

South Tees Site Company Ltd
Teesside Management Offices
Redcar
TS10 5QW

19th April 2022

Graham Watson
HM Principal Inspector of Health and Safety
Chemicals, Explosives and Microbiological Hazards Division
Health and Safety Executive
07879661463

Teesworks Site – Removal of inventory and Declassification of COMAH Status

Please find enclosed a letter detailing the proposed methodology and timeline for removal of COMAH and hazardous substances from the Teesworks site leading to eventual declassification of the present Top Tier status associated with the COMAH Regulations 2015.

Name and position of the person in charge of the establishment.

Signed..... 

Name..... **Derek Weatherill**

Position..... **EHSS Director**

1. Introduction

The South Tees Site Company (STSC) Ltd was an interim government body that was established in 2016 with responsibilities for the safe, secure and cost-effective management of the former integrated iron and steelmaking facility at Redcar which was previously operated by Sahaviriya Steel Industries (SSI) UK Limited until its closure in 2015.

Whilst operational, the SSI UK site manufactured around 3mt of steel slab per annum for export. The site was classified as an upper tier establishment under the Control of Major Accident Hazard Regulations (COMAH) due to the presence of several dangerous substances in quantities in excess of their respective qualifying threshold.

Due to longstanding, unfavourable market conditions, SSI UK was placed into Liquidation on the 2nd of October 2015 and all manufacturing operations on the site ceased shortly thereafter. The Official Receiver (OR) was appointed in the interim to manage SSI UK (In Liquidation).

In December 2016, the responsibility for managing the former SSI UK assets was transferred to STSC Ltd who undertakes this role on behalf of the OR under the terms of a management agreement.

In October 2020 the integration of the South Tees Site Company from the Department for Business Energy, and Industrial Strategy to local ownership under the Tees Valley Combined Authority Group was completed including the subsequent transition to Teesworks.

Following the cessation of manufacturing operations, most of the higher risk COMAH dangerous substances and other hazardous substances that were present at the establishment either ceased to be produced or were removed from site, but the Establishment remains classified as upper tier under COMAH.

Teesworks are currently implementing a major decontamination and demolition project on the Iron & Steel making site on Teesside

It remains the intention to remove, where practicable, all significant inventories of the COMAH dangerous substances remaining on the site such that the aggregate inventory of each substance is below the relevant lower-tier qualifying quantity and eventually full declassification from the COMAH Regulations 2015.

2. The table below details the inventory at the Establishment on submission of the COMAH Safety Report in 2020 and the following materials on site exceeded COMAH criteria:

Material	COMAH Hazard class	COMAH qualifying limits (te)		Inventory (te)	Comments
		Lower tier	Upper tier		
COG main deposits (pyrophoric solids)	P7	50	200	6730	Material spread across many vessels and extensive gas duct.
Gas holder sealant	E1	100	200	137	Largest single inventory 46te
Naphthalene				12	In RCO naphthalene plant
Naphthalene (as fraction of COG deposits)				2423	Across RCO, SBCO and arterial COG main
Benzole absorbing oil/creosote	E2	200	500	620	Largest single inventory 77te
Coal tar				3480	on ground as a solid 'heap'
Coal tar (residues)				4220	spread across a large number of vessels, lines, gullies, sumps and pits

3. Site Maps detailing location of COMAH substances.

Redcar Coke Ovens.



COMAH Inventory -
Redcar Coke Ovens.

South Bank Coke Ovens.



COMAH Inventory -
South Bank Coke Ovens.

Coke Oven Gas & Heavy Fuel Oil Mains (Arterial Mains)



COGM_HFO
Current Progress 16.

