Rookery South CLP Meeting 19 Notes

Monday 18th October 2021 – 6.30 pm, Rookery South offices

Present :

CLP Members – Representatives from Houghton Conquest PC; Marston Moretaine PC; Millbrook PM; Wootton PC; Lidlington Resident; Stewartby PC; Cllr Sue Clark

Observers/Presenters – <u>Rookery South Ltd</u>: Judith Harper, Neil Grimstone; Covanta <u>Energy Ltd</u>: Andy Leonard, Roy Griffin, Mark Heffernan; <u>Environment Agency</u>: Neil Goudie (via Zoom); <u>CBC</u>: Roy Romans.

Facilitator: Bob Fisher (rmpfisher77@gmail.com)

Apologies for Absence: Cllr Tim Hill, Jon Shortland (BBC); Emma d'Avilar (EA); Anita Taylor (CBC); Lyn Lyman, John Symonds (CLP).

NOTES FROM THE MEETING

1. Introductions, CLP Ground rules & Apologies

The introductions included new representatives from Covanta: Andy Leonard, Director of Regional Operations (Europe) responsible for operations at Rookery South and all other European facilities including Dublin EfW; Roy Griffin, new Facility Manager (formerly Facility Manager at Viridor Runcorn EfW with more than 20 years' experience in the Waste industry and an ex-submariner in the Royal Navy; and Mark Heffernan, Environmental Manager for Covanta Europe.

2. Approval of Notes from Meeting 18

The notes from Meeting 18 were approved without any amendments.

3. Matters Arising, Q & A

BF had previously circulated responses to queries from Marston Moretaine PC (attached).

- **Q: Wootton PC** asked who would control [plant] traffic that is outside the control of Veolia. CBC noted that there is a section 106 agreement in place, that penalties could and should be imposed by Covanta for any breaches, and that breaches should be reported to the Local Authority directly to either Roy Romans or Anita Taylor, with as much detail as possible i.e. registration number, day, and time of the offence. CCTV is in place at the site entrance on Green Lane historic data can be viewed. Waste collection vehicles not on a collection round should be reported.
- HGVs going to Veolia's depot at Stewartby Landfill were not subject to the requirements
- **Q: Wootton PC** asked whether this relied on public reporting. CBC said that the LA was happy for the public to report breaches, but that it would also rely on historical CCTV footage to view traffic coming in and out of the plant. **Marston Moretaine** added there was concern about ordinary refuse vehicles from Flitwick, for example coming down the back lanes through Millbrook and Lidlington.
- NG added that the main deliveries were from Sherwood, Veolia and their contractors.
- **Q: Sue Clark** asked whether the processes responsible for odours during the early summer had finished, and **Lidlington Resident** asked if they should be seeing smoke. Covanta confirmed that early commissioning had finished and that no smoke

is produced, only steam from the stack which condenses on meeting cooler air when it emerges.

4. Site Updates

RSL presented slides (2 & 3, attached) with details covering

- Current Commissioning Activity;
- Outstanding works to be completed in Q4;
- Community Programmes and
- Other Activities.

RSL reported that the plant is now running flat out, generating some 58MW that afternoon. Each line is burning 20 tonnes (equivalent to one truck load of waste) each hour. A performance test will be run in Quarter 4 of 2021; if it goes well the plant will then be handed over from Hitachi (HZI) to RSL.

RSL has been working with designers (*Easy Tiger*) regarding the Visitor Centre. The General Manager asked if anyone would be interested in contributing ideas towards what they would like to see in the Visitor Centre [Contact Neil Grimstone direct]. The Visitor Centre should be completed by Q2 next year. Also there are 5 vacancies still to fill, advertised on the Covanta website (<u>www.covanta.com</u>), including the post of Education Officer. RSL is still lobbying E-W Rail to retain the level crossing for the exclusive use HGVs arriving and departing from the EfW facility.

- **Q: Lidlington res**. Asked about the circumstances regarding bridleways. RSL responded that the nature of the paths is designated by the DCO (Development Consent Order) planning consent and cannot be changed. The Local Authority confirmed that it is unlikely that they would prosecute for riders using the footpaths and that anyone can apply to the Council Rights of Way officers for the paths to be upgraded. It was acknowledged that this can take some time.
- **Q: Lidlington res**. Asked how the CEI will be paid. RSL said that GrantScape will confirm registered persons' details and pay the money direct; it will not come off the electricity bill. £100 first payment as it includes a half year for 2021; £66 (indexed) thereafter.

