

Rookery South Energy Recovery Facility (ERF)

Community Liaison Panel

11th January 2021

Facilitator: Bob Fisher



Rookery South ERF – CLP Meeting January 2021

Agenda

1. Introductions/group ground rules (incl. terms of reference)
2. Apologies for Absence
3. Approval of notes from previous CLP Meeting
4. Construction Update (Jack Stitt – Project Manager)
5. Commissioning Phase Activities (Jack Stitt – Project Manager)
6. HGV Routing Strategy (Jack Stitt – Project Manager)
7. Operational Readiness (Ian Judd – Facility Manager)
8. Waste Delivery Update (Jacob Hall – Veolia)
9. Emissions Overview (Environment Agency)
10. Local Authority Monitoring (Anita Taylor – Planning Authority)
11. Rights of Way Strategy (Judith Harper)
12. Site Visits – Rookery; other facilities (Jack Stitt – Project Manager)
13. Stakeholder and local engagement (David Spencer)
14. Items for next meeting
15. Date of next meeting – 12th or 19th April TBC
16. AOB



Rookery South ERF – CLP Meeting January 2021

Introductions

Name	Role	Company	Responsibilities at Rookery
David Spencer	Communications Specialist	Covanta	Responsible for coordinating all external communication
Ian Judd	Facility Manager	Covanta	Responsible for Operation and Maintenance of the plant
Ian Morrish	General Manager	Rookery South Ltd	Overall responsibility for the business and stakeholders reporting to the shareholders
Jack Stitt	Project Manager	Covanta	Responsible for the management of the construction and commissioning phase
Jacob Hall	Fuel Supply Manager	Veolia	Responsible for the management of the waste supply to the plant
Judith Harper	Consultant	Rookery South Ltd	Supporting on planning, permitting and community interfaces
Marine Avisse	Corporate Development Manager	Veolia	Oversight of the development of the plant for Veolia
Neil Grimstone	Business Manager	Rookery South Ltd and Covanta	Supporting on commercial and technical procurement

Ground Rules & Protocols for the Remote Meeting

A set of ground rules agreed by the January 2020 meeting participants:

- Permission from attendees to record meeting (notation purposes only)
- Keep to time
- Keep to the agenda
- Respect each others' views
- Turn-taking - Do not speak over one another
- Mobile phones turned off/turned to silent

Protocol for Zoom Meeting:

- Microphones muted during presentations & cameras turned off
- Raise hand & use Chat mode
- No third party recordings, please



