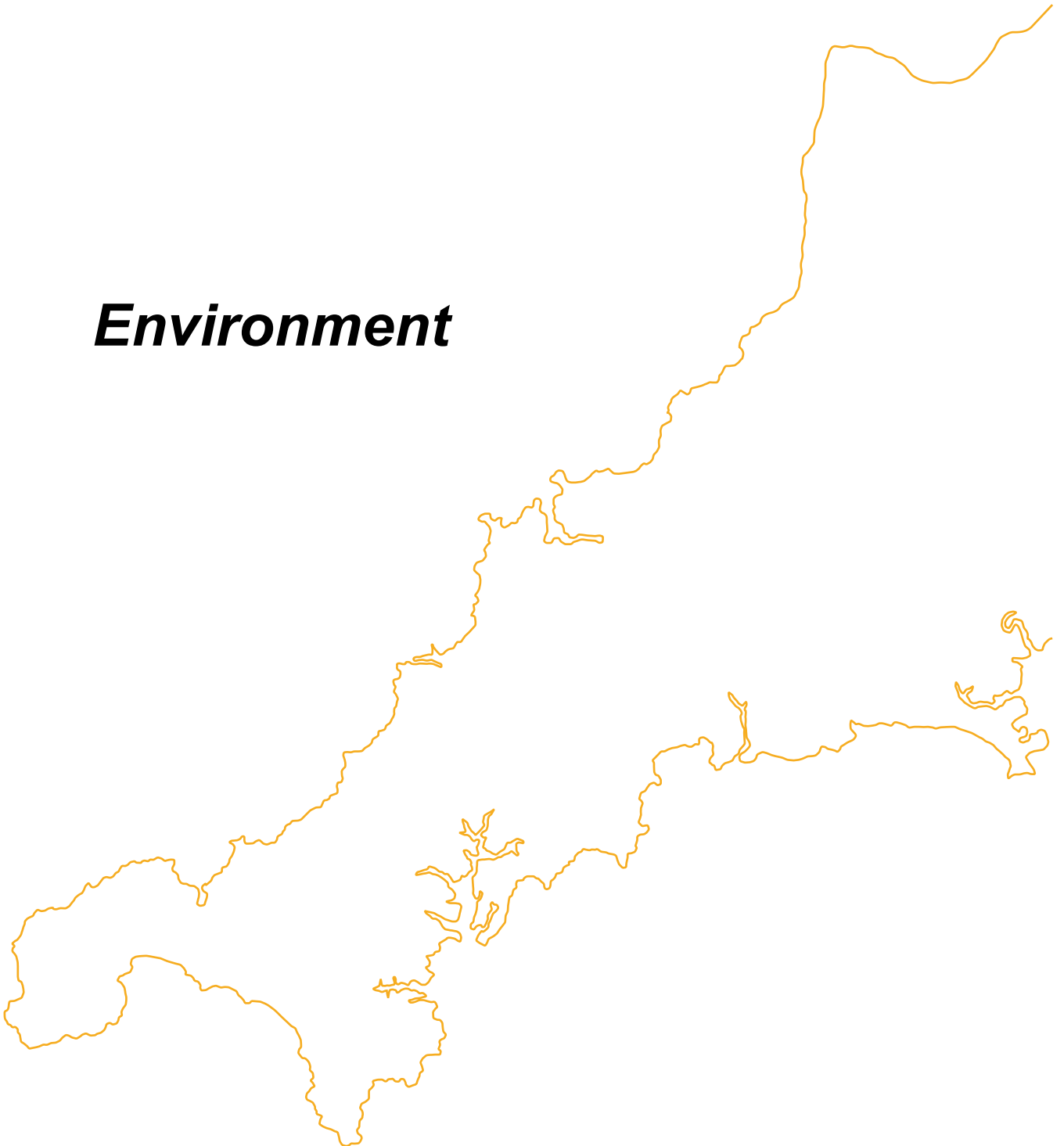




# Consultee Response to CERC Environmental Permit Application

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

## *Environment*



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## Environment

# 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:

- Apparent anomaly re: annual operating hours
- Putrifying waste management during scheduled shutdown
- Putrifying waste management during unscheduled shutdown
- Ensuing leachate management
- Contaminated water management
- Waste backlog management
- Waste backlog storage
- Failure to address unknown effects of climate change in relation to emissions modelling
- Failure to address implications of emissions over the whole life of plant
- Risk to sensitive receptors through exceedences, just within 4hr limit, but continually repeated
- Risk of anticipated dispersion rate failing, due to unforeseen weather patterns
- Additions to existing pollution burdens
- Unacceptable use of ancient farmland
- Unacceptable impacts
- Failure to consider impacts of loss of farmland in mid Cornwall
- Encroachment of village buffer zone
- Failure to address issues of future food security
- Failure to justify feedstock comprising recyclables
- Failure to address bio waste
- Failure to consider alternative technologies
- Failure to address destination of APC residues
- Failure to consider any future need for a hazardous waste site in Cornwall for APC residues
- Failure to consider possible location of such a site
- No account taken of effects of climate change on dispersion modelling, for whole life of plant

