



**S.T.I.G.**

**St.Dennis Incinerator Group**

**June 2008**

## **Non Technical Summary**

### **Consultee Response to CERC Planning Application**

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

**Applicant**  
Sita Cornwall Ltd.

**Application Reference**  
08/00203/WAS

**Address of Proposal**  
Land at  
Rostowrack Farm  
St.Dennis  
St.Austell  
Cornwall  
PL26 8DX

**Proposal**  
Construct and Manage a  
240,000 TPA Energy Recovery Centre  
( Mass Burn Incinerator )

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## Non Technical Summary

### Introduction

#### NTS 1:

##### STIG Response

What is the source and content of the other waste to be burnt?

#### NTS 2:

##### STIG Response

The NTS is a summary of the ES however the EIA that it is based on is incomplete, as it does not properly consider the effects of local geography and St.Dennis's changing landscape.

#### NTS 3:

##### STIG Response

The WDF may well be obsolete by the time it is published. Government policy, legislation and EU directives are changing everyday. The Waste Strategy 2007 identified Anaerobic Digestion as the preferred technology for recovering energy from waste. What if there is another major sea-change before 2012?

#### NTS 4:

##### STIG Response

Greenfield vs. Brownfield site.

### Confirmation of Proposed Waste Strategy

#### NTS 5:

##### STIG Response

How 'independent' are ERM?

Short-term build cost of 5 district facilities versus Long-term health and environmental costs.

68% of MSW is kitchen and green garden waste - SITA uses AD in other areas, why not Cornwall?

## Non Technical Summary

### NTS 6:

#### STIG Response

Single Mass Burn Incinerator is preferable on 2 counts - build cost and attempt to reduce public protestation.

240,000 tpa but would already be operating on a short-fall in its first year therefore C&I waste would be used immediately. The nature of this C&I waste would surely effect emission levels - what would be burnt?

### The Applicant - SITA Cornwall Ltd.

### NTS 8:

#### STIG Response

Only 2.5% of heat produced possibly going to clay dryers how does this make it CHP (and therefore energy recovery rather than waste disposal)?

### Layout

### NTS 9:

#### STIG Response

Building bears NO relation to the landscape or existing architecture in the area.

There will be twin stacks not one chimney.

### The Environmental Statement

### NTS 10:

#### STIG Response

No Comment

### Planning Application Process

### NTS 11:

#### STIG Response

Based on incomplete and misleading data. A proposal of this magnitude demands more than 16 weeks scrutiny.

## Non Technical Summary

### NTS 12:

#### STIG Response

Consultation process deeply flawed - lack of availability to examine hard-copy, difficulty in viewing documents on-line. Requested discs and hard-copy from SITA not forthcoming - despite numerous requests.

### Pollution Prevention Control

### NTS 13:

#### STIG Response

Exceedances at other facilities throughout the UK therefore inevitable at St. Dennis.

IF EP is revoked Cornwall will be left with a derelict white-elephant.

### Alternative Sites

### NTS 14 to NTS 18:

#### STIG Response

Proximity Principle. A30 is a major tourist route.

SITA representatives have said it is "highly unlikely" that rail will ever be used. Citing cost, necessity of night only transportation and the unsuitability of waste trucks to unload onto to rail-trucks.

Only 2.5 % of heat produced MAY be used at clay dryers.

SITA representatives have been heard to express a preference for the Roche site, the only problem they saw there, was the need to compulsory purchase a section of farmland for access, a process they "prefer to avoid due to bad publicity and local ill-feeling"!

### The Proposed Development Site

### NTS 19:

#### STIG Response

6.6 ha of farmland permanently lost from food production affecting the food security of Cornwall.

## Non Technical Summary

Existing industry/buildings relatively unassuming when compared to the Mass Burn Incinerator facility.

### **NTS 20:**

#### **STIG Response**

Twin 120 m stacks plus a 221m visible plume for 47% of daylight hours will severely affect the local visual amenity and impact a wide area potentially damaging tourist perception of Cornwall.

### **NTS 21:**

#### **STIG Response**

CWS, NNR, SSSI's and SAC's will all suffer from the cumulative burden of increased pollution.

The public perception of these areas will also be seriously effected.

### **NTS 22:**

#### **STIG Response**

A haul road passing through a CWS will lead to a serious degradation of the environment of flora and fauna.