4. Latest Summary of removal of COMAH substances to date.

Site Totals		Lower Tier	Upper Tier
Petroleum Products & Heavy Fuels (Gas Oils & Heavy Fuel Oil): 1,065.78T: below Lower Tier qualifying limit		≥2,500	≥25,000
H2 Acute Toxic (Crude Benzole): 31.96T: below Lower Tier qualifying limit		≥50	≥200
P7 Pyrophoric (Coke Oven Gas Main Deposits): 3,952.662T: above Upper Tier qualifying limit		≥50	≥200
E1 Hazardous to the Aquatic Environment (Gasholder Sealant & Naphthalene): 116.18T: above Lower Tier qualifying limit		≥100	≥200
E2 Hazardous to the Aquatic Environment (Benzole Absorbing Oil/Creosote & Coal Tar): 6,206.46T: above Upper Tier qualifying limit		≥200	≥500

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South Bank Coke Ovens

Substances Present

- Gas Oils: 0.23T: below Lower Tier qualifying limit
- Heavy Fuel Oil: 43.52T: below Lower Tier qualifying limit
- Crude Benzole: 3.27T: below Lower Tier qualifying limit
- Coke Oven Gas Main Deposits: 647.62T within gas mains and plant infrastructure, plus 153 Pactec bags (using SG of 1.614 for this substance, assume 246.942T) from ammonia washers demolition (programme for removing these bags being developed): above Upper Tier qualifying limit
- Benzole Absorbing Oil/Creosote: 321.28T, above Lower Tier qualifying limit
- Coal Tar: 1,327.58T within plant infrastructure; estimated 1,664.98T of coal tar 'jollop' on concrete pad as of W/E 08/04/2022 (in process of being removed to Port Talbot): above Upper Tier qualifying limit

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South Bank Coke Ovens— Inventory Removal (as of 11/04/2022)

- Approx. 1,871.38T of coal tar 'jollop' have been removed from site (including material taken away for sampling in 2021).
- Approx. 150.66T of coal tar/ benzole have been removed from the Benzole Storage Tank and Effluent Tank No.4 and taken from site directly from South Bank Coke Ovens.
- Approx. 74.38T of coal tar/ benzole have been removed from the Benzole Storage Tank and Effluent Tank No.4 and taken from site via the Altrad Waste Treatment Plant.
- Approx. 837T of coal tar have been removed from Effluent Tanks 1, 2 and 3. To be removed from site.
- Approx. 201.6T of coal tar have been removed from the Tar/Liquor area (demolition completed 28/02/2022). Approx. 113.86T of this material has been removed from site.
- Approx. 578T of coal tar have been removed from Tanks 1 -3 of the Tank Farm. To be removed from site, completion of demolition of Tank Farm area planned for 18/05/2022.
- Anticipated completion and demobilisation at South Bank Coke Ovens – 26/08/2022.
- Commencement of demolition of washers area planned for 28/04/2022, complete by 26/08/2022.
- Commencement of removal of COG Main planned for 06/06/2022, complete by 05/08/2022.

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South Bank Coke Ovens – Complete and In Progress Inventory Removal



Redcar Coke Ovens

Substances Present

- Gas Oils: 11.05T: below Lower Tier qualifying limit
- Crude Benzole: 28.69T: below Lower Tier qualifying limit
- Coke Oven Gas Main Deposits: 1,410.8T estimated within plant infrastructure and By -Products main; deposits also present within lines underneath the batteries: above Upper Tier qualifying limit
- Gasholder Sealant: approx. 116.18T remaining within Gasholder: above Lower Tier qualifying limit
- Naphthalene: 12.45T: below Lower Tier qualifying limit
- Benzole Absorbing Oil/Creosote: 235.38T: above Lower Tier qualifying limit
- Coal Tar: 2,657.24T: above Upper Tier qualifying limit

