# MULTIDISCIPLINARY TECHNICAL SERVICES FRAMEWORK OJEU Ref 2018/S 127-289621 APPOINTMENT OF CONSULTANT

#### INSTRUCTION

Environment Agency – Contaminated Land Bundle Project -

Date	24/09/21	Environment Agency	Contract Reference	
		,	To be quoted on all correspondence relating to this Instruction	
			this histroction	

The Consultant entered into a contract dated 15/10/2020 with the Agency whereby it was appointed as a consultant on the Multidisciplinary Panel (the "Framework Contract").

The Environment Agency is a Public Sector Body under the Framework Contract.

The Public Sector Body and the Consultant acknowledge and agree that this document is to be treated as an "Instruction" from the Public Sector Body under and for the purposes of the Framework Contract.

The Consultant agrees to supply to the Public Sector Body the Services specified below on and subject to the terms and conditions of this Instruction and the Framework Contract.

Unless otherwise defined in this Instruction, terms used in this Instruction shall have the meaning given to them in the Framework Contract.

#### The Employer

Environment Agency is the Public Sector Body.

In so far as they relate to the appointment of the Consultant to provide the Services all references to the Agency in the Framework Contract shall also be deemed to be references to the Public Sector Body for the purposes of the Instructions and the Framework Contract.

# **PUBLIC SECTOR BODY DETAILS**

Public Sector	Environment Agency		
Body			
Public Sector	Environment Agency Head Office: Horizon House, Deanery Road, Bristol		
Body's Address	BS1 5AH		
Invoice Address			
Contact:			

# **CONSULTANT DETAILS**

Consultant	WSP UK Ltd ("Consultant")
Consultant's Address	WSP House, 70 Chancery lane, London, WC2A 1AF
Contact:	

#### 1. INSTRUCTION PERIOD

#### (1.1) Commencement Date

This Instruction shall commence on: 04/10/2021

#### (1.2) Instruction Period

6 months - ending on 31/03/2022

#### 2. SERVICES REQUIREMENTS

The following Services shall be provided:

Under Part 2A of the Environmental Protection Act 1990, every local authority has a duty to inspect its borough to identify potentially contaminated land. In certain circumstances the Environment Agency becomes the regulatory authority if sites are determined as contaminated land and also fall within the description of a Special Site as defined in the Contaminated Land (England) Regulations 2006.

However, the Contaminated Land (England) (Amendment) Regulations were revised in 2012 to incorporate changes to Regulation 3b, which sets out the types of surface water pollution that can be considered a Special Site; and the Statutory Guidance was updated to introduce a significance test. Subsequent changes to legislation now the UK has fully left the European Union and the way we carry out water quality monitoring for the purposes of Water Framework Directive reporting have restricted the categories of surface water pollution we can consider under Regulation 3b. Only significant pollution or significant possibility of significant pollution to a Bathing Water protected area or a Shellfish protected area now constitutes a Special Site under Regulation 3b.

This financial year (2021/22) we have secured DEFRA funding to implement a 'package' of three Contaminated Land site reviews to be awarded to an expert consultant as a single commission. The work will mostly be desk based with some limited sampling from existing boreholes, reviewing data to establish whether these sites still meet the criteria of being Contaminated Land under Part 2A EPA 1990 and the revised Statutory Guidance 2012.

Sites included within the bundle are: Cogdean Elms (Dorset); Former Grosvenor Chemical Works (Kirklees); and Tuddenham Landfill (East Suffolk). Each of these sites was determined as Contaminated Land and designated a Special Site because of pollution of controlled waters, or having had a permit, between 12-15 years ago. Whilst the three sites are geographically dispersed and different in terms of site characteristics, the ultimate aims are

the same: i.e. to draw conclusions on whether the sites still meet Contaminated Land status.

# **Site Backgrounds**

#### **Tuddenham**

Tuddenham landfill is a former sand and gravel pit at NGR TM 1932 4920 in the village of Tuddenham St Martin, approximately 5km north-east of Ipswich. The site is roughly rectangular and covers an area of approximately 3 ha. The geology is glacial sands and gravels (Secondary A) overlying the Red Crag (Principal aquifer). The Red Crag is underlain by London Clay. The site is on the north-eastern side of the Fynn valley, and a spring line is evident down gradient of the site where the London Clay outcrops on the valley side. Here a number of springs drain the site area and ultimately discharge to the River Fynn, which is approximately 200m from the site.