5. Emissions Data

It was noted that RSL is obliged to publish the emissions data and to consult the CLP about how it is done, noting that there is no obligation to provide real time data. This is the start of that consultation. RSL presented a slide (4, attached) with the proposals. A discussion followed.

- **Q: Sue Clark** considered that people would like to drill down into more detail and that it is better to demonstrate transparency, which would in turn help the company to create a positive impression.
- In response to a **Wootton PC** question, RSL confirmed that the emissions were measured within the stack and that NOx levels were after the flue gas treatment process within which ammonia is used to break down the Nitrogen Oxides to form Nitrogen and water, staying below the limit.
- **Q: Houghton Conquest PC** considered that people are more interested in when and how often the limit is exceeded rather than the average level of emissions and

how many times it would need to be exceeded before the Environment Agency (EA) take action.

- **EA** responded that the data details for publication is up to the public, but that the EA will report any exceedances at the CLP meeting and is answerable to the public to validate information and investigate the cause of any breaches. It would be very unusual to have live data online. The EA report would include narrative about any enforcement response. But a display should be in a format that can be understood.
- **Q: Lidlington res.** asked if the emissions were dangerous to health and could they be lower than just below the limit. **Covanta** responded that there is a balance between resource consumption and plant efficiency. **EA** added that the permit would not have been issued had there been any likelihood of causing a risk to health.
- **Covanta** proposed that they circulate schedule 4 of the Environmental permit with the minutes as this is a public document and provides details of the parameters that must be reported, with frequency.
- **The Local Authority** proposed that RSL should put together a scheme for display of emissions data, explained against other monitoring data, and send it to all CLP members for an opportunity to reflect and comment before the final scheme is decided upon.
- **Q: Houghton Conquest PC** was happy for limited data with average figures to be displayed if the CLP is kept informed of breaches
- **The EA** would expect to make the first quarterly report available as soon as the plant is out of commissioning, so probably next meeting. NB reports would lag by 1 month as they are produced within 28 days of the reporting period.

6. Regulator Update – EA

The EA presented a report summarised on a slide (5, attached).

The plant is in commissioning but if there are any exceedances they are still assessed as non-compliances, but the enforcement response would be dictated by those activities. Rookery South ERF is well below the permit levels. There have been 6 odour reports, some of which could not be attributed to the EfW facility; Covanta has responded pro-actively taking appropriate action although some reports were unsubstantiated by evidence.

The EA will carry out operator monitoring in the next quarter/half year. They assess quality control aspects of all the monitoring – emissions to air, water, the standard of the equipment the management systems, any contractors that have come in to do any sort of calibration tests, and any day-to-day, monitoring and maintenance done by the company itself.

- **Sue Clark** asked if six reports of odour was a lot or not very many, based on evidence that, whilst many people complain on Facebook, few report issues formally. There is a lot of education to be done. The EA considered it was average for a new plant.
- There followed some discussions, the outcome of which was that **Stewartby PC** and **Marston Moretaine PC** will publish details of where to send complaints in their next newsletters. The RSL General Manager also responds to complaints that come via the Rookery South website. Covanta emphasised that details of when and where were important in order to check against the plant's operational status and weather conditions at that time.

7. Regulator Update – Local Authority

The Planning Authority gave a verbal report:

Once hot commissioning is finished, and the plant is operated commercially there are various things that need to be in place by that timetable. The LPA job is to look at the DCO and s.106 as regards the pre-completion activities. The LPA visited the site 15/10/21 and was basically happy with what they saw; in the next few months all the hard landscaping will be carried out. They will be checking that it is in accordance with the scheme.

The LPA noted that Millbrook Power has a DCO [in Rookery South pit]; construction is due to begin in second quarter of 2022 and they will be using the Green Lane Access Road. The LPA proposed that Millbrook Power could have a slot at this CLP meeting as all are keen to learn from the ERF development. It will be a major construction project but its impact once in operation will be low.

- CLP members were broadly in favour of not having to have a separate meeting with Millbrook Power
- Millbrook PM was concerned about traffic issues since people associated the name with Millbrook and might result in more misdirected vehicles.
- Covanta asked if Millbrook Power has its own s.106 requirement for a CLP. The LPA will check this

8. AOB

Houghton Conquest PC asked if the CLP would be meeting at Rookery South ERF regularly. If so, would visitor forms be required each time? RSL said the meetings would be at the ERF. Covanta said that it was whatever the code of practice would be for safety and security.

