

# Site Visit Report

The site visit process is a sample on a particular day of an installation's compliance with some of its licence conditions. Where non-compliance against a particular condition has not been reported, this should not be construed to mean that there is full compliance with that condition of the licence.

Instructions and actions arising from the visit shall be addressed, or where applicable noted, by the licensee in order to ensure compliance, to improve the environmental performance of the installation and to provide clarification on certain issues.

The licensee shall take the actions specified to close out the non-compliances and observations raised in this Site Visit Report.

Licensee	
<b>Name of Installation</b>	Dublin Waste to Energy
<b>Licensee</b>	Dublin Waste to Energy Limited
<b>Licence Register No.</b>	W0232-01
<b>CRO Number</b>	399060
<b>Site Address</b>	Pigeon House Road, Poolbeg Peninsula, Dublin 4, Dublin
<b>Site Visit Reference No.</b>	SV15396

Report Detail	
<b>Issue Date</b>	10/04/2018
<b>Prepared By</b>	Simon Buckley

Site Visit Detail					
<b>Date Of Inspection</b>	06/03/2018	<b>Announced</b>	No		
<b>Time In</b>	11:25	<b>Time Out</b>	16:40		
<b>Agency Personnel On Site</b>	Thomas Sexton Simon Buckley				
<b>Licensee Personnel and Role</b>	Tomas C. Eriksen, Director of Operations Donal Fanning, Chief Operations Manager Mark Heffernan, Environmental Manager John Comey, Shift Supervisor Connor Murphy, Auxiliary Operator.				
<b>Photo Taken</b>	No	<b>Samples Taken</b>	No	<b>Video Taken</b>	No
<b>Odour Assessment</b>	No				

## > Scope

The site visit was carried out to inspect and evaluate records in relation to incident reference number INCI013973 concerning failure to maintain a combustion temperature of 850°Celsius (C) or greater. The purpose of this report is to present the findings of the site visit.

## > Media

The following media was inspected at the time of the site visit:

- Air.

## > Site Areas Inspected

The following area was inspected at the time of the site visit:

- Control room.

## > Documents Inspected

The following records were evaluated at the time of the site visit:

- Condition 2.3.2.7: Temperature trend record for incinerator line 2, dated 02/03/2018
- Condition 2.3.2.7: Ram feeder position record for incinerator line 2, dated 02/03/2018
- Condition 2.3.2.7: Burner logs for incinerator line 2, dated 02/03/2018
- Condition 2.3.2.7: Auxiliary fan volumetric flow record for incinerator line 2, dated 02/03/2018
- Condition 3.4.2: Closed-circuit television (CCTV) footage from the Line 2 combustion chamber, at approximately 04:00hrs, dated 02/03/2018
- Condition 6.1 and Schedule C: Process control records for air pollution control equipment, dated 02/03/2018.

The following documents were inspected at the time of the site visit:

- Condition 5.1 and Schedule B.1: Continuous emissions monitoring system (CEMS) data for emissions to air at emission point Ref. No. A2-2 (incinerator line 2), dated 02/03/2018
- Condition 9.2: Emergency Response Procedure
- Condition 9.3: Incident event log for incident Ref. No. INCI013973
- Condition 9.3 and 11.3.6: EDEN incident notification record Ref. No. INCI013973.



## 1. Site Specific Issues

1.1

	Answer	Condition Number	Non Compliance	Observation
Incident Ref. No. INCI013973 (loss of combustion temperature)	Checked	9.3, 11.1		Yes
<b>Comment / Corrective Action</b>				
<p>On 02/03/2018 a Dublin Waste To Energy Limited (DWtE) representative notified the EPA by telephone at 08.50 that the combustion chamber on line 2 decreased below 850°Celsius (C). On 02/03/2018, the EPA received a complaint (Ref. No. COM07140) from the Irish Town Residents Association concerning chemical and wastewater (WWTP) odour and alleged that the chemical odour originated from DWtE. The EPA contacted DWtE (Control Room Shift Supervisor and Environmental Manager) at 12.36 and 13.12, respectively, by telephone. DWtE subsequently submitted incident report Ref. No. INCI013973 at 15.46 through LEMA.</p> <p>During the site visit on 06/03/2018 EPA personnel evaluated records associated with incident Ref. No. INCI013973. The records indicated that on 02/03/2018 at approximately 01:47 the temperature of the combustion chamber on line 2 decreased below 850°C or greater. Records also showed that the auxiliary burner was not switched on automatically to maintain the required temperature of 850°C or greater while waste was in the combustion chamber.</p> <p>A power interruption was confirmed by DWtE as the likely cause of the incident. An off-site emergency resulted in the interruption of the supply of electricity to the site from the national grid. The licensee outlined that the diesel back-up generators for the installation switched on automatically 3 minutes after the start of the power interruption.</p> <p>It was confirmed by DWtE that the purpose of the diesel back-up generators was limited to sustaining key equipment for the protection of the installation. The diesel back-up generators do not provide for the active operation and control of the flue gas abatement equipment.</p> <p>Review of the process control records for flue gas abatement system showed that the operation and control of abatement equipment was limited to the wet scrubber abatement unit. The bag house filter provided a level of abatement as the auxiliary fan drew a reduced flow of flue gas through the abatement system.</p> <p>On 02/03/2018 at 11:25 the Electricity Supply Board Networks notified DWtE that the electricity supply was restored. At 12:10 the installation resynchronised to the national grid and the emergency diesel generators were switched off. Auxiliary burners were switched on at 16:55 and at 19:10 approximately 17 hours 23 minutes after the incident was first noticed, the temperature in combustion chamber Line 2 increased to 850°C or greater.</p> <p><b>Corrective Action</b></p> <p>DWtE shall update the EDEN incident notification record Ref. No. INCI013973 with the relevant information required in accordance with condition 9.3 (a) to (f) of the licence. In particular, DWtE shall include measures to avoid reoccurrence of the incident and put in place any other appropriate remedial action.</p>				