Construction, Commissioning and Highways Updates

Jack Stitt – Project Manager

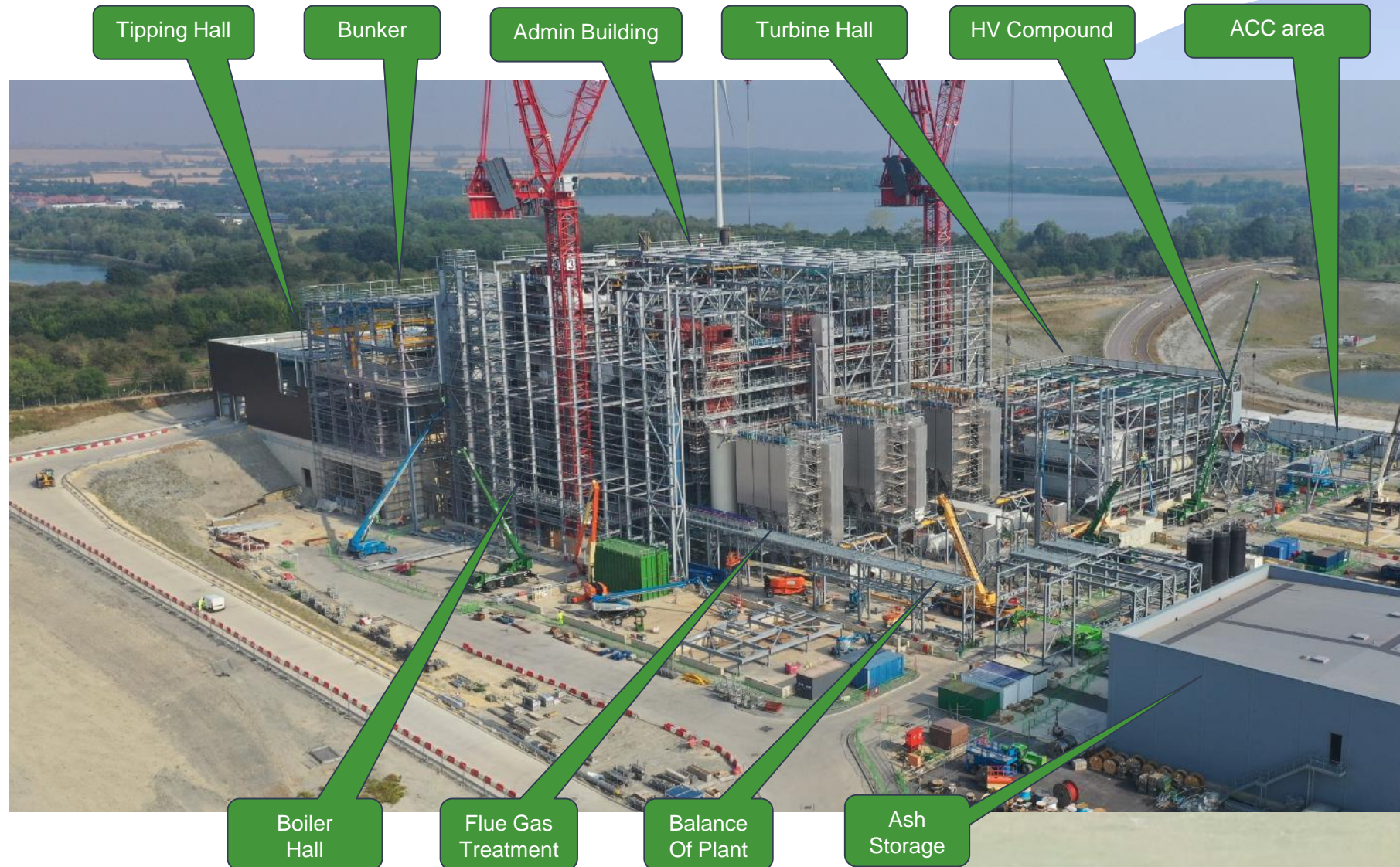


Construction Update

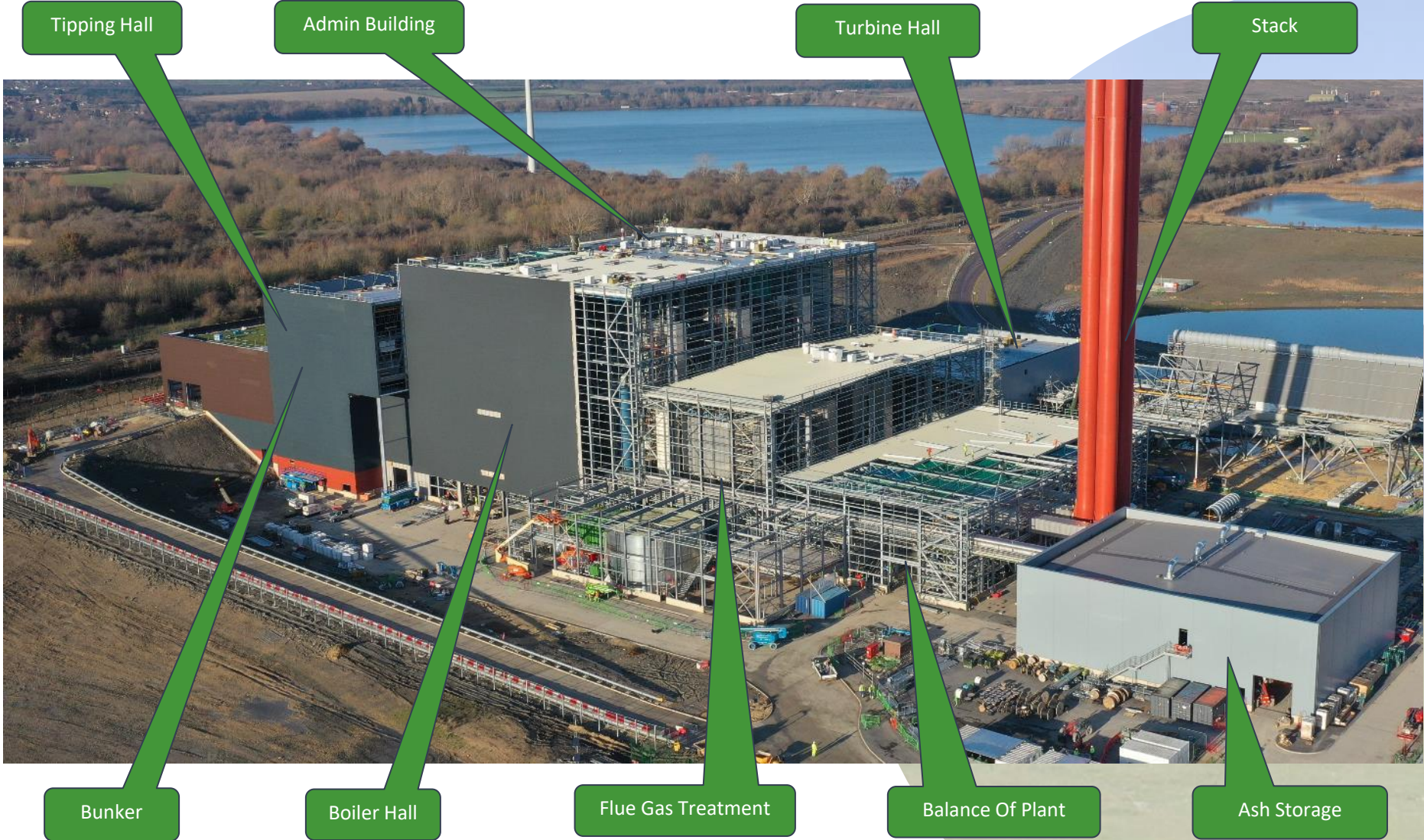
- Construction progressing on schedule
- Extensive Covid-19 control measures continue
- Tower cranes removed
- Building steelwork complete
- Process installation substantially complete
- Cladding installation ongoing
- Tipping Hall, Bunker and Boiler Hall steelwork substantially complete.
- Cladding installation underway
- Green Roof installation underway
- Administration building internal fit out ongoing
- Site workforce currently around 600 persons per day
- Over 2 million person hours worked in total to date



Aerial Photograph – September 2020



Aerial Photograph – December 2020



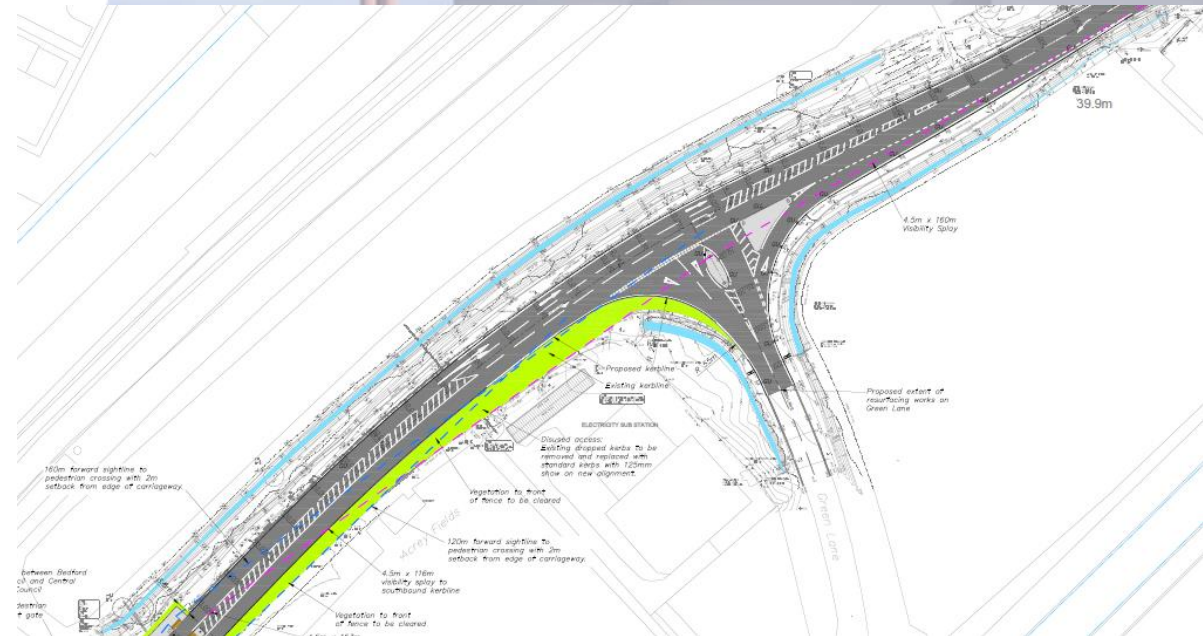
Off Site Works

- UKPN HV grid connection works
 - Physical installation works complete.
 - Connection energised on 30th September, providing additional import capacity
- Anglian Water
 - Works in Green Lane complete.
 - Anglian Water works in Stewartby Village approaching completion
 - Water connection expected January 2021
- Network Rail
 - Level crossing upgrade works completed on schedule.
 - “Anti-dazzle” fence to be installed along part of the access road



