



# STSC: New Environmental Permit Application

## Present situation:

- STSC operates environmental permit JP3638HM/V006 for an integrated iron and steelworks on the behalf of the Official Receiver.

## Future situation:

- STSC requires assistance with the generation of a new bespoke environmental permit application for discharge activities
- The scope shall cover the successful completion of all relevant application forms and reports, and any required modelling using H1 software tool for carrying out environmental risk assessments.



# General Description: Site Description

- Brief overview of the site's history
- Site boundaries and nature of the land
- Approximate number of employees
- Brief overview of ongoing activities:
  - Keep Safe
  - Demolition
  - Decontamination Project
  - Waste Removal
- Third-party activities:
  - Runtech
  - D Jones
  - Falck
  - OCS
  - Interface with other third parties (British Steel, RBT, STDC)

# General Description: Site Infrastructure



**South Tees  
Site Company**

- Buildings (occupied and unoccupied)
- Pipelines
- HV/LV network
- Road network
- Site waterways
- Landfill (covered by a separate permit)



# General Description: Inputs

- Electricity (National Grid)
- Water (Northumbrian Water)
- Gas
  - Small quantities in mobile cylinders
  - Nitrogen via third party provider (fixed distribution network)
- Fuel



# General Description: Outputs

- Electricity (via diesel generator)
- Historic waste
- Arising waste (WEEE, office consumables, waste oil, etc.)
- Water to site outfalls
- Sewage
- NO<sub>x</sub> and SO<sub>x</sub> from diesel generator and vehicle movements



# Redcar Coke Ovens - Water Treatment Facility (1)

- Input: rainwater runoff from around the site
  - Gullies
  - Pits
  - Sumps
  - Firewater runoff
  - Bunds
- Output: R1 point source to Tees estuary



# Redcar Coke Ovens - Water Treatment Facility (2)

- Description of process
  - Oil-water separation
  - Sedimentation
- Analysis
  - From various tanks and sumps throughout the system
  - R1
- Emissions
  - Air            **x**
  - Land          **x**
  - Water        **✓**
  - Waste        **✓**



# Electricity Generation

- 6MW generator
- Hours (runtime)
- Maintenance
- Inputs:
  - Diesel/Water (cooled; industrial & potable, application of treatment chemicals)
- Outputs
  - Water/Electricity
  - $PM_{10/2.5}/NO_x/SO_x$
  - $CO_2$  /Consumables
  - Heat/Noise
- Analysis – W3 outfall



# Gas Main Nitrogen Blanket

- COG main
  - Approx. 27km long, with approx. 7km of underground sections
- RCO By-Products tanks
  - Coal tar and distillates – approx. 6,000T
- SBCO By-Products tanks
  - Coal tar and distillates – approx. 4,000T
- Inputs:
  - Nitrogen (+H<sub>2</sub>O) blanket
- Outputs:
  - Nitrogen (point source + fugitives)
  - H<sub>2</sub>O/condensate
    - Analysis
    - 3<sup>rd</sup> party disposal



# HV/LV Network

- Description of system
- Supplies STSC and third parties
- Inputs:
  - Electricity
  - Oil for maintenance (transformers)
  - SF6 gas
- Outputs:
  - Transformer oils
  - Electricity



# SLEMS Activities

- Storage/loading of BOS oxide material via shovel
- Carried out by third party for the Official Receiver
- Inputs:
  - None
- Outputs:
  - BOS oxide material (recovery activity by third party); reduction in levels of historic BOS oxide



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