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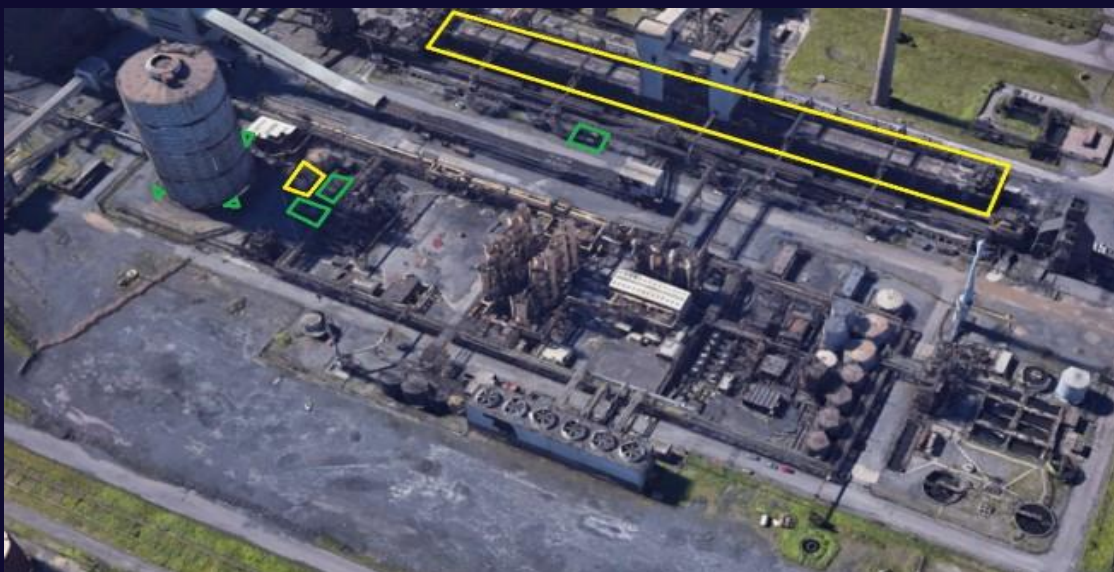
Redcar Coke Ovens— Inventory Removal (as of 11/04/2022)

- Approx. 18.24T of Gasholder Sealant have been removed from tanks and have left site.
- Approx. 41.5T of benzole absorbing oil/creosote have been removed from three tanks and have left site. Approx. 22.16T of washings containing benzole absorbing oil/creosote have been removed from tank 1T410 and have left site.
- Cleaning of the COGM distribution lines has been completed. The material has been taken to a storage area adjacent to the Steelmaking clarifiers for onward disposal. Cleaning of flushing liquor lines has also been undertaken.

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Redcar Coke Ovens— Complete and In Progress Inventory Removal



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Fuel Services Area

Substances Present

- Heavy Fuel Oil: 786.89T: below Lower Tier qualifying limit

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Fuel Services Area– Inventory Removal (as of 11/04/2022)

- Tank 1 has been drained down to ground level.
- Approx. 219.79T of Heavy Fuel Oil have been removed from Tank 4 and have left site.
- Approx. 217.32T of Heavy Fuel Oil have been removed from Tank 3 and have left site.
- Circulation and extraction of Heavy Fuel Oil from all tanks planned for completion on 03/05/2022, with demolition of FSA planned for completion on 20/07/2022.
- Demolition of Butane Tank area (estimated 50.95T of coal tar present) planned for completion on 06/06/2022. Emptying of the butane tanks is in progress with approx. 77.76T of material having left site.

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Fuel Services Area– Complete and In Progress Inventory Removal