May also undermine the River Fal flood plain.

### **NTS 23:**

#### **STIG Response**

"Majority of traffic" - where will the rest be?

How many PEOPLE will be affected?

### **NTS 24:**

#### **STIG Response**

What about the HUMAN environment of the surrounding homes and villages are they NOT significant?

## Non Technical Summary

If flora and fauna are “sensitive to emissions” from a Mass Burn Incinerator won’t humans also be “sensitive”?

### **NTS 25:**

#### **STIG Response**

There will be a cumulative burden from stack emissions, the clay industry and the local power plant.

There is a presumption of compliance.

## **The Principle Development Proposals**

### **NTS 26:**

#### **STIG Response**

Is the loss of resources, environmental degradation and human health risks really worth it for just 16.6 mw of electricity?

If the clay dryers do not take the heat, the Mass Burn Incinerator cannot be classed as CHP.

### **NTS 27:**

#### **STIG Response**

350 vehicle movements per day: -

- Fuel costs
- Dioxin emissions
- Carbon Dioxide emissions

This is a vast increase in the numbers currently experienced.

(Equivalent to approximately 5,000 cars)

## Non Technical Summary

### Main Elements

#### NTS 29 and NTS 30:

##### STIG Response

Will produce bottom-ash and 11,000tpa of HAZARDOUS waste. Copious amounts of aggregate already exist in Cornwall - can 'the market' bear anymore?

Transporting hazardous waste out of county also has implications for Road Traffic Accidents.

Is it fair that another county bear the burden of dealing with Cornwall's hazardous waste?

#### NTS 31:

##### STIG Response

Will, in fact, have twin stacks that should be treated as two emission sources therefore DOUBLING all the emission data.

Continuous monitoring will not be for PM 2.5's and below. "Acceptable levels" to whom? Certainly not for residents.

### Design and Materials

#### NTS 32:

##### STIG Response

The proposed development is in no way "sympathetic" to its surroundings. The construction materials have no relation to the existing "character and sensitivity" of the setting.

#### NTS 33:

##### STIG Response

The translocation of Cornish hedges could severely impact on the environment of resident flora and fauna.

## Non Technical Summary

### Access

#### NTS 34:

##### STIG Response

350 vehicle movements per day with a predicted 1 vehicle every minute along 250m of public highway to junction of access road.

#### NTS 35:

##### STIG Response

Site access road will be across farmland, again removing land from food production.

Realignment of existing highway could cause a major disruption to the day to day life of the village and surrounding areas - how long will this take and what steps will be taken to mitigate this?

Again the realignment of Cornish hedges will degrade the habitat of flora and fauna.

#### NTS 36:

##### STIG Response

How will this be guaranteed?

The village regularly has problems with large delivery vehicles for Goonvean that SAT-NAV has told to go via Fore Street.

### Staff, Operating Hours and Maintenance

#### NTS 37:

##### STIG Response

During annual maintenance, will waste be stock-piled or will it be diverted to landfill during this period?

Bearing in mind that waste deliveries will be coming from all over Cornwall, how will a 5pm completion time be guaranteed, particularly during the tourist season when grid-lock is common on many Cornish roads?

## Non Technical Summary

### NTS 38:

#### STIG Response

Other Mass Burn Incinerators have “detailed maintenance programmes” - this has not however stopped over 500 exceedances of emission limits in one year alone.

### Pedestrian Access and Footpaths

#### NTS 39 to NTS 41:

#### STIG Response

The footpath is in daily use by residents of Treviscoe, who use it to access services provided in St. Dennis. How are they expected to SAFELY access St. Dennis during the construction phase? A track that will also be used for moving cattle cannot be considered safe.

### Flue Gas Treatment

#### NTS 43:

#### STIG Response

PM 2.5's and below will still not be removed from emissions.

#### NTS 44:

#### STIG Response

“Best Available Technology” is not adequate to ensure safety of emissions.

### Air Pollution Control (APC) Residues

#### NTS 45:

#### STIG Response

The Mass Burn Incinerator will produce approx.11,000tpa of HAZARDOUS WASTE. If Gloucestershire will no longer accept this waste (as has been muted), what alternatives are there?

