Friends of the Earth South Gloucestershire

Friends of the Earth Bristol

South Gloucestershire Friends of the Earth and Bristol Friends of the Earth's joint objection to SITA's Planning Application PT09/5982/F

The Friends of the Earth groups in South Gloucestershire and Bristol object to SITA's application PT09/5982/F, on the following grounds:

1. This application is contrary to the West of England Joint Waste Core Strategy
2. The proposed incinerator will result in importation of waste from outside the sub-region
3. Adverse climate change impacts
4. The proposal will not maximise energy recovery from waste and is unlikely to deliver Combined Heat and Power. The incinerator operation is therefore classified as "disposal" under the EU Waste Directive
5. There is no local market for secondary aggregates from incinerator wastes
6. The proposal will create additional hazardous waste from non-hazardous which will require treatment outside the area
7. Cumulative impacts of this proposal alongside other similar proposals for the area
8. Adverse health impacts
9. Increased road transport
10. Adverse impacts on protected wildlife species
11. Flood risk

These points are addressed in more detail below.

1. This planning application is contrary to the West of England Joint Waste Core Strategy.

The incinerator will provide surplus waste processing capacity, when compared to the West of England region's identified need.

The West of England Joint Waste Core Strategy has identified the additional capacity required to process the region's waste, up until 2026. Under the strategy, the Avonmouth area has been assigned 390,000 tpa additional waste capacity, with four other waste sites of smaller capacity distributed across the WoE. New Earth Solutions already have planning permission to build a 200,000 tpa MBT (Mechanical Biological Treatment) plant in Avonmouth. Cyclamax have planning permission to create a 125,000 tpa MRF and gasification plant. Ethos Recycling, who operate the former Compact Power pyrolysis plant in Avonmouth, have planning permission to extend the capacity of its plant. SITA have applied to build an Energy Recovery Centre by incineration plant, handling 400,000 tpa waste. This would provide an excess to the WoE identified capacity of around 365,000 tpa. This does not take into account the simultaneous application by Viridor, to build a 500,000 tpa waste facility (including a 350,000 tpa energy from

waste by incineration plant), just over the border in Bristol. This plant is also in the Avonmouth area as defined under the Joint Waste Core Strategy – giving a potential over-supply of 865,000 tonnes of waste per year.

This proposal should not be considered separately from the Viridor proposal for a similar sized facility. With the Core Waste Strategy – a statutory planning document covering the sub-region, all planning applications for waste plants should be considered jointly by the authorities and in particular where, as with this case, two plants of similar capacity are submitted concurrently to two adjacent planning authorities, for virtually adjacent land sites, they must not be considered in isolation – and should not end up becoming a race for which planning authority can get the application considered first. In order to be considered correctly the cumulative environmental assessment and cumulative strategic environmental assessment which are missing must be in place.

2. The incinerator will import waste rather than process only locally-generated waste.

The Government 'Waste Strategy for England 2007' applies the proximity principle to waste management. Waste should be treated as close to where it is generated as possible. As shown in point 1 above, SITA's plant will provide excess capacity for the region; therefore SITA will inevitably have to seek customers from outside the region. This will lead to increased vehicle movements, and Avonmouth will have to deal with both the vehicle- and waste treatment pollution impacts, produced as a result of other regions' failure to increase recycling, and process their own waste close to home.

SITA stated in their exhibition materials, that they already have contracts within the WoE area to process 120–130,000 tpa Commercial and Industrial waste, which they currently send to landfill (outside the area). It is not clear where they will find the additional 270–280,000 tpa to fuel their incinerator. They have a contract with S.Gloucs Council to handle 150,000 tpa MSW, but have stated that they do not currently intend to send this or any other household waste to the proposed incinerator.