Off Site Works

- Improvements to visibility at the junction of Green Lane and Bedford Road (C94).
- As required by Condition 37 of the Rookery Development Consent Order.
- Section 278 agreement with Bedford Borough Council.
- Advance notice signs deployed on 16th December
- Works to be undertaken by Hitachi Zosen Inova throughout January.
- Three-way traffic lights in operation between 4th and 31st January
- Weekend road closures with signed diversion routes via A421 and Broadmead Road:
 - 22nd – 24th January
 - 29th – 31st January













Construction – 3 month lookahead

- Quality control and inspection activities on completed works
- Completion of building cladding installation
- Completion of cable pulling and termination
- Completion of installation of electrical equipment, lighting & HVAC
- Cold commissioning activities



Project Programme

Activity	2018	2019	2020	2021	2022
Works Commencement NTP March 2019					
Access Road & Green Lane Junction					
Civil Construction (incl. piling)					
M&E Installation					
Boiler Pressure Testing					
Cold Commissioning (Power on Sept 2020)					
Hot Commissioning (First waste fire May 2021)					
Testing & Full Operation					

Covid-19 Management & Action Plan

- All arrangements are in line with current UK Government guidance and Site Operating Procedures published by the Construction Leadership Council
- UK Government position since the start of the pandemic has been that where suitable measures can be implemented, construction sites in England should remain operational
- The Plan for the Rookery project includes:
 - Transport to site has been re-arranged to ensure that only personnel who are sharing accommodation are travelling together
 - All persons arriving at site are subject to temperature screening and “misting booths”
 - Workforce start, finish and break times are staggered to avoid large groups
 - Additional units have been installed in the welfare area (canteen, locker rooms & offices) to provide extra space and enable social distancing
 - Additional handwashing facilities and sanitiser
 - Additional cleaning / disinfection
 - Skilled staff involved in construction of waste management facilities are exempt from 14 day quarantine for arrivals into UK from overseas

Temporary Extension of Working Hours - Further Applications

- Development Consent Order states “Construction work ... may not take place other than between 0700 and 1900 hours on weekdays and 0700 and 1300 hours on Saturdays... unless otherwise agreed in writing by Central Bedfordshire Council.”
- Permission has been sought to extend the site working hours to mitigate against time lost due to Covid-19 and site productivity issues.
- An application was submitted to Central Bedfordshire Council on 2nd December covering works to the Air-Cooled Condenser.
- **Installation of steel structure and process equipment:**
 - 4th January – 28th February 2021
 - Monday to Friday: 1900 – 2200
 - Saturday: 1300 – 1600
 - No Sunday working
- **Welding:**
 - 4th January – 28th February 2021
 - Monday to Friday 1900 – 0700
 - No weekend working.
- Permission was received from Central Bedfordshire Council on 18th December 2020

Commissioning Phase Activities

- Extensive commissioning and testing phases to verify and optimise the facility operations.
- Three main phases of commissioning & testing:
 - Cold Commissioning
 - Hot Commissioning
 - Operational reliability testing
- Commissioning plan submitted to Environment Agency in December 2020.

Many of the things seen or heard during commissioning are not typical of the normal operation conditions of the facility.



Cold Commissioning: January 2021 to May 2021

- Functional testing of equipment carried out prior to the introduction of consumables (e.g. fluids & gases) and fuel (diesel, waste), for example:
 - Simulated demonstration of safety systems.
 - Testing of electrical systems.
 - Testing of control systems.
 - Flushing of boilers and pipework with water.



Hot Commissioning: April 2021 – December 2021

- Operational testing carried out with the inclusion of consumables (e.g. fluids & gases) and fuel (diesel, waste).
- Initial warming/heating of the facility takes place using fuel oil (diesel) burners – April 2021
- Steam blow – April 2021
- First fire using waste feedstock – May 2021
- Includes verifying plant safety systems such as emergency shut down scenarios.



Steam Blow – April/May 2021

- Introduction of steam for the purposes of cleaning.
- Steam is generated and distributed through the process system to remove debris that accumulates during manufacture, shipping and installation.
- Two periods of steam blowing:
 - Late April 2021 for 5 – 10 days.
 - Late May 2021 for 5 – 10 days.
- Steam blowing can generate noise.
- Steam blowing not permitted overnight as stipulated in the DCO.



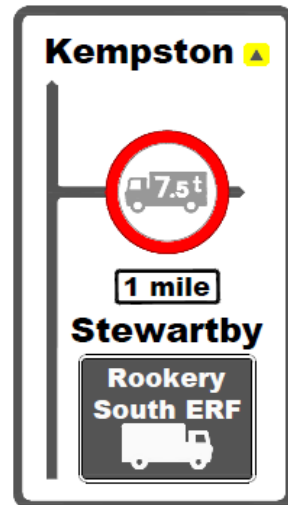
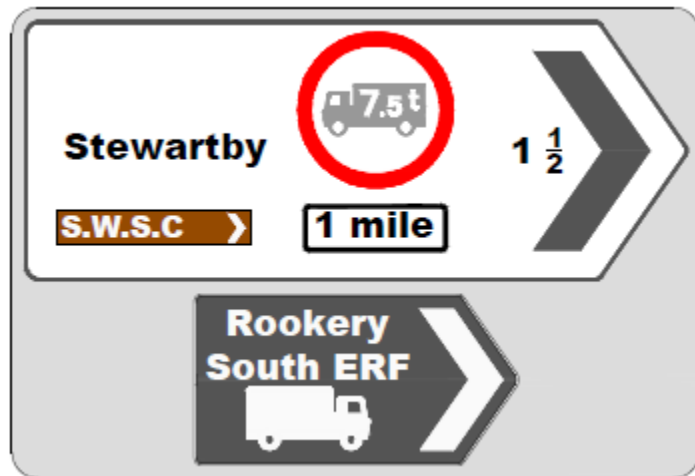
Operational Reliability Testing: December 2021 – March 2022

- Carried out on successful completion of cold & hot commissioning.
- Facility required to run reliably within the normal operating parameters for a pre-determined period of time.
- December 2021 – March 2022
- Following successful completion of the reliability run, the construction, commissioning and testing of Rookery will be complete and the facility can move into commercial operation.