Sand and gravel extraction took place prior to the 1940s with infilling of demolition and construction waste commencing prior to 1948. Anecdotal evidence stated that during the mid 1960s, fertiliser waste (floor sweepings from local manufacturers) was disposed of at the base of the pit above the water table. In 1983 elevated ammonia concentrations up to 735mg/l were detected at Tuddenham Bridge during routine monitoring by Anglian Water. Investigation at this time traced the pollution to the springs at Tuddenham and the tip was considered the most likely source.

The site was determined as Contaminated Land under Part 2A of EPA90 on 12 January 2006 by Suffolk Coastal District Council (SCDC). The Record of Determination identified 2 significant pollutant linkages (SPLs) as the reasons for the determination:

- SPL 1: Leaching of ammonia from soils on the site into controlled waters (groundwater) contained within the Red Craq aquifer
- SPL 2: Leaching of ammonia from soils on the site and then migration via springs to controlled waters in the River Fynn

It was designated as a Special Site on 31 January 2006 by virtue of Regulation 3(b) of the Contaminated Land (England) Regulations 2000 by SCDC.

The statutory monitoring point is at Tuddenham Bridge in Tuddenham St Martin. The River Fynn has been monitored downstream of the landfill at Tuddenham Road (FYNo20) for many years, with occasional monitoring of the springs. Since 2017, there has been no exceedances of the o.6mg/l N WFD Good status target.

#### Grosvenor

The Grosvenor Chemicals Special Site is on Lees Mill Lane, Huddersfield (Grid Reference 408900, 414200). It's bordered to the west, south and east by the River Colne and to the north by the Huddersfield Narrow Canal.

The site has been subject to industrial use since 1892, when the land was associated with woollen mills. 'Grosvenor Mill' was present on site from 1918, becoming 'Grosvenor Works' around 1968. It is believed that Crewe Chemicals began producing agricultural chemicals at the site in 1976. Pennine Chemicals are thought to have taken over the site in 1978, becoming part of Grosvenor Chemicals in 1988.

The site was determined as Contaminated Land and designated as a Special Site by Kirklees Council in February 2007. The site was determined as Contaminated Land on the basis of pollution of controlled waters. It was designated as a Special Site under Regulation 2(1)d 'land on which a prescribed process designated for central control has been or is being carried on

under and authorisation.'

A review of the Part2A status of the Grosvenor Chemicals Special Site is required to establish if the land meets the current definition of Contaminated Land, in accordance with Statutory Guidance issued under Part 2A of the Environmental Protection Act 1990.

# Cogdean Elms

Cogdean Elms is an industrial estate in Corfe Mullen, Dorset (NGR SY 99361 98031). Since the 1950's it has been used for the storage, recovery and supply of industrial chemicals, most notably chlorinated solvents.

The National Rivers Authority (precursor to the EA) carried out investigations in the 1990's and these were followed by Soil Vacuum Extraction remedial works to remove solvents from the unsaturated zone.

Following the introduction of Part 2A of the EPA 1990, the site was further investigated and subsequently determined as Contaminated Land and designated as a Special Site under Regulation 3(b) of the Contaminated Land (England) Regulations 2000. The designation at the time was due to five pollutant linkages relating to pollution of the Ashington Stream adjacent to the site, which as a result did not meet the criterion for classification applying to the watercourse under the following regulations made under the Water Resources Act 1991:

- Surface Water (Dangerous Substances)(Classification) Regulations 1992, SI 1992/337
- Surface Water (Dangerous Substances)(Classification) Regulations 1997, SI 1997/2560
- Surface Water (Dangerous Substances) (Classification) Regulations 1998, SI 1998/389

The five pollutant linkages were:

CONTAMINANT	PATHWAY	RECEPTOR	
Trichloroethene			
Tetrachloroethene	Migration through	Ashington Stream	
Chloroform	groundwater		
1,1,1 Trichloroethane			
1,2 Dichloroethene			

There have been a large number of investigations and risk assessments undertaken at the site over the past ~25 years, with the most recent surface water quality monitoring completed in 2018. Because of the amount of site data available (including the monitoring data from the Ashington Stream), we think it's unlikely that further sampling will be required. For this site we want a documentary review of the existing data, followed by a recommendation on whether Significant Pollution of Controlled Waters (SPoCW) is taking place and the site should still be considered Contaminated Land.