## Non Technical Summary

### Bottom Ash

**NTS 46:****STIG Response**

Leaves 54,000 tpa to become aggregate (in an already over-burdened market) or sent to landfill.

### Construction

**NTS 47:****STIG Response**

A 3.5 year construction period will give rise to numerous disruptions and inconveniences.

Are no BRITISH firms capable of such an undertaking - were ANY considered?

255 (possibly foreign) construction workers coming to a rural area has potential for much ill-will and suspicion.

Where will they reside during the construction period?

Resentments may well be felt over a wider area - leading to possible conflicts.

**NTS 48:****STIG Response**

Again how will it be GUARANTEED that NO construction traffic will pass through St. Dennis OR Treviscoe?

**NTS 49:**

See Comments for NTS 47.

## Non Technical Summary

### The Environmental Impact Assessment (EIA) Process

**NTS 50:****STIG Response**

The “scoping exercise” findings were not presented to any local populations that would be effected.

**NTS 51:****STIG Response**

Obviously does not take into account any other changes that may occur between “scoping” and actual construction (approx. 6 yrs).

**NTS 52:****STIG Response**

Desk-top studies and computer modeling are far removed from reality, resulting in guesstimates and possibilities - which is just NOT GOOD ENOUGH in these circumstances.

**NTS 53:****STIG Response**

Are all mitigation measures best available or just most cost-efficient option?

### Traffic and Transport

**NTS 55:****STIG Response**

1 vehicle trip is equal to 2 vehicle movements therefore the ACTUAL figure is 350 and NOT 175.

**NTS 56:****STIG Response**

How can 350 vehicle movements be classed as a “small to medium” change to traffic flow?

## Non Technical Summary

This number is bound to have a SIGNIFICANT effect despite SITA'S 'predictions'.

### **NTS 57:**

#### **STIG Response**

How can 1 vehicle every minute of every working day be described as "low frequency"?

Given the numerous young, elderly and or frail people in the locality, how can they justify the statement that "fear and severance" will be "negligible" for pedestrians crossing the roads?

### **NTS 58:**

#### **STIG Response**

How many 'local waste vehicles' does this apply to, without accurate figures how can significance be quantified?

### **NTS 59:**

#### **STIG Response**

How will this be achieved - car-pool, company bus? The staff will certainly not be able to rely on local public transport.

### **NTS 60:**

#### **STIG Response**

Rather vague - what exactly will be done to cope with 255 workers?

## **Air Quality Effects**

### **NTS 61:**

#### **STIG Response**

How "comprehensive" was the base-line monitoring, how long was it carried out for? Were they sufficient to cover the vagaries of the Cornish weather and St. Dennis's micro-climate in particular?

## Non Technical Summary

### **NTS 62:**

#### **STIG Response**

Two chimney stacks not one - again misleading. Dispersion modeling is only as good as the data imputed - rubbish in = rubbish out.

### **NTS 63:**

#### **STIG Response**

Basically, if it wasn't for the Marsh Fritillary Butterflies in the SAC, the stacks would be 75m and the HUMAN population could go to hell.

### **NTS 64:**

#### **STIG Response**

"Predicted" concentrations not exactly reality based data. How good can this prediction be when "all dust is presumed to be PM 10" and PM 2.5's are ignored?

### **NTS 65:**

#### **STIG Response**

With emission exceedances inevitable, how can they predict "potential deposition" on SAC's? Again the impact of emissions cannot be quantified.

### **NTS 66:**

#### **STIG Response**

How can 350 vehicle movements EVERY DAY not have a significant effect on local air quality?

### **NTS 67:**

#### **STIG Response**

The visible plume could be up to 221m. This is not "small". With a 47% visibility in daylight hours year round, it will be obvious to visitors as soon as they cross the Tamar.

## Non Technical Summary

### NTS 68:

#### STIG Response

What about system failures, total breakdowns, exceedances and the like? Surely not even SITA has THAT much faith in their facilities!

### NTS 69:

#### STIG Response

The HHRA says it is “highly unlikely” the Mass Burn Incinerator would be a risk to health and yet, elsewhere in the planning application they admit to an increased risk of LEUKAEMIA in children living near incinerators - which is it, risk or no risk?

Because of pre-existing pollution, does SITA hope to hide the blame for THEIR part in the increase in ill-health?

Is St.Dennis just a ‘good PLACE to bury bad news’?