Operational Highway Signage Scheme

- Signage will be installed on the public highway to enforce the HGV Access and Routing Strategy.
- Covanta have engaged an engineering consultant and produced a Signage Strategy document.
- Signage Strategy currently being reviewed by Central Bedfordshire Council.



Operational Readiness

Ian Judd – Facility Manager



Mobilisation Update

Ongoing

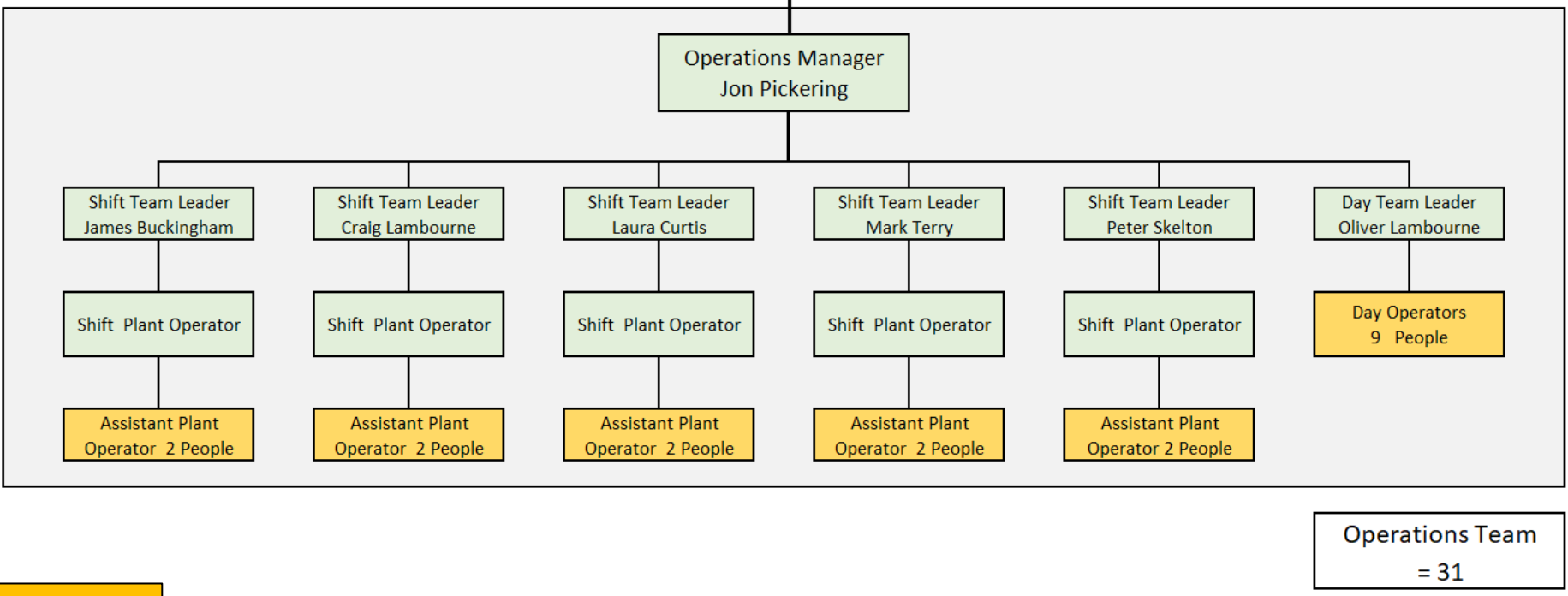
- Final recruitment activities
- Employee on boarding and training
- HZI and Covanta operator training and accreditation
- First waste delivery scoping with Veolia and HZI
- HZI – O&M commissioning interface and support

Look Ahead

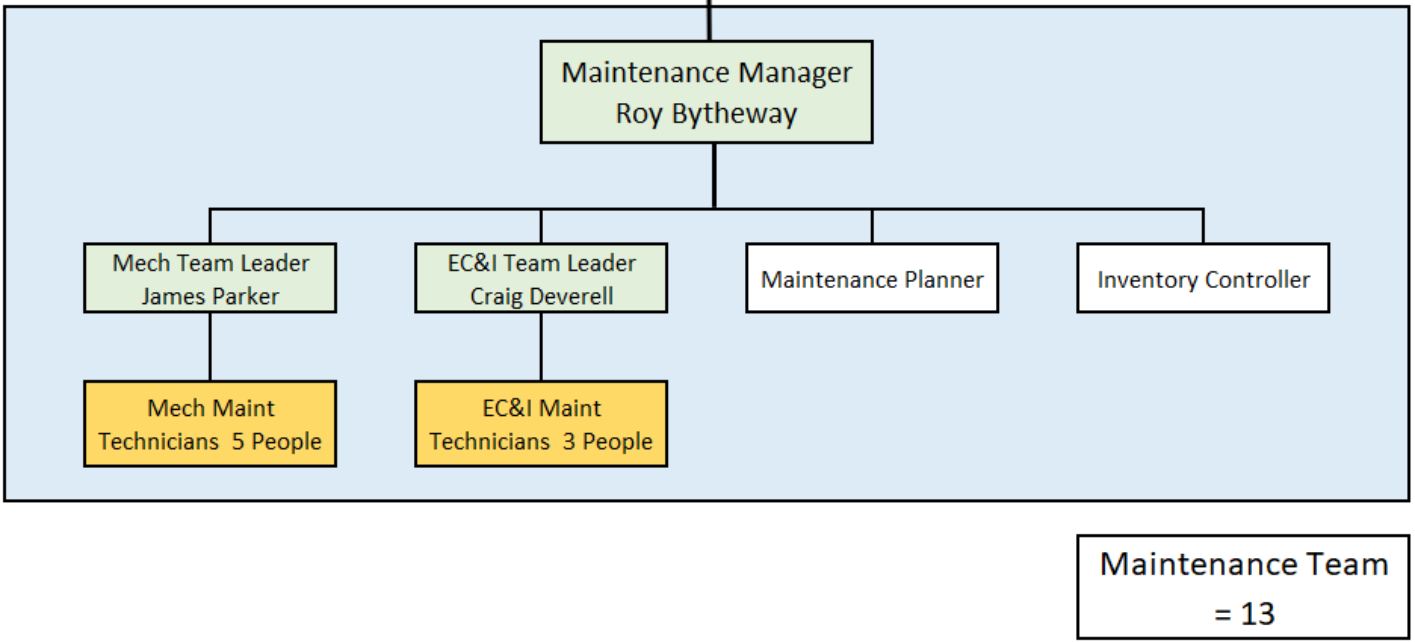
- Engage with UK training providers and service providers
- Continue with the Local Employment Plan commitments
- Development of Operational procedures and risk assessments
- Development of Maintenance Management System and regulatory compliance
- Development of the Environmental Management System and regulatory compliance
- Development of the Health and Safety Management systems and training