It seems likely that SITA are intending to import pre-treated Commercial and Industrial waste. Such waste may have been processed by MBT into refused-derived fuel, miles away from SITA's incinerator. It is not clear in the planning application what this waste actually is and where it comes from. This should be covered in the Environmental Assessment, as the pre-processing methods and distance travelled have big implications for the climate-change impacts of SITA's operation, and the likely make-up of the waste will affect the direct air pollution that comes from the incinerator.

SITA have stated that they only intend to process Commercial and Industrial waste via the incinerator. Bristol City and B&NES Councils have policies for MSW (which of course includes commercial waste collected by the authorities) that prevents them from using incineration as a means of treating their residual municipal waste. The four WoE authorities have signed an interim contract with New Earth Solutions (Phase 2 of the Joint Residual Waste Strategy) to treat 120,000 tpa of WoE waste from April/May 2011–2016, with an option to extend that contract for a further 4 years. SITA intend their incinerator to be operational within 3 years of gaining planning permission – midway through New Earth Solutions' WoE contract. It is unlikely that BCC or B&NES will change their anti-incineration stance, or that the WoE Partnership will switch to incineration for treating MSW. SITA's plant will mainly be providing a facility for businesses from outside the region.

In their exhibition, SITA stated that the benefits of recovering energy from waste include "Diverting up to 400,000 tonnes of waste from landfill each year and saving £19.2 million in landfill tax… preventing the need to pay landfill tax, which is set to increase to £72 per tonne by 2013." This is not relevant to S.Gloucs Council and local residents, who are doing their bit to increase recycling, and to divert waste from landfill. Any landfill tax saving through switching to incineration, will be gained by businesses outside the region, not by S.Gloucs.

3. Adverse climate change impacts.

SITA claim that incineration is better than landfill in terms of climate change impacts and in their exhibition that they will be "Reducing methane emissions, which are 21 times more damaging than CO_2".

A study by Eunomia, Bristol-based waste consultants, conducted on behalf of Friends of the Earth, concluded:

• Recycling is better than incineration in terms of climate change.

• Waste incinerators are being sold to the public and local authorities as a source of green electricity, yet the fact that they produce fossil fuel derived greenhouse gases is rarely mentioned.

• This research shows that, currently, electricity-only incinerators produce 33% more fossil fuel derived CO_2 per unit energy generated than a gas fired power station. By 2020, with increases in recycling and improved technology, these incinerators will be almost as polluting in terms of CO_2 emissions as new or refitted coal fired power stations, and 78% worse than new gas power stations.

• It makes no sense to promote this type of technology when there are better waste management options available. Incinerators that generate heat have similar efficiency to gas-fired plants – but only if the heat is really used.

• The best option in terms of climate and resources is to phase out residual waste, ensuring that all waste is reusable, recyclable or compostable.

• However, residual waste will continue to exist for some time, so must be dealt with. This research shows that one of the best options from a climate point of view is an MBT process that extracts both the metals and plastics with the stabilised residual going to landfill.

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The above recommendation is exactly what the WoE local authorities are going to follow for their municipal waste strategy – working on reduction and recycling, then using MBT with stabilised residue going to landfill. If this is best-practice for municipal waste, why should we settle for less when dealing with commercial and industrial waste?

The applicant has not undertaken a WRATE analysis because they have stated that they do not intend to burn Municipal Solid Waste (MSW). The Environment Agency states: "Municipal solid waste (MSW) is household waste and any commercial or industrial waste collected by the waste collection authority or its agents." Therefore if the applicant has not undertaken such an assessment then the use of the site must preclude any commercial waste being burnt from the MSW stream – and if they are taking pre-treated waste – presumably in the form of refuse derived fuel, or solid refuse fuel (or some other description on waste that has been pre-treated prior to being shipped in for burning), this must also not have originated from an MSW source.

In addition, without a WRATE analysis the applicant must offer information about the climate change/global warming impacts and carbon dioxide emissions in order for the planning authority to make an informed judgement of the impacts of this proposal.