### NTS 70:

#### STIG Response

Possibly some merit - however a 240,000 tpa Mass Burn Incinerator will still produce in excess of 190,000 tonnes of CO<sub>2</sub> every year.

## Noise

### NTS 71 to NTS 74:

#### STIG Response

Until the Mass Burn Incinerator is built and operational, it is difficult to quantify the effect of additional noise pollution in the area. The site, being in a valley, may have a ‘super-bowl’ effect - amplifying the noise so as to affect a far wider area than at first thought.

It would be hoped, that in the event of approval being given, residents who request double/triple glazing would have that need met ,at SITA’S expense, without the need for a protracted debate - in the spirit of ‘good-neighbourliness’.

## Non Technical Summary

### Landscape and Visual

**NTS 75 to NTS 78:**

**STIG Response**

Again this ignores the fact that it is two stacks. It is in no way “broadly in character” with the area.

The vast scale of the development will have a substantial effect on the local visual amenity and its impact on public perception in the wider area cannot be discounted.

Admits that NOTHING can be done to minimise the visual effect.

### Natural Heritage

**NTS 79 to NTS 82:**

**STIG Response**

There are no guarantees that, once displaced, flora and fauna will return to translocated Cornish hedges, which could have a devastating effect on local ecology.

With emission exceedances typical, the fragile habitats in the SAC’S will suffer irreversible harm.

The day-to-day activity at the Mass Burn Incinerator is likely to deter any re-habitation by dormice, bats and so forth, therefore further degrading the local ecology.

### Social and Community Effects

**NTS 83:**

**STIG Response**

There will be little or no opportunities for local employment. 255 outside workers may put undue strain on local services, while providing only minimal and temporary financial benefit for a few. There is also potential for resentment and local conflicts.

## Non Technical Summary

### **NTS 84:**

#### **STIG Response**

During site preparation and construction, how will any complaints from the public and local businesses be addressed?

### **NTS 85:**

#### **STIG Response**

What is meant by local people - is it Cornish in general or St.Dennis in particular?

68 permanent jobs will not have a significant effect on spending in local shops and services.

The minimal benefits do not out-weigh the considerable risks.

### **NTS 86:**

#### **STIG Response**

The HIA carried out by Ben Cave Associates was laughable. Both the village school and doctor's surgery declined to take part. A brief 'chat' with 62 villagers hardly constitutes a meaningful assessment.

It must not be forgotten that 'clay country' has the highest rate of childhood asthma in the county.

See also comments on NTS 69.

### **NTS 87:**

#### **STIG Response**

Despite EA emission limits, there are over 500 exceedances every year in the UK - how can we expect this Mass Burn Incinerator to be ANY different?

### **NTS 88:**

#### **STIG Response**

You cannot compare Cornwall to Hampshire. They are two very disparate Regions. St. Dennis is already at the lowest end of the housing market.

## Non Technical Summary

Villagers who have recently had to move for family or work reasons and been forced to accept offers at £30-40,000 less than the asking price in order to secure a sale.

As public awareness of the dangers of incineration increases and more scientific studies are published proving those dangers, there is a significant likelihood that the local housing market may never 'recover' to pre-Mass Burn Incinerator levels.

### **NTS 89:**

#### **STIG Response**

Given the substantial role of food production and processing in the region, there is likely to be a significant adverse effect in these sectors with ramifications for farming and other related employment.

The reputation of Cornish food will be severely affected by public perception. This could be catastrophic for our county.

### **NTS 90:**

#### **STIG Response**

There is a good community spirit in St. Dennis. People care about where they live and how their neighbours are. It has a low crime rate. All that may change with the building of a Mass Burn Incinerator. If St. Dennis becomes known as St. Dustbin by the wider population, it will severely effect how the villagers feel about their home. The element of "if no-one cares about our home, why should we care?" cannot be dismissed. This will lead to a break-down of our society and all that that entails.

### **NTS 91:**

#### **STIG Response**

This still equates to 'Best Available Technology' and most economically beneficial (to SITA) and NOT what is best for our communities and environment.

### **NTS 92:**

#### **STIG Response**

Does SITA have a crystal ball? St.Dennis is highly unlikely to be the site of any "new services" in the near or distant future, especially if it has a Mass Burn Incinerator in its midst.