1.2

	Answer	Condition Number	Non Compliance	Observation
Failure to control the combustion process	Checked	3.18.5	Yes	
<b>Comment / Corrective Action</b>				
<p>On 02/03/2018 at approximately 01:47 the licensee failed to operate the incineration plant in such a way that after the last injection of combustion air, the gas resulting from the process was raised, in a controlled and homogeneous fashion, for a duration of two seconds to a temperature of 850°C or greater.</p> <p><b>Corrective Action</b></p> <p>The licensee shall comply with condition 3.18.5 of the licence.</p>				

1.3

	Answer	Condition Number	Non Compliance	Observation
Failure to maintain combustion temperature using auxiliary burners	Checked	3.18.6	Yes	
<b>Comment / Corrective Action</b>				
On 02/03/2018 at approximately 01:47 the licensee failed to automatically switch on the auxiliary burner in order to ensure that a temperature of 850°C or greater was maintained at all times as long as unburned waste was in the combustion chamber.				
<b>Corrective Action</b>				
The licensee shall comply with condition 3.18.6 of the licence.				

1.4

	Answer	Condition Number	Non Compliance	Observation
Emergency Response Procedure (ERP)	Checked	9.2		Yes
<b>Comment / Corrective Action</b>				
The ERP dated 25/04/2017 (Ref. No. LR028158), agreed by the EPA on 19/05/2017 and amended thereafter by DWtE on 31/01/2018 (Ref. No. LRO33172), was evaluated during the site visit and the following 2 points were noted:				
<ol style="list-style-type: none"> <li>ERP risk identification and analysis was considered having regard to the three incidents that occurred between January and March 2018 that resulted from power interruptions (Ref. Nos. INCI013788, INCI13960 and INCI013973 refers). Risk identification No. 8.6 of the ERP relates to power failure and the resultant effect on the flue gas abatement system. Power failure was assessed in terms of likelihood and consequence of occurrence. The methodology applied a scale of 1 to 5 for both likelihood and consequence. The selection and multiplication of the numbers resulted in '1'. The very low likelihood of a power interruption and trivial consequence is under evaluated</li> <li>The ERP as revised was limited to local industrial activities contact details. The ERP does not satisfy the requirement to develop appropriate responses to off-site emergency situations that may have implications for the operation of DWtE's site.</li> </ol>				
<b>Corrective Action</b>				
The licensee shall:				
<ol style="list-style-type: none"> <li>Review the risk identification No. 8.6 of the ERP in light of the incidents and amend the likelihood and consequence of occurrence accordingly</li> <li>Identify off-site emergency situations that may have implications for the safe operation of the licensee's site and develop appropriate responses. Response shall include both control/mitigation and communication. The licensee shall have regard to 2.3.2.8 concerning effective communication of emergencies that may result in off-site environmental and health impacts</li> <li>Submit a revised ERP that addresses points 1 and 2 within month of receipt of this report as a site update notification/response to EPA report on EDEN.</li> </ol>				

2 non-compliances were recorded concerning failure to maintain combustion temperature and failure to automatically switch on auxiliary burners on 02/03/2018 during incident Ref. No. INCI013973.

DWtE did not have appropriate control/mitigation measures in place and ensure the flue gas abatement system remained fully operational during power interruption. The incident (Ref. No. INCI013973) remains under review.

## **FOLLOW-UP ACTIONS**

You are required to complete the instructions and actions, as outlined in this report, within the specified timeframe. Where required, you shall respond to actions specified in Compliance Investigations within the required timeframe. The licensee shall maintain documentary evidence, for review by the EPA, that the prescribed corrective actions were completed within the required timeframe.

### **(i) Compliance Investigations**

You are not required to respond directly to items contained in this EPA site visit report; where an issue requires a direct response, the EPA will generate a Compliance Investigation through the EDEN system. You will receive notification when a Compliance Investigation instruction or action is generated.

### **(ii) Publication of reports and licensee response.**

Please note that this Site Visit Report will be made available for public viewing via the EPA's Licence Enforcement Access Portal within one day of the issue date and will be published on the Licence Details Page of the EPA's website, [www.epa.ie](http://www.epa.ie), that relates to your licence 60 calendar days after the issue date.

You may if you choose submit, within 45 calendar days of the issue date of this Site Visit Report, a Licensee Public Response that will be published alongside the Site Visit Report. This Response, should you wish to avail of it, provides you with an opportunity to inform the public about how you are implementing the actions set out in the report, activities underway, timescales and target completion dates. Please be aware that the content of your Licensee Public Response must be factual and should not breach the EPAs stated online publication standards.

If you wish to submit a Licensee Public Response to an EPA Site Visit Report, you should do this by clicking on the 'Make a Response' link on the Site Visits page in EDEN. A .pdf document containing your response can be attached and submitted from here.

### **(iii) Response to Site visit report**

Where you do wish to respond directly to a site visit report, you should do this by generating a 'Licensee Return' of the type 'Site Updates/Notifications' and the sub-type 'Response to EPA Report' in EDEN.

Please note that you are required to comply with the conditions of your licence at all times, and where noncompliance occurs you must restore compliance within the shortest possible time. These actions will be verified during subsequent EPA visits.

Please quote the above Inspection Reference Number in any future correspondence in relation to this Report.