Having failed to find a heat customer prior to applying for planning permission, the ERC plant will fall below optimum energy efficiency and low down in the hierarchy outlined in the Waste Incineration Directive and will fail to be eligible for ROCs – Renewables Obligation Credits.

Without this information the Planning Committee should not determine this application and we call upon the Committee to defer determination until the information has been provided and assessed and consulted upon.

4. SITA's plant will not maximise energy recovery from waste, and is very unlikely to deliver CHP (Combined Heat and Power).

By not having a heat customer lined-up at the outset for their waste heat, SITA are not maximising the energy recovery from the waste – as required by local planning policy set out in the South Gloucestershire Minerals and Waste Local Plan – policy No.41 . No heat recovery is proposed which moves their operation more towards the "disposal" end of the waste hierarchy. Reuse or recycling recovers far more energy from materials than burning them for electricity generation alone.

The waste hierarchy – as adopted in the Joint Waste Core Strategy – states that waste should be processed, in order of preference, by:

Waste prevention
Re-use
Recycling/composting
Energy recovery
Disposal

Using the heat from waste incineration is an essential part of the energy recovery process and as a result the Government has specifically excluded waste plants that do not use Combined Heat and Power systems from its Renewable Energy classification. SITA's exhibition stated that "Heat generated by the facility could also be exported to adjoining local industry." 'Could' is not good enough – a heat customer needs to be lined-up at the planning stage of the development.

Research shows that, currently, electricity-only incinerators produce 33% more fossil fuel derived CO_2 per unit energy generated than a gas fired power station. By 2020, with increases in recycling and improved technology, these incinerators will be almost as polluting in terms of CO_2 emissions as new or refitted coal fired power stations, and 78% worse than new gas power stations.

There is a poor history of retro-fitting CHP to EfW incinerators. Incinerator operators will say in applications that heat delivery is possible, but in practice, it is rarely delivered. It is worth noting the SELCHP – South East London CHP was built under just these circumstances and they have never secured a heat customer despite being in a very built up area of London.

Whilst we totally oppose this application, if the council is minded to approve it, it will be essential that really effective legal and financial measures are put in place to enable the cost-effective retrofitting of heat utilisation.

5. There is no local market for secondary aggregate.

SITA intend that the bottom ash generated through incineration will be processed into secondary aggregate for the road building. There is already a surplus of supply vs demand for such secondary aggregate, with only around 40% of currently-produced bottom ash finding a market in this way.

SITA do not plan to manufacture aggregate on site, so approximately 100,000 tpa of bottom ash will need to be transported from the site, for processing. SITA acknowledge that there will need to be monitoring of this ash to determine any hazardous content.

6. Treatment of hazardous waste.

SITA estimate that they will produce approximately 16,000 tpa of fly ash, which is classified as hazardous waste. This will be stored on site in silos, and then exported out of the region for disposal. The nearest suitable disposal sites are in Gloucestershire and Swindon. The Gloucestershire site's original PPC permit indicated that the site only had a hazardous waste lifetime until 2012. In addition they have a temporary dispensation in relation to their treatment of APCR (Air Pollution Control Residues – fly ash residues) as their process is unable to meet the EU Waste Acceptance Criteria.

The next nearest site is in Cheshire – and even if it were acceptable to export this toxic waste to the north of England, the Cheshire repository this is only a hazardous waste store, not a disposal site.

7. Cumulative effects of other proposed developments in the Avonmouth area.

SITA's application needs to be taken into consideration along with the cumulative impacts of other current applications in the area.

In terms of waste over-provision, the application needs to be considered alongside Viridor's application for a 500,000 tpa waste facility, including a 350,000 EfW by incineration plant to handle commercial and industrial waste, and MSW. The site proposed for this plant is just a little bit further along the Severn estuary, over the Bristol border.

In terms of transport impacts, the application needs to be considered alongside SITA's incinerator and New Earth Solutions' MBT plant.