## Environment

- Limited data for St.Dennis school
- Doubts that St.Dennis school has been properly considered and included in correct modelling
- Doubts that any reference has been made to effects of climate change on St.Dennis or Cornwall as a whole
- Concern that rising sea levels will alter historic and current weather patterns of Cornish peninsula
- Hadley Centre caution on uncertainty of predictions from climate models
- Serious doubts on accuracy and reliability of SITA modelling

## Environment

# INTRODUCTION

### **REF: ENVIRONMENT AGENCY STANCE**

#### **QUOTE:**

*We recognise that incineration with energy recovery has a role in a balanced regional or local waste strategy that acknowledges the waste hierarchy and does not undermine the need to minimise and recycle wastes. We support the one incinerator with energy recovery solution for Cornwall.*

*However, insufficient information has been submitted with the planning application to demonstrate that this proposal does not pose an unacceptable risk to the environment. Further information in respect of flood risk and surface water drainage, pollution control and waste management, biodiversity, water resources and groundwater must be submitted as part of the environmental statement. (ES). This information must demonstrate that the environmental risks are insignificant.*

*Planning Policy Statement 23 (PPS23) highlights that 'the planning system should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses'. We consider that the outstanding issues are of such importance that we must maintain our objection to the planning application until the issues are resolved.*

While the Environment Agency, quite rightly, maintains it's objection on the grounds stated above, should it not also be objecting and refusing a Permit, on the grounds that this proposal would contribute to Climate Change, by producing Greenhouse Gas emissions through the:

- Process of incineration: burning fossil fuel derived products.
- Increased waste miles: vehicle fuel emissions.
- Tonnes of CO<sub>2</sub> released, per tonne of waste incinerated, *(all transportation must be factored in.)*
- The stated intention to use 300,000 litres of fuel oil per annum, equating to 9 million litres over a 30 year operational life.
- Any assertion that CO<sub>2</sub> levels would be reduced, compared to current practice is disingenuous. Current practice is no benchmark, considering it's record on GHG emissions, to date.
- Greenhouse Gas Emissions from Landfill could be cut, at a stroke, by the simple expediency of removing all biodegradable waste, through segregated collections, at source. It's diversion to, for instance, EfW Anaerobic Digesters and Composting facilities, would create a Virtuous Circle, rather than a Cycle of Destruction.

## Environment

- An 80% reduction in GHG emissions by 2050, will not be facilitated by the continued proliferation of Mass Burn Incinerators throughout the UK.

A comprehensive ENERGY IN v ENERGY OUT audit should be mandatory for this or any similar proposal, elsewhere.

It should encompass ALL inputs, including that used in the extraction, and manufacture of raw materials, production of goods, and transport, relating to first use, as well as the continual replacement necessitated by the wanton waste and destruction of incineration.

It should be obvious that this application should not be considered in isolation.

Any Incinerators, proposed elsewhere, will add to Climate Change, in a similar manner. The accumulative effects, nationally and globally, must be taken into consideration.

If we are to meet the challenging targets for the reduction of CO2 emissions, more benign methods of waste treatment must replace incineration.

### **E.A Quote:**

#### ***Our views on incineration***

#### ***At a glance:***

- 1) *The amount of waste generated by householders is increasing each year;*
- 2) *We must find ways to manage waste to minimise its effect on the environment, including human health;*
- 3) *We support the waste hierarchy for the management of waste. We believe that we all need to create less waste and recycle more;*
- 4) *We do however consider that other waste disposal facilities will be required and these must be managed in a safe and environmentally friendly way;*
- 5) *We believe that incinerators have a role in the disposal of waste.*

## **STIG Response**

1. Rather than shutting the stable door after the horse has bolted, should the EA not be more pro-active in pressing for legislation, to prevent the use of precious resources for single use products and packaging, to reduce waste at source?

## Environment

To conserve resources, should the EA not also be pressing for a comprehensive and uniform U.K. directory of materials that MUST be segregated at source for recycling, by all sectors, including food & other bio waste?

Should it not, at the very least, be pressing for 'Dirty' MRFs to be provided, as an essential part of every waste management provision, nationally, so that nothing 'slips through the net'?

2. New technologies have been developed towards achieving this without resorting to Incineration. Waste budgets soar, yet too often are invested in destructive, polluting technologies when there are now far better solutions, which must be embraced, to achieve a truly sustainable and ecologically sound solution in the long term.
3. Support of the Waste Hierarchy demands rejection of this application when the admissions of feedstock is considered.
4. They no longer need to include Incineration, as better technologies are now available.
5. Beyond the need to dispose of clinical or similar hazardous waste:  
Why?