Operations Team - Recruitment

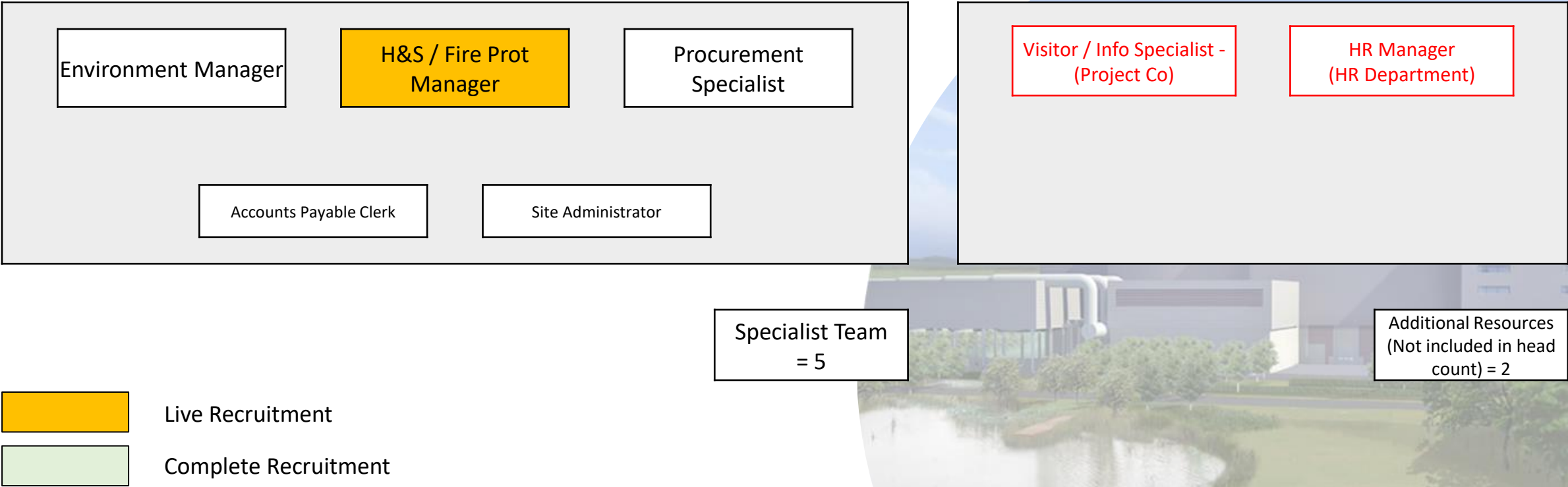


Maintenance Team - Recruitment










-  Live Recruitment
-  Complete Recruitment

Other – Recruitment



Operation & Maintenance: Key Dates and Milestones

Activity	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Full O&M Team Recruitment					
HZI Training and Ops Accreditation					
Systems and Procedure Development					
First Waste Deliveries					
First Waste Fire (May)					
Workshop and Stores					
Commercial Handover					