## Non Technical Summary

### NTS 94:

#### STIG Response

Mass Burn Incinerators have had an effect on recycling in other areas worldwide - the need to feed the beast.

Because of Cornwall's increased household recycling rates, SITA'S Mass Burn Incinerator will be operating on a MSW shortfall from the get-go. C and I waste will be used from the start and the percentage of this waste will not doubt increase as MSW further decreases. This need will act as a disincentive to both central and local government to legislate changes in these areas - this will have a major effect on recycling in real terms.

Also it should be remembered that 'recyclable' is not the same as 'recycled' - recycling only happens where there is a viable market - it is profit not environmentally driven.

## Ground Conditions

### NTS 95 to NTS 99:

#### STIG Response

There are dangers to the public and environment from the removal of asbestos and Japanese Knotweed - they could both be dispersed to a wider area than is currently affected.

Soil in St. Dennis is already contaminated by a number of chemicals. The ARSENIC levels reach 110mg/kg as opposed to an expected 20mg/kg for residential areas and allotments.

Can we tolerate ANY increase in soil toxicity given the dire ramifications of such contamination?

## Water Environment

### NTS 100 to NTS 103:

#### STIG Response

Surface water is likely to suffer contamination from emissions from the Mass Burn Incinerator.

## Non Technical Summary

### NTS 103:

#### STIG Response

There is already a “significant failure” (in PH levels) in local surface water. Any increase in toxicity could severely impact on the flora and fauna that come into contact with it.

## Archaeology and Cultural Heritage

### NTS 104 and NTS 105:

#### STIG Response

In the event of archaeological discoveries being unearthed during site preparation and construction, will all works be suspended whilst they are fully examined by INDEPENDENT and qualified archaeologists?

### NTS 106:

#### STIG Response

Speaks for itself!

### NTS 107:

#### STIG Response

Can this be absolutely guaranteed during the construction phase? The Mass Burn Incinerator will be a blot on the landscape - a carbuncle in the Duchy of Cornwall.

### NTS 108:

See Comments on NTS 33; 35 and 79-82

## Land Use and Agriculture

### NTS 109:

#### STIG Response

It is of sufficient quality for the grazing of cattle and therefore integral to milk and beef production.

In this time of food crisis worldwide, the permanent loss of ANY agricultural land is both short-sighted and foolhardy.

## Non Technical Summary

Soil improvements via Anaerobic Digestion could well have a beneficial effect on such lands and increase their contribution to food production.

### **NTS 110:**

#### **STIG Response**

A Mass Burn Incinerator will affect any possible sale of the WORKING farm by its current owner or discourage new tenants from undertaking its running.

### **NTS 111 to NTS 113:**

#### **STIG Response**

Dioxin levels in milk from cows grazing near incinerators in France resulted in thousands of litres of milk being destroyed. This could be devastating to local farmers who are already in dire straits as a result of the CAP.

The change from Greenfield site to Mass Burn Incinerator is hardly a “beneficial” change.

### **NTS 114 and NTS 115:**

#### **STIG Response**

What will be done with the waste arisings NOT used on site?

### **NTS 116:**

#### **STIG Response**

Will there be any ‘dirty mrf’s?

### **NTS 117:**

#### **STIG Response**

Maybe so, however Anaerobic Digestion would have a far greater benefit to waste management nationwide. And would comply with the Waste Strategy 2007.

### **NTS 118:**

#### **STIG Response**

Why Cardiff? Are there no local facilities? Proximity Principle again.

## Non Technical Summary

These metals are recoverable by any number of means it is NOT solely a benefit of Mass Burn Incineration.

### Conclusion

#### NTS 119 to NTS 121:

##### STIG Response

This implies that it is Mass Burn Incineration or nothing. This is blatantly NOT the case. Bearing in mind that 68% of MSW is kitchen and green garden waste (and therefore biodegradable), it is this waste that MUST be diverted from landfill. It makes far more sense to use ANAEROBIC DIGESTION.

SITA already successfully operates AD facilities in the UK; therefore the waste contract with CCC would still stand.

The benefits of ANAEROBIC DIGESTION over Mass Burn Incineration are numerous, not least that you are using old food to help grow new food - recycling at its very essence.

AD is now the preferred technology for recovering energy from waste.

Cornwall should be embracing AD technology.