In term of air pollution impacts, the application needs to be considered alongside Viridor's incinerator; two biomass power stations at the Royal Portbury Dock; and 4WB's application to build a power station fuelled by jatropha or palm oil. The biofuel power station will emit PM10 particulate pollution – as will the two incinerators. These plants are likely to have road traffic impacts, as even if all their fuel arrives by ship/pipeline, their residues will need to be taken away by road.

8. Adverse health impacts.

a) Increased risk at start-up and shut-down.
SITA's illustration and plans for their proposed plant, show a double burner system for the incinerator. This allows the operator greater flexibility over the amount of waste being burned at any one time, because they can run one or both burners. However, the implication of running this system, is that one or both burners will be shut down and started-up more often. It is at start-up and shut-down that the greatest levels of pollution are released – when the incinerator is not burning at optimal efficiency. Pollutants released that are hazardous to health include PM10s and dioxins. It should be remembered that even if the waste input into the system is relatively safe, then incineration will render some of it hazardous.

b) Radioactive waste.
Many incinerators end up with authorisations to burn 'low level' radioactive waste. But radiation cannot be burnt so particles fly downwind of the stacks, potentially harming peoples' health. The Avonmouth to Oldbury coastal strip has high levels of breast cancer already, possibly due to outpourings from Oldbury into the Severn. 51% extra breast cancer mortality was found within a 5 km strip from Avonmouth to the Upper Severn Bridge by Dr (now Professor) Chris Busby in a 2001 study, using Office of National Statistics figures. With the proposed new nuclear power stations at Oldbury and Hinkley, SITA's plant will add to the health risks of living in the WoE area.

9. Increased road transport.

We acknowledge that SITA have made some efforts to look into using rail transport to and from the site. However, using these rail links effectively, relies upon negotiating time on Network Rail's lines for night-time delivery to the incinerator, and on transporting into and out of the site via waste railheads at Westerleigh, S.Gloucs; Barrow Road, Bristol; and Westmoreland Road, Bath. It seems unlikely that all the 400,000 tpa waste per year coming into the site, could be accommodated via these routes – and if waste is imported into our area, then there will be some additional vehicle movements delivering to these railheads. And, it seems unlikely that all the 16,000 tpa fly ash and 100,000 tpa bottom ash can be transported away from the site by rail, and direct to their ultimate destinations. The plant will generate additional road traffic. This is acknowledged in the officer's site visit report: "It is proposed that the facility would potentially

operate and treat waste 24 hours a day, the thermal process itself will be continuous. It is anticipated that there would be approximately 158 deliveries of waste per day. In addition to this other vehicle movements would be necessary for the operation of the site including deliveries of non-waste product necessary to facilitate the process and removals of ash. These are likely to amount to an additional 22 trips per day."

10. Protected species: Proximity to a Ramsar site on the Severn Estuary.

Ramsar sites are recognised under the Ramsar Convention on Wetlands of International Importance – especially as key waterfowl habitats. The old Sevalco site is close to a Ramsar site on the Severn Estuary, which itself is recognised under the EU directive on the Conservation of Wild Birds as an SPA (Special Protection Area). The rain-out rates for pollution at Avonmouth, are already higher than regulations permit. Any new developments in the area that add to that pollution will obviously impact upon protected wildlife areas, and will need to demonstrate that their emissions will not exceed 1% of the permissible load.

11. Flood risk.

The proposed site for the ERC by incineration plant is in the flood zone. Planning guidelines suggest that this is suitable for waste treatment facilities, but not for hazardous waste plants. As we have already mentioned, SITA have not given adequate details of how they will deal with hazardous fly ash. The Environment Agency notes that some incinerator bottom ash (IBA) will be hazardous and each EfW/ERC will need to test and report on the Incinerator Bottom Ash content. Given that this is planned to handle a large proportion of commercial waste, and 'pre-treated' waste – there will be a greater likelihood of this being hazardous after burning. Applying the precautionary principle must be paramount and the intention to store toxic fly ash on site is untenable in a flood plain.

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