Waste Delivery Update

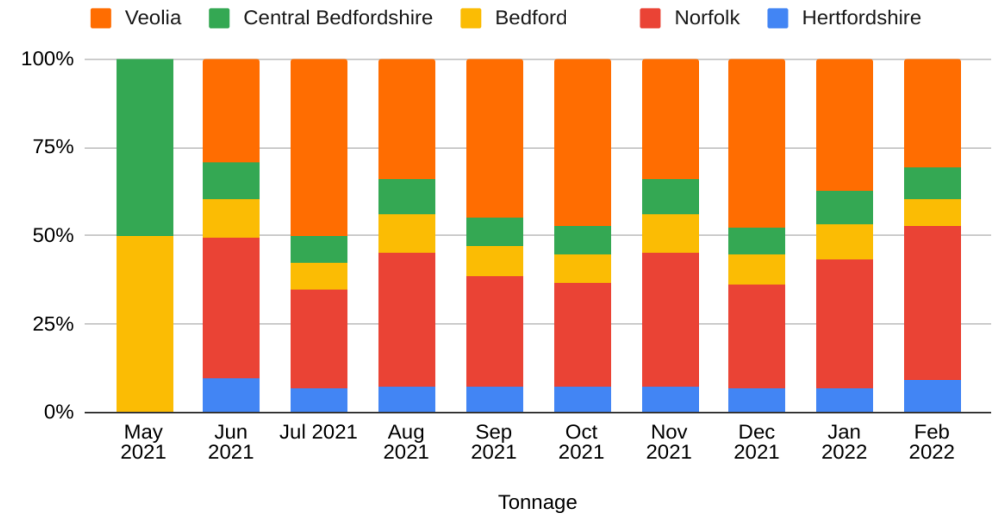
Jacob Hall – Fuel Supply Manager



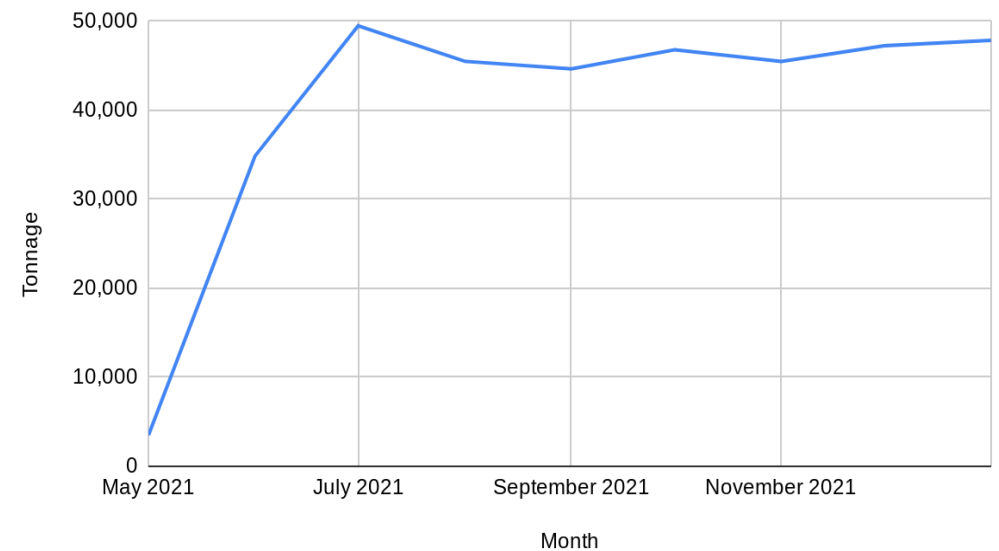
Fuel Requirement during Commissioning

- During Commissioning, Veolia committed to deliver 100% of the waste volumes required
- Commissioning Fuel required from circa mid-May 2021 until February 2022
- Waste requirements fluctuate significantly over the Commissioning period
- Veolia will work closely with Covanta's Operations team to schedule the deliveries

Rookery delivery %



Commissioning Delivery Profile



Sources of Fuel

Local Authority Volumes

Authority	Volumes (tpa)	Start date
Hertfordshire County Council	Up to 40,000	01/04/2021
Norfolk County Council	180,000	01/04/2021
Bedford Borough Council	49,000	14/11/2020
Central Bedfordshire Council	17,000	01/10/2020
	29,500	01/04/2021
	14,000	01/04/2022
TOTAL	329,500	

Veolia's Commercial volumes

Waste transfer station	Mileage	Volumes (tpa)
Northampton	27	28,000
St Albans	36	41,000
Cambridge	38	28,000
Peterborough	50	11,500
Hinckley	56	35,000
Birmingham	80	23,000
Derby	85	4,500
Norwich	100	21,000
Lincoln	105	23,000
TOTAL		215,000

Waste Transfer Stations Location



Haulage and Vehicles Movements

- Veolia is currently finalising the list of haulage contractors we will be using for deliveries into Rookery. Veolia will be using a large number of our own vehicles
- Material from Bedford and Central Bedfordshire will be direct delivered in refuse collection vehicles (RCVs)
- All other materials will be delivered using larger walking floor trailers
- 25% of vehicle movements will be on RCVs during commissioning
- Hauliers will be issued with delivery routes prior to deliveries and it will form part of inductions for drivers
- All deliveries are equipped with GPS trackers so allows the monitoring of vehicle movements to ensure they follow the correct routing to site



Emissions Overview

Environment Agency



Rookery Pit Liaison Meeting

Name Emma D'avilar

Job title Regulatory Officer

Date 11 January 2021

Points to cover

- Health impacts from the emissions
- Legislation changes and how this affects the permit



EA has a legal duty
to protect human
health and the
environment

We are not Health
experts, we work with
other health and medical
expert bodies to assess
impacts on human
health

We ensure industry
standards and
Legislation Regulations
are met

Sources of pollution

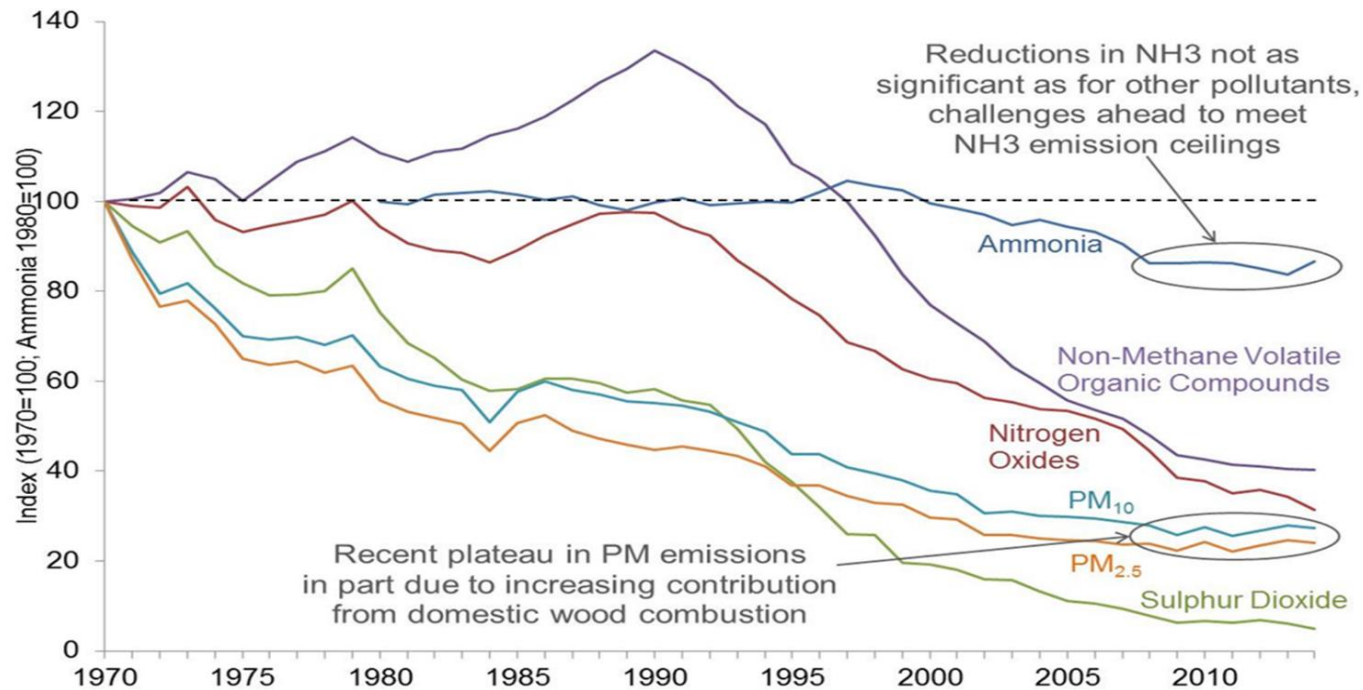


How much
does
industry
contribute
to air
pollution?

**The National Atmospheric
Emissions Inventory
(NAEI)** : Industry makes a
significant contribution to
nitrogen oxides (NO_x),
particulate matter ($\text{PM}_{2.5}$)
& sulphur dioxide (SO_2).



UK national emissions are mostly improving...