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Arterial Mains

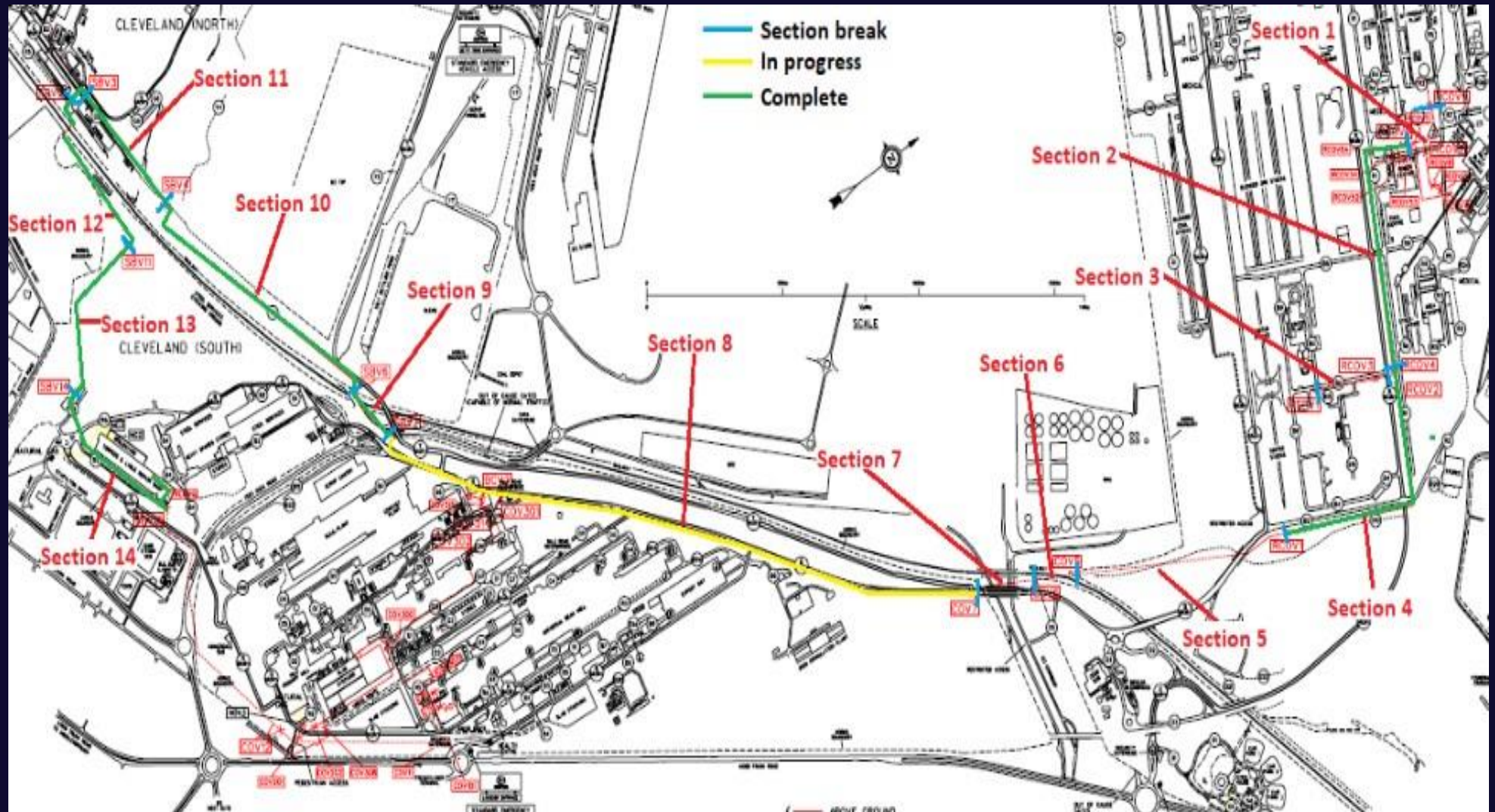
Substances Present

- Heavy Fuel Oil: 155.3T: **below Lower Tier qualifying limit**
- Coke Oven Gas Main Deposits: 737T estimated to remain as of W/E 11/02/2022 within arterial mains; approx. 910.3T estimated to remain within Sinter/Blast Furnace/Power Station lines: **above Upper Tier qualifying limit**