# **Objectives**

The project is to review and assess site data at 3 individual sites to establish their current Part 2A Contaminated Land status under EPA 1990. For each site the work will involve a documentary review, developing an updated conceptual model and the design and implementation of simple surface and / or groundwater monitoring programme to fill any data gaps from existing site data. The key project objectives are to:

- Establish whether the land still meets the definition of Contaminated Land under Part
   2A EPA 1990
- Review available data and information, update the site conceptual models and identify

data gaps

- Design and implement a limited surface and / or groundwater monitoring programme to gather any additional data, if necessary
- Report conclusions, recommendations and offer outline remediation options (if required)

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# **Project Governance**



# **Data Sources and Requirements**

As stated above, data collation and review is a key element of the project.

Site maps and more detailed site information is on pgs 13 - 21

The key documents to be reviewed by successful consultant, which we will supply post award, include:

#### For Tuddenham:

- Arcadis GMI for the EA, April 2000 Tuddenham Landfill Site Investigation Report.
- EA, 2005, Part 2A EPA 1990 Tuddenham Landfill Potential Special Site Inspection Report.
- Entec UK Ltd March 2008, Tuddenham Landfill Draft Detailed Remedial Options Appraisal Report.
- Entec UK Ltd June 2009, Technical Note An Assessment of Greenhouse Gas Emissions from Tuddenham Closed Landfill.
- Entec UK Ltd November 2009, Tuddenham Landfill: Further Assessment- Interim Report.
- Entec UK Ltd May 2010, Tuddenham Landfill: Further Assessment of Remedial Options, Final Report.
- EA September 2013, Remediation Statement prepared by the EA

#### For Grosvenor:

- Grosvenor Chemical Works. Report to Kirklees MBC. Environment Agency, August 2005
- Contaminated Land Determination Notice February 2007
- Special Site Designation Notice February 2007
- Grosvenor Chemicals Ltd. Groundwater and Surface Water Monitoring Summary Report 2011-2012. Version 1. SKM Enviros, 2012
- Grosvenor Chemicals. Factual and Interpretative Ground Contamination Report.

Version 1, Draft. Ramboll January 2019

#### For Cogdean Elms:

- Updated Risk Assessment Report, February 2004. Halcrow;
- Report on Remediation Assessment Actions for Part IIA Compliance, June 2008. URS;
- Plume Delineation, Geo-Environmental Site Investigations and Chemox Bench Trials, December 2009. Volumes 1&2. Vertase F.L.I;
- Additional Plume Delineation and Human Health Risk Assessment Sampling, March 2010. Vertase F.L.I;
- Chemical Oxidation Field Trial and Remedial Design, March 2010. Vertase F.L.I;
- Zero Valent Iron Field Trial and Outline Remedial Options, March 2010. Vertase F.L.I;
- Complete Ashington Stream Water Quality Monitoring Data. Environment Agency xls Worksheet.

Further detailed background information and site maps for each location can be found in the ITT document included at Annex 3.

# Health, Safety and Environmental Requirements

Whilst the majority of this project will be office based and will focus on desk-based review, there are elements where on-site sampling is a requirement. No intrusive investigation works are proposed. The proposed water sampling will be undertaken from existing on-site boreholes. Sites have been selected where access is easy, landowners are amenable and borehole monitoring points are suitably located. The Environment Agency Project Manager in liaison with the local Groundwater and Contaminated Land Team will coordinate access. The consultant will comply with all appropriate H&S procedures and detail these protocols prior to the site visit.

The Consultant is expected to pursue sustainability in their operations, thereby ensuring the Environment Agency is not contracting with a supplier whose operational outputs run contrary to Environment Agency's objectives. The Consultant will need to approach the project with a focus on the entire life cycle of the project. The Consultant is required to provide a copy of their environmental policy and any environmental accreditation schemes such as ISO 14001 or EMAS which they have been awarded or are working towards.

# Covid-19 contingency planning

As the ongoing COVID-19 situation could impact the project to some degree, we would request that the Consultant includes a statement about current working practices, how you see the project being affected (key risks) and what mitigation measures you will put in place.

(see Annex 4 for Consultants Proposal)							

#### 3. DELIVERABLES

The following outcomes will be delivered:

#### **Activity Schedule**

• Task 1. Start-up workshop to discuss approach and refine scope

Day long workshop (probably online, depending on COVID restrictions/preferences at the time) where the EA will provide a background to the project and sites, and the overarching aims and objectives. The consultant will then present their scope of works and their understanding of the commission. Data requirements / provision and sampling needs will be discussed and agreed.

Deliverable: A refined specification to include all comments and suggestions from the start-up workshop

• Task 2. Document review and establish data gaps

The EA will provide all relevant site data we hold for each of the 3 sites for the consultant to review and identify any data gaps which can be filled with some limited sampling (see pg 12 for a list of the documents to be reviewed). This will be in the form of electronic files shared via email or, if file sizes are too large, a suitable file sharing platform such as ShareFile.