## Environment

# RESPONSES TO VOLUME 1

## *Table 5a - Types and amounts of waste*

*Capacity (See note 1 below) 31.5 tonnes/hour*

*Maximum amount (See note 2 below) 2,880 tonnes*

### *Notes*

- 1. By 'capacity', we mean the total incineration capacity (tonnes per hour) for waste incinerators, the total landfill capacity (cubic metres) for landfills, the total treatment capacity (tonnes per day) for waste treatment and the total storage capacity (tonnes) for waste storage operations.*
- 2. By 'maximum amount', we mean the maximum amount of waste you store on-site at anyone time.*

### **NOTE:**

*Total operating hours = 8,000 per annum.*

*Total materials incinerated = 240,000 tonnes per annum*

*(as stated elsewhere in application)*

## **STIG Response**

Apparent anomaly Re: Annual Operating Hours

24 hrs = 1 day, 365 days = 1 year.  $24 \times 365 = 8,760$  hrs.

- 1)  $8000 \div 24 = 333.3$  days
- 2)  $8,760 - 8,000 = 760$ hrs.:  $760 \div 24 = 31.6$  days non operational.

Is this correct?

- 1)  $31.5$  tonnes/hr x 24hrs = 756 tonnes per day.
- 2)  $240,000 \div 756$  per 24 hrs = 317. 46 days p.a  
 $365 - 317.46 = 47.54$  days non operational.

Or is this correct?

- 1) 8000 hrs operating time x 31.5 tonnes/hour =252,000 tonnes per annum.

Is this correct?

## Environment

Does 252,000 include the 5,210 tonnes of treatment chemicals from table 6?

N.B

252,000 tonnes far exceeds the 200,000 tonnes quoted in Cornwall Waste Local Plan for maximum plant size, as does 240,000 tonnes.

During non operational periods and/or if further, protracted and unplanned shut downs occur:

How would putrifying waste, already on site be managed?

How would any ensuing leachate be treated and prevented from contaminating the site?

How would any water, used to wash away such leachate be treated?

Where would such contaminated water be discharged?

What contingencies will be in place, to prevent the backing up of waste throughout the County?

Where would any such backed up waste be stored?

## RESPONSES TO VOLUME 2

### QUOTE:

#### **EMISSIONS TO AIR**

*The principal sources of emissions to atmosphere from the normal operation of the proposed CERC will be from the two 120 metre chimneys and will include carbon dioxide, carbon monoxide, water vapour, oxides of nitrogen, sulphur dioxide, particulate matter, trace metals and organic compound.*

*Detailed atmospheric dispersion modelling of the CERC has been undertaken with the plant burning the maximum throughput of waste.*

*The results show that there is no significant impact to local air quality, human health or site of nature conservation interest.*

### **STIG Response**

This paragraph openly states that carbon dioxide, carbon monoxide, oxides of nitrogen, sulphur dioxide, particulate matter, trace metals and organic compounds will be emitted.

Yet it goes on to say there is no significant risk to human health or conservation sites

As all the data is from computer modelling and simulation from data from other sites, it cannot accurately predict the UNKNOWN implications of Climate Change over the whole-life of the Plant.

## Environment

### **QUOTE:**

*In the event of abnormal operation the operator will:*

- 1. Reduce or close down operations as soon as practicable until normal operations can be restored.*
- 2. Initiate the shutdown sequence on those process lines where continuous emission monitors serving them indicate:
  - a) any individual continuously monitored emission limit value has been exceeded for 4 hours or more consecutively; or*
  - b) a part of the APC system has failed and any individual continuously monitored emission limit value has been exceeded for 4 hours or more consecutively; or*
  - c) any individual continuously monitored emission limit is being exceeded and the total time that any emission limit has been exceeded in the last year is more than 60 hours.**
- 3. Initiate the shutdown sequence if any emissions measurement equipment is out of service for more than 24 hours or such shorter time if any other relevant monitored parameter is in breach of its specified emission limit.*

*These actions will meet the indicative BAT requirements.*

### **STIG Response**

Although these criteria may meet current requirements, it is indicated that this Plant could operate for up to 4 hours outside emission limits

The criteria also states, that the process may exceed emission limits for up to 60 hours per year.

Were limits to be exceeded for four hours then reduce, in a repeating sequence over a short period, whilst remaining within the overall 60 hours per year limit, would this not represent a significantly increased risk for sensitive receptors, particularly if prevailing weather conditions did not oblige and anticipated dispersion rates prove overly optimistic?

Is this an acceptable extra burden on an area that is already close to saturation levels for several existing pollutants?