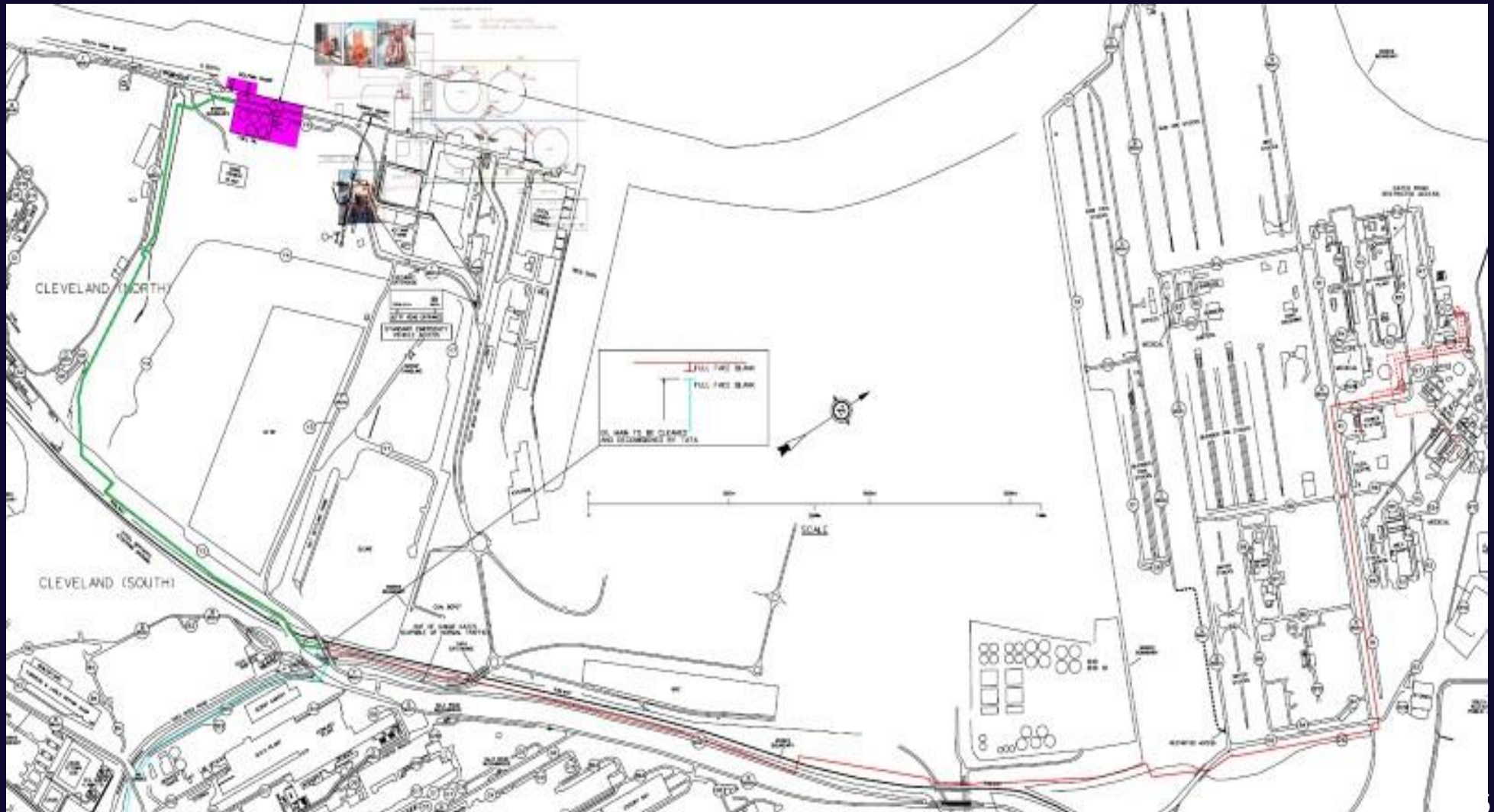
Arterial Mains – Inventory Removal (as of 11/04/2022)

- The TLRS/SBCO arterial COG main has been decontaminated and removed.
- Approx. 625.28T of COG main material remains within Altrad's scope.
- Approx. 81.06T of Heavy Fuel Oil have been removed from site.