Deliverable: Establish what data gaps exist for each site and identify which require limited sampling to fill those gaps

• Task 3 Design and carry out limited sampling programme where necessary

As EA monitoring has stopped or slowed for these sites over time, there is likely requirement for some limited sampling at 2 of the sites to get current information on presence of contaminants listed in the formal determination/designation.

The EA will be responsible for ensuring that at each site there is suitable monitoring infrastructure with all points being viable and easily accessible. The successful Tenderer / Subcontractor will be responsible for liaising with the EA and site landowner to gain access to sites, and the sample collection, storage and analysis. For costing purposes, it should be assumed that there are 6 monitoring points to be sampled on **two** separate occasions for the 2 sites. The exact number of sampling rounds and analytical suites will be agreed at the Start Up meeting, however a rough guide is below:

#### Tuddenham sampling

 2 x quarterly sampling of the up, mid and downstream river sample points FYNo11, FYNo18 and FYNo20 and the springs FYNo13 (Spring 1), FYNo14 (Spring 2) and FYNo16 (Spring 3). Analytical suite including NH4-N, NO3-N, BOD, pH, Cl and EC.

### Grosvenor sampling

- three monthly rounds of groundwater and surface water monitoring, comprising:
  - o surface water samples taken at 4 points (upstream, downstream and two adjacent to the site)
  - 8 groundwater samples per monitoring round from the 8 existing groundwater monitoring wells

The contaminants listed on the determination notice are: 'TPH', toluene, 1,2-dichloroethanenyle, MCPP, MCPA, MCPB, diuron, and chlorotoluron. However, monitoring in 2019 picked up other herbicides not listed on the determination. Therefore, a broader suite of testing should be used to include: general organics, total phenols, speciated PAHs, heavy metals, monoaromatics, petroleum hydrocarbons (TPH-CWG), VOCs, acid herbicides, phenylurea herbicides and pyrethroids.

Deliverable: Limited sampling strategy designed and completed for sites, if necessary, to establish continued presence of contaminants listed on the Determination

• Task 4. Data interpretation and risk assessment

The consultant will carry out a data review and DQRA risk assessment for each site to establish whether SPoCW is still occurring, leading to an updated conceptual model.

Deliverable: A refined risk assessment and updated conceptual model for each site

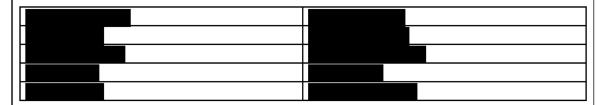
• Task 5. Site Report and recommendations for each site
A detailed site report for each site covering the documentary review, sampling, risk
assessment and updated CSM, with conclusions and recommendations as to whether the
site in question still meets the definition of Contaminated Land under Part 2A EPA 1990

Deliverable: A full set of factual, interpretive site reports and recommendations for each site in the context of Part 2A

#### 4. RESOURCES

## (4.1) Staff of the Consultant to be involved in the provision of the Services

The following people will deliver the Services:



#### (4.2) Resource Schedule

A resource schedule is attached at Annex 2.

### (4.2) Sub-contractors to be involved in the provision of the Services

The Laboratory Services are outlined in the WSP Third Party Costs tab of the Pricing Schedule – Annex 2.

### 5. PROGRAMME

The Services will be delivered in accordance with the programme included at Annex 1.

The Agency anticipates the project commencing w/c 04/10/21 and requires the Consultant to confirm availability to attend a start-up workshop during that week (at this stage assume this will be held virtually). The Tasks and deliverables have been outlined in this document and the Consultant has provided a programme (in the form of a Gantt chart) which will allow completion of all tasks by the agreed deadline.

As this is a relatively straightforward bundle project, the Agency anticipates fortnightly update calls/emails between the client and the appointed consultant as well as an updated monthly reporting template. The Project Manager should be kept fully apprised of project developments and progress, to include any deviations from the agreed scope.

The Project Programme is included at Annex 1.

# 6. FEE

#### (6.1) LUMP SUM FIXED - £66,792.30

The Pricing Schedule from Consultant response to the Public Sector Body's brief is attached at Annex 2. This relates to the specific work items set out in the Public Sector Body's brief.

# (6.2) FEE Rates

Day rates are included in the Annex 2 pricing schedule from the Consultant response to the Public Sector Body's brief. These rates are the agreed Framework Contract panel rates unless discounted rates are offered and will be used for all of the works instructed or works instructed in addition to those covered in the Lump Sum Fee.