- Long-term decline in the emissions of key air pollutants since 1970.
- With the exception of ammonia and PM_{2.5}, emissions of all pollutants continued to decrease in 2015. in 2

Public Health England

- In a recent study PHE have stated :
- “PHE’s risk assessment remains that modern, well run and regulated municipal waste incinerators are not a significant risk to public health. While it is not possible to rule out adverse health effects from these incinerators completely, any potential effect for people living close by is likely to be very small”

Nitrogen oxides (NO_x) pollution

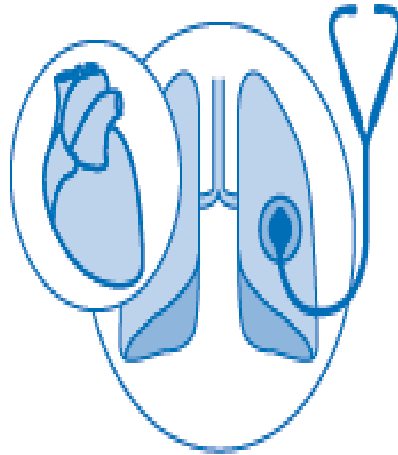
SOURCES

Road transport  34%*

Energy generation  29%*

Domestic & Industrial combustion  25%*

Other transport  10%*

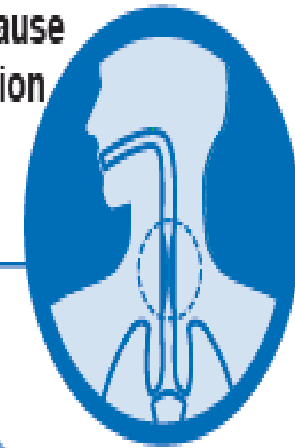


Exacerbates symptoms
of those already suffering from
lung or heart conditions
shortening lives and reducing
quality of life



high levels of
NOx can change
soil chemistry
and affects
biodiversity in
sensitive habitats

Short-term exposure to
high concentrations of
NO₂ can cause
inflammation
of the
airways



INCREASES
susceptibility:
• **respiratory**
infections
• **allergens**



Sulphur dioxide (SO₂)

SOURCES

Energy generation



54%*

Industrial combustion



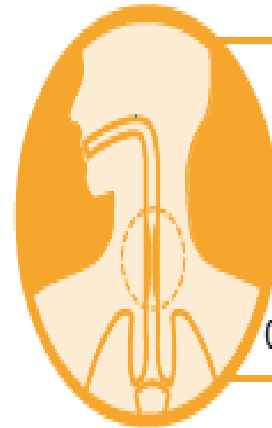
21%*

Manufacture & use of domestic solid fuel



15%*

IMPACTS

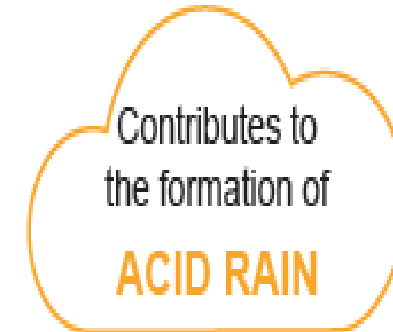


A respiratory irritant that can cause constriction of the airways

People with asthma are particularly sensitive



Health effects can occur very rapidly



Contributes to the formation of **ACID RAIN**



SO₂ pollution damages the environment

this affects biodiversity



Volatile organic compounds (VOCs)

SOURCES

Industrial processes



56%*

Agriculture



12%*

Domestic & industrial combustion



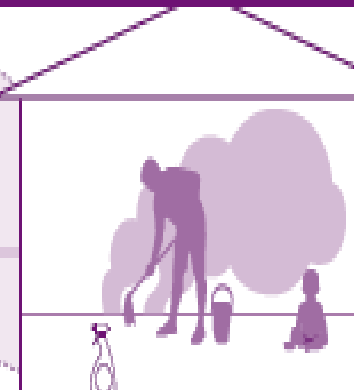
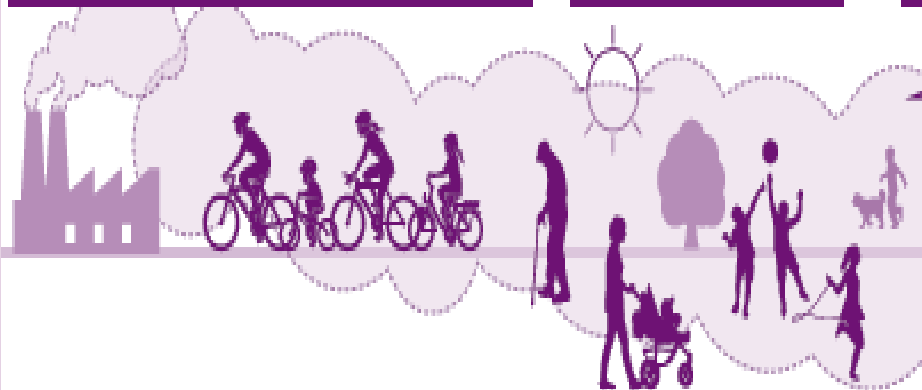
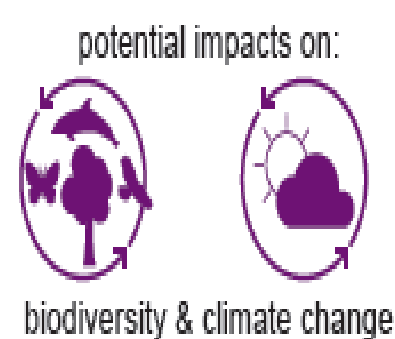
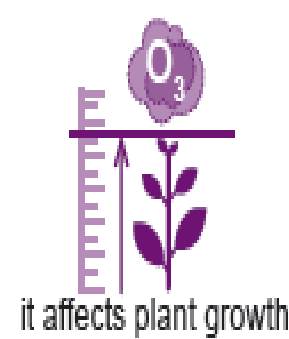
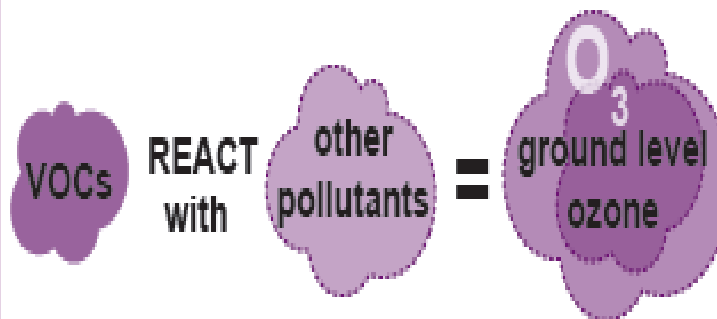
8%*

Transport



5%*

IMPACTS



Particulate Matter (PM_{2.5})

SOURCES

Domestic
wood & coal
burning



39%*

Industrial
combustion



17%*

Road
transport



13%*

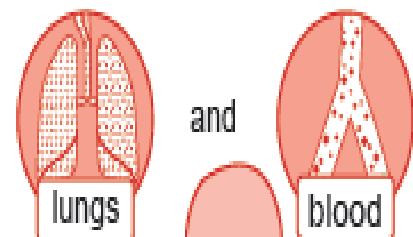
Industrial
processes



10%*

IMPACTS

These very small particles from smoke, soot and dust can get into the...