Arterial COG Main – April 2022



Heavy Fuel Oil Main—April 2022



Altrad Scope – Completion Rates- April 2022

Coke Oven Gas Mains

Section	Valve Limits	Metres	Metres Complete	%
1	RCOV6a-RCOV9	390	0	0
2	RCOV4-RCOV6a	645	645	100
3	RCOV3-RSP1	275	0	0
4	RCOV1-RCOV2	970	970	100
5	COV5-RCOV1	670	0	0
6	COV6-COV5	90	0	0
7	COV7-COV6	250	0	0
8	SBV7-COV7	2300	140	6
9	SBV6-SBV7	220	220	100
10	SBV4-SBV6	860	860	100
11	SBV4-SBV10	820	820	100
12	SBV11-SBV12	500	380	76
13	SBV14-SBV11	570	570	100
14	TLRS endSBV14	500	500	100
	Total	9060	5105	56

Heavy Fuel Oil

Section	Valve Limit/Split Point	Metres	Metres Complete	%
Wharf Terminal	FOV143-FOV152	1400	1400	100
Holme Beck to Dingley Dell	FOV152-Pigging Station near SBV7	984	984	100
Dingley Dell to Pipe Bridge	Pigging Station to Valve at Pipe Bridge	3113	0	0
Pipe Bridge to FSA	Pipe Bridge Valve to FSA	2600	0	0
	Total	8097	2384	29

Redcar Power Station

Substances Present

- Gas Oils: 37T: below Lower Tier qualifying limit
- Heavy Fuel Oil: 30T: below Lower Tier qualifying limit

Raw Materials Handling

Gas Oils: 0.49T: below Lower Tier qualifying limit

Redcar Blast Furnace

Substances Present

- Gas Oils: 1T (other inventory utilised onsite): **below Lower Tier qualifying limit**

Steel House

Substances Present

- Gas Oils: 0.3T: **below Lower Tier qualifying limit**

5. Summary timeline for removal based on demolition/decontamination programs.

South Bank Coke Ovens – Inventory Removal (as of 11/04/2022)

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Arterial Mains – Inventory Removal (as of 11/03/2022)

- The TLRS/SBCO arterial COG main has been decontaminated and removed.
- Approx. 625.28T of COG main material remains within Altrad’s scope.
- Approx. 81.06T of Heavy Fuel Oil have been removed from site.

6. Environmental Management.

Demolition contractors must employ suitable and sufficient environmental and waste management techniques which are described within the appropriate CDM documentation (Construction Phase Plans, Environmental Management Plans, Waste Management Plans) as well as task-specific Risk Assessments and Method Statements.

Contractors must also manage their activities in such a way that the risk to the environment is reduced.

For the COMAH Dangerous Substances remaining onsite, spill control will be a key technique, with measures expected to be in place firstly, to prevent a release to the environment and, subsequently, to mitigate against the effects of such a release.

Teesworks will not dictate the method adopted for the handling of these substances, but it is anticipated that they may include high-pressure water jetting (as has been seen to date on the decontamination of the arterial Coke Oven Gas Main), vacuum operations and 'pigging' of mains. Task-specific Risk Assessments and Method Statements shall be developed, and the Teesworks Project Managers and EHS support will review and comment on these, especially where there is an interface with the COMAH Regulations.

Responsible waste management is a critical expectation of the contracts placed, and Teesworks must be appraised of all waste removals as demolition projects progress, to allow for the real-time tracking (or as near as possible) of the removal of the COMAH inventory from the site.

The master COMAH inventory spreadsheet, latest version attached below, is updated on a regular basis to reflect these removals.

Master COMAH spreadsheet as of 07th April 2022.



220407 STSC
COMAH Substances

Specific spreadsheets demonstrating the removal of inventory by area and substance have been developed, and progress on these removals will be communicated to Teesworks personnel via the weekly Environment, Health, Safety and Security report and to Teesworks board members via the monthly meeting.

Inventory removal weekly updates spreadsheet.



Inventory Removal
Weekly Updates.xlsx