The date of the next meeting was proposed as **Monday 17th January, 6:30pm at Rookery South Offices**.

The meeting was concluded and followed by a limited 'tour' to see the Visitor Centre (prior to fit out) and the Control Room – with views of the waste bunker.

It was noted that visits to the plant by the wider community might be available from early next year.

Rookery South ERF - Community Liaison Panel AGENDA – Monday October 18th 2021 RSL Visitor Centre

- Introductions/Group ground rules and apologies (5 mins BF)
- Approval of notes from previous CLP Meeting (5 mins BF)
- Matters arising from last meeting including previous Q&A & Smoke/Odour Issues (20 mins - BF)
- Site Updates: (15 mins –NG)
- Construction
- Operation
- Transport
- Questions (10 mins)
- Emissions Data
- Regulator and Local Authority Feedback (10 mins)
- Environment Agency
- Planning
- Questions and Answers (15 mins)
- Update on Community Trust Fund (DS 5 mins)
- AOB (5 mins)
- Date & Items for next meeting Proposed date 17th January 2022





Community Liaison Panel



Plant view 20th September 2021

Rookery South ERF – Community Liaison Panel – 18th October 2021 Project Update



	AUGUST	SEPTEMBER	POST COD
WASTE (tonnes)	15,300	12,600	c 46,000
POWER (MWh)	-	-	40,000

Waste Sources in Commercial Operation

- Veolia Municipal Contracts (Central Beds, BBC, Norfolk)
- Veolia Commercial & Industrial waste
- Bedfordshire-based independent waste company
- Leading national aggregator

Waste source locations (approximate)

- Beds, NE Herts, E Bucks, S Northants 45%
- Norfolk 30%
- Elsewhere 25%

Current Commissioning Activity

- All 3 incineration lines running regularly
- Turbine/generator synchronised to the grid (power exported)
- Preparing for performance test in Q4 ahead of take over in Q1

Outstanding works to be completed in Q4

- Landscaping around EfW facility
- Clearance of surplus materials

Community Programmes

- Community Trust Fund (£190k in 2022)
- Marston Vale Trust contribution (£320k to be paid Q4/2021)
- Community Energy Initiative c. £100/household payable in Q2/2022
- Upgrade Footpaths/Cycle routes in North part of pit (Q1/2022)

Other Activities

- Visitor Centre definition/staffing/fit out
- District heating project: Vital Energi engaged
- Emissions data publication (for approval by Councils; CLP consulted)
- Recruitment
- Stewartby level crossing



Covanta Dublin - 2019 Facility Performance

Emissions Data Proposals

How Do Our Emissions Compare to Other Sources in the Country? Local air emissions* in Ireland



✓ In 2019, the facility was 99.65% compliant with CEMS emissions standards

* Based on Ireland's 2019 Informative Inventory Report (IIR) and Nomenclature for Reporting (NFR) tables. The IIR and NFR detail emissions for years 1990-2017. Where available, the facility's 2017 emissions were replaced with the reported 2019 emissions.





Regulatory update



- Commissioning is progressing well and in line with the plan agreed with the Environment Agency.
- The site remains in compliance with the plan and the environmental permit.
- No emission limit breaches have been recorded.
- Reporting to the Environment Agency of permit conditions has been on time and satisfactory.
- There have been 6 odour reports from the public.
- The company has responded proactively to these reports and has taken appropriate action in each case.
- An inspection will be carried out in the next quarter and reported back at the next meeting.

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Proposal to Display Rookery South Emissions Data

1. Introduction

- Under the Section 106 requirements for Rookery South, Clause 7 states that "Throughout the Operation Period the Emissions Data ...and Environmental Permit Data shall be displayed... within the Visitor Centre and on the Website."
- Furthermore Clause 7.2.2 says that the Owner and/or Covanta will consult with the CLP as to the most helpful way of displaying the Emissions Data.
- This proposal continues the consultation with the CLP and the Council on the form in which Rookery South Limited (RSL) and Covanta will display the information.

2. Information to be published on the Website (https://www.rookerysouth.co.uk/)

The current information already displayed on the Rookery South website explains the emissions control and cleaning processes here Emissions Information - Covanta (rookerysouth.co.uk). Rookery South Web pages will be amended to provide Emissions Data as follows:

State-of-the-art emissions control technologies

Boiler Design:

The Rookery South ERF is designed with a very high efficiency combustion system to minimise formation of dioxins and ensure complete combustion, recovering over 60 MW of electricity for export to the grid and generating minimal emissions. The process uses a multistage flue gas treatment system to remove pollutants.

