

Volume 1, Issue 2
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What we do:

- Permitting, Planning and commissioning EfW plants
- Inspection and facilities improvement
- Design and commissioning waste processing plant
- Air monitoring
- Performance tests
- Due diligence
- Waste minimisation
- Energy auditing
- Environmental auditing
- Environmental Management Systems
- Sustainability
- Legislation

Inside this issue:

- | | |
|---|-----|
| Operational performances review of waste facility in Angola | p.1 |
| Assistance with shutdown supervision - Major EfW UK | p.1 |
| Clinical Waste Incineration Audit - Veolia Tyseley UK | p.2 |
| Phase I Environmental Audit in West London | p.2 |
| Bulletin | p.2 |

Waste Technology & Process Division

Operational performances review of waste facility in Angola

A major oil producer operates oil and gas exploration and production activities in a number of blocks offshore Angola. During routine operations a range of non-hazardous and hazardous wastes are generated both offshore and onshore that need to be managed in accordance with Angolan and international law and best practice. The company uses a third party to dispose of the majority of its waste, both hazardous and non-hazardous, and its duty of care to manage waste so that it poses no harmful risk to humans or the environment triggered the review.

Due to the technical specialism required to fully understand incineration technology and current best practice landfill management, the company commissioned a team of waste treatment experts including *WISenvironmental* to provide technical assistance in order to fully carry out this duty of care review.

The reviewing team undertook a number of facility visits during the trip to Luanda in August 2010. The

site visits included general discussions with key personnel to provide a background and a technical overview of the operations, as well as detailed site walkover to assess operations.

It was considered that the incinerator was well run by technically competent staff. The three thermal desorption units were found to be well managed and so was the landfill which was found to be generally tidy and well managed. The team was generally pleased by the efforts made by all facility personnel to operate to good standards in all sectors but concluded nevertheless that standards achieved still fell short of current EU best practice.



Assistance with shutdown supervision - major EfW plant UK

WISenvironmental was contracted in June by a major international plant engineering and construction company to supervise the boiler cleaning and scaffolding aspects of the first yearly shutdown of one of three boilers at an EfW plant in the UK. *WISenvironmental* engineers spent up to sixteen hours a day to plan and coordinate the different contractors' actions.

A number of complementary methods were employed in order to complete the cleaning: high air flow vacuumation, manual cleaning, grit blasting and coarse cleaning with jack hammers and vibrating pokers. Controlled

detonations by KRR (UK) Ltd preceded the clean to reduce the risk of large ash deposits falling on personnel. In addition an air extraction system was used to ventilate, filter and collect the dust generated by the clean and thereby creating a safe working environment.

Typically, the project was delayed by unplanned factors. The major issue was the extent to which the plant fouled which was much higher than initially expected. However, *WISenvironmental* ensured the plant was clean and safe for the maintenance work to be carried out and stoppage time was minimised.

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Environmental Management & Compliance Division

Clinical Waste Incineration Audit - Veolia Environmental Services Birmingham

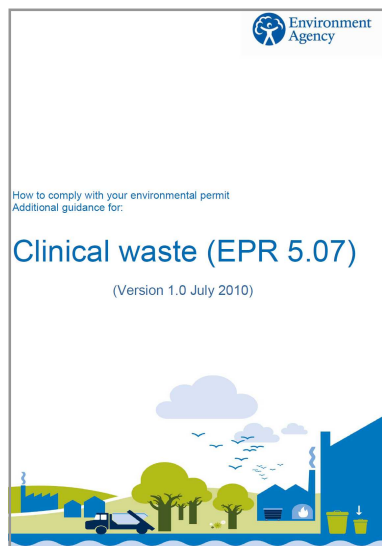
The WISenvironmental team was commissioned by Veolia Environmental Services in the last quarter of 2010 to carry out an audit of the clinical waste incineration operations at the Tyseley energy-from-waste facility at Tyseley, Birmingham. The instruction followed the delayed publication in July 2010 of the Environment Agency guidance *EPR5.07 Clinical Waste, part of the 'How to Comply with your Environmental Permit'* series and followed on from the need for VES to determine the level of compliance of current activities in relation to the 'appropriate measures' identified in the guidance. WISenvironmental audited and reported on the following activities:

- Measures undertaken pre-acceptance and upon delivery of the waste to the site;
- Measures for waste storage and handling;
- Measures for the control of emissions to air, surface water and sewer

The audit was carried out during a four-day period of assessment during which, by processes of observation, examination of documents and from interviews, two senior auditors collected the information necessary to verify that operational controls conformed with permit and 'appropriate measures' requirements or to identify 'findings' where operational controls were not in conformity. A

plan to implement corrective actions has been drawn up on site.

The audit concluded that a satisfactory standard of operation is taking place on site although the publication of the new guidance will require changes to current practice. Permit compliance assessment reports from routine site inspections and audits carried out by Environment Agency inspectors and examined as part of the audit confirm that there is no evidence of historical permit non-compliance related to the incinerator operations and no permit conditions have been breached.



Successful outcome for Phase I Environmental Impact Assessment - Office building, London

WISenvironmental Environmental Management & Compliance Division was commissioned by a firm of architects in West London to carry out a Phase 1 Environmental Site Assessment (Phase 1 Audit) to support the application for planning permission to the local planning authority to change the use of the premises from offices to residential. The audit was recommended by Land Quality Officer at the local authority, the London Borough of Hounslow since there was evidence of former light industrial use held in their records. It was

requested that a full contaminated land condition report was prepared for the site.

The detailed examination of all available evidence led to the conclusion that nothing could suggest that the property is contaminated as a result of former uses. There was insufficient evidence of impact to recommend carrying out a Phase II ESA (intrusive site investigation). The findings of the study have been accepted by the local authority and the application is proceeding satisfactorily.

Bulletin:

Installation of Solar Panels – WISenvironmental's offices

At the beginning of August 2010, following the removal and replacement of the pre-existing asbestos cement roof at our offices in Loseley Park, six square meters of solar panels were installed. Until November the solar panels have provided the total heat and hot water required by the office building. In the winter, they will complete the energy input to heating the office building supplied by the biomass boiler. Both these developments demonstrate our commitment to sustainable practices in the management of our own facilities and to the reduction in the size of our business's carbon footprint.

Monitoring of Economiser performances - major EfW plant UK—Update

In the previous issue we informed you that WISenvironmental had been asked to monitor boiler performances at a UK energy-from-waste facility on behalf of our partner company KRR (UK) Ltd. The monitoring exercise was deemed a success and has resulted in the avoidance of costly shut-downs for our client. Interest in using our services has grown and a similar plant is now using this approach. Through real time access and interpretation of data for key parameters such as flue gas temperatures and boiler pressure drops the service can indicate when the boiler is not operating efficiently and when cleaning is required.

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