## **RESPONSES TO VOLUME 3**

### **QUOTE:**

#### **SITE HISTORY**

*The site is located in a rural area with a history of china clay working immediately to the east and south, and agricultural land to the south-west, west and north-west. The site has been a field since before 1881, when the earliest available map was made.*

*The historical maps show that the area has changed little since 1881. The most significant changes are listed in A2.3a.*

## Environment

### STIG Response

Bodella was first recorded in 1554 and Rostowrack in 1211. Fields in this area are associated with these historic settlements, the enclosures may be termed Anciently Enclosed Land (i.e. enclosed before 1600) in Historic Landscape Character Assessments.

The adoptable site road from La Mount to the proposed site, passes through the Treviscoe Village Buffer Zone.

#### **QUOTE FROM THE ENVIRONMENT AGENCY:**

*Planning Policy Statement 23 (PPS23) highlights that 'the planning system should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses'.*

This area of Mid Cornwall has a smaller percentage of farmland than many other areas of the County. To allocate this site for such a purpose is in conflict with several National and Local Policies.

There is now Global concern over FOOD SECURITY. Food prices in the UK have increased sharply, as cheap imports decline.

Climate Change is likely to have an adverse impact on crops and current food supplies. Reliance on locally produced food is bound to increase, and a far greater degree of self sufficiency will almost certainly be required, in the future.

It is essential to conserve and enhance precious agricultural land, locally and nationally, if the world is to be fed.

It would, therefore, be foolhardy to surrender a single inch of farmland to this, or any other type of development.

#### **A3.1 DETAILS OF THE INSTALLATION**

*The facility will produce electricity from the combustion of mixed residual*

*municipal waste which will, in general, comprise solid materials with a*

*minimal liquid content such as:*

- *Plastic, paper and cardboard;*
- *Textiles;*
- *Food waste;*
- *Wood;*
- *Glass;*
- *Inert substances;*
- *Metals.*

## Environment

### STIG Response

Justification requested Re: Feedstock

What justification is given for including materials, which, to comply with the Waste Hierarchy, COULD and SHOULD be:

- Re-used
- Recycled
- Composted
- Anaerobically digested, to yield biofuel and soil enhancers

These alternative treatments do not produce toxic Air Pollution Control Residues or Bottom Ash and are:

- More sustainable
- Less polluting
- Could be provided by smaller, more local facilities to reduce waste miles and would
- Reduce demand for virgin materials in a world of shrinking resources.
- Remove the need to transport APC residues to Gloucestershire.
- Remove any future need to provide a hazardous waste site in Cornwall, should the Gloucestershire facility no longer be available.

For SITA to claim only RESIDUAL waste would be incinerated is disingenuous. With the current, woefully inadequate, recycling provision for both homes and small businesses it is inevitable and freely admitted by SITA that feedstock would comprise of RECYCLABLE materials.

## RESPONSES TO VOLUME 4

**REF: D 9.1**

**QUOTE:**

*For the dispersion modelling, hourly sequential meteorological data from Camborne meteorological station for the year 2002 have been used. This was based on the results of the assessment of the operational impact of the plant, which indicated that the year 2002 produced a worst-case result. Further*

*details regarding the choice of meteorological data and the associated wind rose can be found in Section D4.2. Meteorological data were also available from the following recording stations:*

- *St. Mawgan – operated by the UK Met Office; and*
- *St. Dennis School, Cornwall – operated by Cornwall County Council.*

*No perfect simulation can be made with either of the data sets from St.Mawgan or Camborne, while the data collected from St Dennis Primary School were only available for a single year - 2006. ERM has*

## Environment

*formed the view that the results generated using the Camborne meteorological data are more likely to be closest to reality; a full wind climate sensitivity analysis can be found in Section 4 of Annex E.*

### STIG Response

Unprecedented extremes of weather are now being experienced, worldwide.

Higher winds and heavier rainfall are already increasing in frequency, locally.

Forecasters suggest an increase in severity and unpredictability, worldwide, as Climate Change advances and sea levels rise.

How would Camborne data from 2002 relate to St Dennis in 2012 - 2042, when the plant would be operational?

Why was no data from St Dennis School collected in 2007 and early 2008, whilst SITA were preparing Planning and Permit Applications for submission?

Is the Environment Agency satisfied that St Dennis School has been properly included, and that correct modelling has been used, in this regard?

What work was undertaken to estimate the effects of Climate Change on weather systems in St Dennis? Cornwall?

How will rising sea levels impact on the Cornish peninsula, and alter historic and current weather patterns?

In the light of the caution from the Hadley Centre that:

*“It is important to be aware that predictions from climate models are always subject to uncertainty because of limitations on our knowledge of how the climate system works and on the computing resources available.”*

What level of accuracy in SITA’s modelling can be guaranteed?