The emissions from the stack comprise a large proportion of water (natural moisture from the waste) driven off as steam. When the outside air temperature is cold, as in winter, the steam will condense into water vapour and appear as a white plume. This is perfectly normal.

Rookery South must comply with emissions limits values (ELVs) for a range of substances set out in the Environmental Permit issued and monitored by the Environment Agency. Sampling and monitoring is carried out by an independent third party on a quarterly basis and reported to the Environment Agency. A copy of the quarterly report can be found <u>here</u>.

The Environmental Permit also requires continuous emissions monitoring of a more select range of substances. Emissions are measured automatically and continuously (every 3 seconds) within the stack downstream of the flue gas treatment process; 30 minute averages and daily average values are recorded.







*% of ELVs	Limit (½ hour average)	Limit (Daily average)
10%	150 mg/m ³	50 mg/m ³
20%	200 mg/m ³	50 mg/m ³
20%	400 mg/m ³	200 mg/m ³
30%	30 mg/m ³	10 mg/m ³
30%	20 mg/m ³	10 mg/m ³
40%	60 mg/m ³	10 mg/m ³
	*% of ELVs 10% 20% 30% 30% 40%	*% of Limit ELVs (½ hour average) 10% 150 mg/m³ 20% 200 mg/m³ 20% 400 mg/m³ 30% 30 mg/m³ 30% 20 mg/m³ 40% 60 mg/m³

limit value shall not exceed the following percentages of the emission limit values:

The graphs below represent the average half hour and daily emissions calculated at Rookery South recorded for the month in question as a percentage of the emission limit value allowed within the Permit. The data presented on these graphs covers periods of normal operation only.









How we manage the emissions

Nitrogen Oxides (NOx):

Ammonia is injected into the furnace via a selective non-catalytic reduction (SNCR) system to chemically convert NOx into gaseous nitrogen, a harmless gas that makes up the majority of our atmosphere, and water.

Mercury and Dioxins:

After leaving the boiler, combustion gases travel through an extensive air pollution control system. Activated carbon is added to the flue gas stream as it exits the boiler. Gaseous phase contaminants such as Mercury and dioxins adsorb to the surface of the carbon so can be removed downstream in the baghouse filter.

Acid gases:

Acid gases, including Sulphur Dioxide and Hydrochloric Acid, are neutralised by injecting lime into the flue gases, removing more than 95 percent of these acid gases.





Particulates:

Operating like a very efficient vacuum cleaner, the baghouse removes 99.5 % of the particulate matter from the combustion gases. As air is drawn through the baghouse, particulate matter and fly ash are caught on the surface of the bags. Periodically, the bags are cleaned by temporarily reversing the airflow or, in other designs, pulsing the bags with a strong jet of air. The particulates and fly ash are removed from the bottom of the filter and stored for removal from site.

3. Information to be Displayed in the Visitor Centre

It is proposed to display live data in the Visitor Centre in the same format which is currently displayed in the Control Room as part of the plant management function.

This display shows a continuous trace of the emissions as they are recorded at 30 second intervals plus 10 minute, 30 minute and daily averages.

Explanatory text to be provided:

A continuous emissions monitoring system (CEMS) is used to measure and record emissions at Rookery South ERF.

Exhaust gas sample probes sample each emission in order for its concentration to be analysed.

This information automatically updates on the plant control system and is recorded in a dedicated (read only) data acquisition system. CEMS data is displayed live in the facility Control Room where it is monitored by the Covanta Operations team. This data will be relayed to a display in the Visitor Centre for information purposes as close to real time as possible.

The data will not have undergone final verification or have been reported to the Environment Agency when displayed and therefore should not be used in published documents. Final verification and quality control procedures are undertaken on a regular basis and data are stored on the Control Room's master log for regulatory purposes.

For the first year of operation, periodic extractive sampling from the flue gas ducting is carried out on a quarterly basis by a United Kingdom Accreditation Service (UKAS) certified independent contractor. After the first year, the sampling is carried out every 6 months. The results are reported to the Environment Agency.

The graphical representation [link here] shows the ½ hourly averages from the continuous monitoring of particulates, Total Organic Carbon, Hydrogen Chloride, Carbon Monoxide, Sulphur Dioxide and Oxides of Nitrogen emitted from each incineration line. The measured values and emission limit values are described in mg/Nm³.