# (6.2) Assumptions

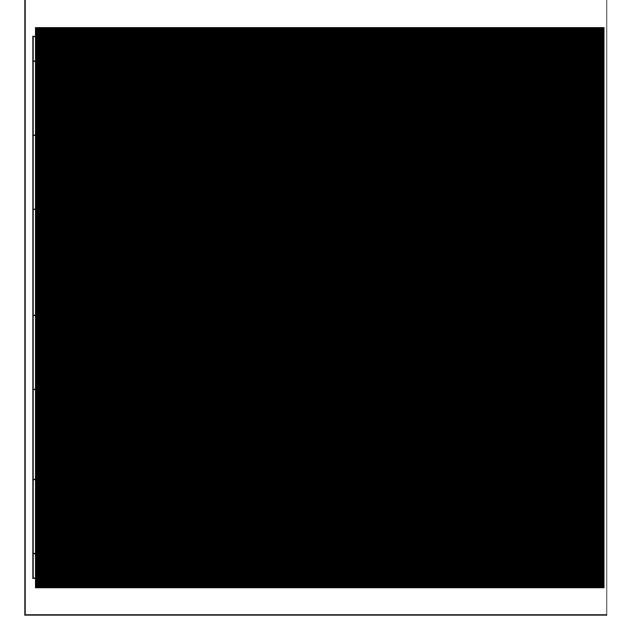
Task 3 Assumes requirement under WSP H&S when working near surface waters that two staff are always in attendance

### 7. INVOICING AND PAYMENT

Invoices in respect of the Instruction will only be processed for payment by the Public Sector Body where:

- (a) they are for the current Instruction;
- (b) the current Environment Agency Purchase Order Reference Number is quoted on the invoice; and
- (c) invoiced in accordance with Schedule 2 of the Framework Contract
- (d) the invoice is addressed to Environment Agency

Payment will be made to the Consultant by Environment Agency according to the following payment schedule:



### 8. SPECIAL CONDITIONS

(7.1) Clause 32 Limit of Liability shall be amended as follows:-

Other special requirements of the Public Sector Body:

### Health and Safety

WSP has the following accreditations: Quality to ISO9001, Environment to ISO14001, Health and Safety to OHSAS18001 and Information Security to ISO 27001:2005. Copies of accreditation certificates must be made available to the Agency prior to the Contract start date.

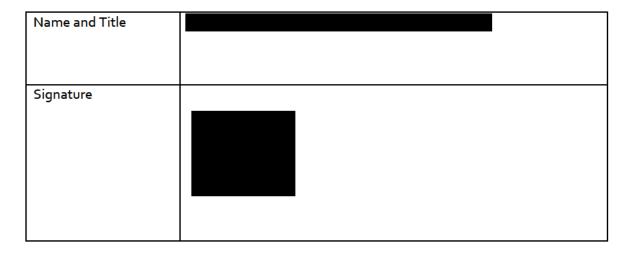
# **Intellectual Property Rights**

The findings and outputs delivered from this project will remain the Property of the Environment Agency throughout.

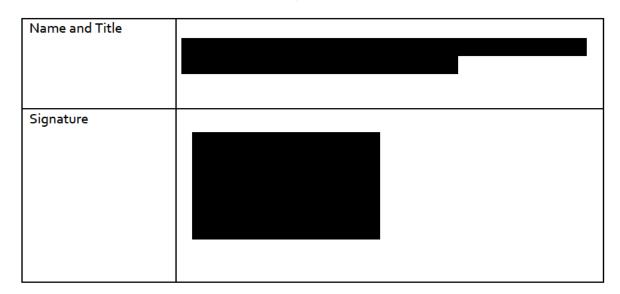
BY SIGNING AND RETURNING THIS INSTRUCTION THE CONSULTANT AGREES it is entering into a legally binding contract for the Consultant's appointment (the "Consultant Appointment Contract") with the Public Sector Body to provide the Services. The Consultant Appointment Contract incorporates and is subject to all of the terms and conditions contained in the Framework Contract as may be varied and/or amended by the other provisions of this Instruction and the provisions of the Framework Contract, the provisions of this Instruction shall prevail).

The Consultant and the Public Sector Body hereby acknowledge and agree that they have read this Instruction and the Framework Contract and by signing below agree to be bound by the terms of this Consultant Appointment Contract from the date appearing at the start of this Instruction.

#### For and on behalf of the Consultant:



# For and on behalf of the Public Sector Body:



# Annex 1. Programme