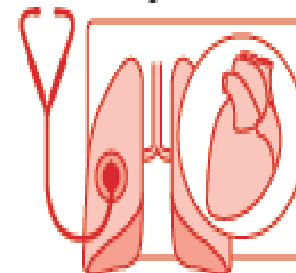


PM can be
transported
around
the body

and get
lodged
in organs



More likely to be affected are:



those already
suffering from
lung and heart
conditions



the elderly

and very young

Emerging evidence shows links between air pollution and:



reduction in children's
lung development



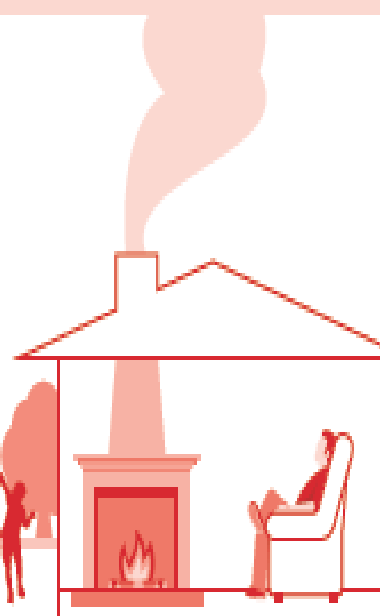
low birth weight
in babies



cancers &
dementia



PM_{2.5}
can shorten
lifespans



Changes in legislation and then the permit

Introducing the mechanisms in which improving standards are Implemented into permits

- BAT and BATc, Best Available Techniques conclusions.
- Regulations 61 Notices.
- Timelines – 4 years from December 2019 for Rookery.
- What they will mean : Reduction in ELVs and possibly additional monitoring.
- Permit reviews results in a new varied permit such as the Covanta, Rookery pit permit.
- EU BAT process will be mirrored in UK BAT process following the EU Exit of the 31 December 2020.

Local Authority Monitoring

Anita Taylor – Planning Authority



Rights of Way Strategy

Judith Harper



Rights of Way Strategy

- Footpaths in and around Rookery comprise permissive and dedicated Rights of Way
 - The DCO extinguished all footpaths within Rookery South
- The DCO enables the footpaths to be automatically reinstated as Rights of Way under the agreed Strategy. Process:
 - the Council is notified that a footpath is reinstated
 - the Council checks and approves the specification
 - the Council adds it to the 'definitive map'.
- The ROMP provides for upgrade of some FPs to Cycleways.
- The DCO does not make any provision for bridleways.
- Covanta has proposed to reinstate FPs to a specification which allows for adequate space alongside to enable access by horses.



Rights of Way Strategy

Routes/ works relevant to S106 obligation

Legend

Application Site

Not included in the Application Site

Existing

RoW

Footway

RoW to be stopped-up

Proposed (as part of LLRS)

Dedicated RoW (pedestrian rights only)

Permissive RoW

Proposed (as part of RRF)

Dedicated RoW (pedestrian and cycle rights)

Upgrade of Dedicated RoW by ROMP to incl cycle rights

Upgrade of Existing Dedicated RoW to include cycle rights

Rights of Way Extinguishment area within Rookery Pit South

Other

Proposed footway by Hanson HQ (Committed)

Boundaries

Boundary between Central Beds and Beds Borough

The map illustrates the Rights of Way Strategy for the Rookery South ERF. It shows a central area shaded in grey, representing the Rights of Way Extinguishment area within Rookery Pit South. Surrounding this area are various routes and boundaries. The map includes a legend on the left side, detailing the symbols used for different types of routes and boundaries. A north arrow is located in the top right corner. The map also shows various footpaths (FP) and footways (FW) throughout the area.

Site Visits – Rookery and Other Facilities



Stakeholder and Local Engagement

David Spencer



Rookery South ERF – CLP Meeting January 2021

Stakeholder and Local Engagement Update

Newsletter:

- Early circulation to CLP members
- Increased circulation
- E-editions shared with 14 Town and Parish Councils
- Future hard copy editions of Rookery South News

Other near neighbour communications:

- Project updates for Stewartby Parish Council's newsletters
- Introduction meetings with Ian Morrish with Stewartby PC, Marston Moreteyne PC and Cllr Tim Hill (date tbc)
- Early notice by HZI of future off-site works (C94/Green Lane and plant commissioning in 2021)



Stakeholder and Local Engagement Update

Recruitment advertising and press release

- First phase November – December
- Local media coverage in each of the target newspapers
- Next phase advertising to shortly commence

Latest film

- August to November film
- See www.rookerysouth/constructionprogress

Festive Donation

- Continued support to Bedford's SMART Prebend Street Centre



COVANTA IS RECRUITING

Covanta, a world leading operator of energy-from-waste facilities, is now recruiting for its operations team at the Rookery South Energy Recovery Facility in Stewartby, Bedfordshire.

The new Energy Recovery Facility will provide a proven and sustainable alternative to landfill, by using residual waste left after recycling and composting efforts, as fuel to generate enough electricity to power over 112,500 homes.

Join us and become a protector of tomorrow. At Covanta, we share a common commitment to the three pillars of sustainability - people, the planet and a shared prosperity. Our culture is one of inclusion, purpose and teamwork, inspiring our dedicated professionals to create a world where no waste is ever wasted.

Covanta is currently recruiting for:

- 5 SHIFT PLANT OPERATORS
- 10 ASSISTANT SHIFT PLANT OPERATORS

To find out more about the Rookery South Energy Recovery Facility and future employment opportunities, please visit: rookerysouth.co.uk

ROOKERY SOUTH
Energy Recovery Facility

COVANTA
Powering Lives. Protecting Tomorrow.

Meeting Closure

- Items for next meeting
- Date of next meeting – 12th or 19th April TBC
- Any Other Business