These values have been standardised to the following conditions in accordance with the license: standard temperature and pressure, 11% oxygen.





Example of the Display



4. Note to Community Liaison Panel

The Environment Agency assesses quality control aspects of all the monitoring – emissions to air, water, the standard of the equipment and the management systems. It has undertaken to present a quarterly report to the CLP including a narrative and explanation of any exceedances and enforcement action taken. Reports would lag by 1 month as they are produced within 28 days of the reporting period.

For reference, the obligations of Rookery South Limited with regard to the display of emissions are set out below:

Extract from s.106 Agreement Dated 08 July 2011

1. Definitions

"Emissions Data" means data on emissions into the atmosphere from the stack comprised in the EfW Facility that forms part of the Development;

7. Emissions Data

7.1 Throughout the Operation Period:

7.1.1 the Emissions Data shall be displayed in accordance with the details in paragraph 7.2; and





7.1.2 the Environmental Permit Data shall be displayed in accordance with the details in paragraph 7.2.1 only;

- 7.2 The details referred to in paragraph 7 .1 are as follows:
 - 7.2.1 the Emissions Data and the Environmental Permit Data will be displayed:

7.2.1.1 within the Visitor Centre;

7.2.1.2 on the Website; and

7.2.1.3 at other public buildings as may be agreed between the Owner and/or Covanta and the Councils PROVIDED THAT this does not result in unreasonable or disproportionate expense to the Owner and/or Covanta; (Note: Due to the increased access to the internet since the Section 106 Agreement was executed in 2011, this requirement has since been removed)

7.2.2 Subject to paragraph 7.2.3 the Owner and/or Covanta will consult with the CLP as to the most helpful way of displaying the Emissions Data;

7.2.3 the Emissions Data will be provided in a form and of a frequency that enables the general public to review and consider the emissions into the atmosphere arising from the Development PROVIDED THAT nothing in this paragraph 7 shall be construed as requiring the publication of the Emissions Data in real time format; and

7.2.4 the presentation of the data that comprises the Emissions Data will accord with the indices for limits for emissions that relate to the Environmental Permit.

This document takes into account feedback received by Rookery South Ltd at the CLP meeting on 18th October 2021 and completes the CLP consultation as required under the Section 106 Agreement.

We would request any further comments from the CLP **by 7th January**. after which the format of the emissions display will be finalised.

Rookery South Limited

20th December 2021

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1	A1, A2, A3	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
TOC Parameters as required by condition 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	Bottom Ash	Before use of a new disposal or recycling route	
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	APC Residues	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	APC Residues	Before use of a new disposal or recycling route	
Functioning and monitoring of the incineration plant as required by condition 4.2.2		Annually	1 Jan

Table S4.2: Annual production/treatment		
Parameter	Units	
Total Municipal Waste Incinerated	tonnes	
Total Commercial Waste Incinerated	tonnes	
Electrical energy produced	KWh	
Thermal energy produced e.g. steam for export	KWh	
Electrical energy exported	KWh	
Electrical energy used on installation	KWh	
Waste heat utilised by the installation	KWh	
Incinerator bottom ash exported	tonnes	
Incinerator bottom ash aggregate exported	tonnes	

Table S4.3 Performance parameters			
Parameter	Frequency of assessment	Units	
Electrical energy exported, imported and used at the installation	Annually	KWh / tonne of waste incinerated	
Fuel oil consumption	Annually	m ³ / tonne of waste incinerated	
Mass of Bottom Ash exported	Annually	Kg / tonne of waste incinerated	
Mass of APC residues exported	Annually	Kg / tonne of waste incinerated	
Ammonia consumption	Annually	Kg / tonne of waste incinerated	
Activated Carbon consumption	Annually	Kg / tonne of waste incinerated	
Lime consumption	Annually	Kg / tonne of waste incinerated	
Water consumption	Annually	Kg / tonne of waste incinerated	
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.	

Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form	
Air	Form air 1 to 7 or other forms as agreed in writing by the Environment Agency	January 2018	
Water and raw material usage	Form WU/RM1 1 or other form as agreed in writing by the Environment Agency	January 2018	
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	January 2018	
Waste disposal/recovery	Form R1 or other form as agreed in writing by the Environment Agency	January 2018	

Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form	
Residue quality	Form residues 1 and 2 or other forms as agreed in writing by the Environment Agency	January 2018	
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	January 2018	