



**GLAN LLYN DEVELOPMENT SITE
LLANWERN
NEWPORT**

**SUPPLEMENTARY INFORMATION
FOR MOBILE PLANT PERMIT
DEPLOYMENT APPLICATION**

AUGUST 2020

R2488/20/5022

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1.0 INTRODUCTION

This report is to be read in combination with the attached Environmental Permit Deployment form. The sections in this report contain additional information to that supplied in the deployment form where indicated in the form.

Celtic Technologies Limited (Celtic) operates and manages its water treatment works in accordance with its Mobile Plant Permit (MPP), reference AP3195FG, which may be deployed in England or Wales as determined the Environment Agency (EA) or National Resources Wales (NRW) respectively.

Celtic have been commissioned by St Modwen to undertake water treatment works within the former Llanwern steelworks, which is currently undergoing development works. The proposed area for deployment is set within an area of largely vacant land near the southern boundary of the development site (as shown on drawing D2488_5022_A1, Appendix A). Residential properties are located approximately 850 m to the west, whereas an Amazon distribution warehouse lies 450m to the east. The Gwent Levels SSSI is located approximately 70 m to the south of the site and the Severn Estuary is located approximately 4 km to the south of the site. A railway line is located to the north of the site.

The development site is currently drained by a network of surface water reens which discharge to the adjacent Tata Steel site via the Main East West Ditch (MEWD). An agreement has been reached between St Modwen and Tata Steel to allow this discharge to continue during the Glan Llyn site development works, on the basis that the surface water is treated to standard acceptable to Tata Steel. This water is subsequently discharged to the Severn Estuary under an Environmental Permit held by Tata Steel.

Celtic have been commissioned to install, commission and operate a water treatment system to treat surface water exiting the site via Drain 4, which ultimately discharges to the Tata Steel effluent treatment plant. The surface water will be pumped from a pre-treatment lagoon, through the treatment system, prior to discharge to the Drain 4 outfall. The treatment works to be carried out by Celtic will therefore result in improvement in the quality of water currently exiting the site.

B5 SPECIFIED ACTIVITIES TO BE CARRIED OUT AT THE SITE

B5.1 SUITABILITY OF SPECIFIED TECHNOLOGIES

Celtic propose to deploy a water treatment system to treat influent water containing suspended solids, organic and inorganic dissolved phase contaminants to concentrations as agreed with the recipient of the effluent, Tata Steel. The system will treat the water via the following processes as standard:

- Settlement of suspended solids via a baffled settlement tank;
- Filtration of suspended solids through sand filters and Granular Activated Carbon (GAC) vessels;
- Sorption of dissolved phase hydrocarbons through GAC vessels; and
- Removal of ionic and metals species via zeolite filter media.

Based on extensive surface water monitoring carried out by the client's consultant, the influent contaminant loading is expected to be low; however, Celtic have designed the system to be flexible and robust, therefore the system also has the following capabilities, should additional treatment processes be required:

- pH adjustment through flow-proportional acid/alkali dosing, should influent pH fall outside of the required range;
- Precipitation of metals species via pH adjustment, coagulation and settlement, in the event of high dissolved metals concentrations in influent water;
- Removal of dissolved metals species through ion-exchange resin.

Non-aqueous phase liquids (NAPL) are not expected to enter the system, however, the system also incorporates oil-water separation through gravity separation, with IBCs available for storage of any recovered NAPL.

The system will be equipped with in-situ sensors to continuously monitor pH, electrical conductivity and turbidity in effluent, with the ability to automatically react to changes in these parameters indicating potential exceedance of agreed criteria, by ceasing discharge and diverting flows to additional treatment (as described above), as required.

The system, to be housed within a bund of 110% capacity, will be fully automated with multiple safety devices, including tank high levels sensors, bund high level sensors and pressure sensors. All information will be fed to a central Programmable Logic Controller (PLC), which will be programmed to automatically detect and react appropriately to any detected issue. Remote system access and telemetry will enable notification of Celtic personnel in the event of any fault. These features will enable the system to safely operate 24 hours a day, 7 days per week with minimal supervision and maintenance requirements.

The water treatment system piping and instrumentation diagrams are presented in Appendix A.

B5.2 RESIDUAL MATERIALS / WASTE

The water treatment system has been over-designed to ensure it is capable of treating influent water of varying quality including water of significantly worse quality than that expected from previous sampling and chemical analysis carried out by the client's consultant. The system is also designed to automatically cease discharge should in-situ sensors detect levels indicating degradation of effluent quality, with the automatic redirection to additional treatment, as described in Section B5.1. As such, we do not expect to receive any water of quality that cannot be treated by the proposed system. Residual wastes which cannot be treated on site will, however, be generated by the treatment process. These include:

- Spent activated carbon (GAC);
- Spent ion-exchange media;
- Settled suspended solids / precipitates; and
- Possible NAPL.

Activated carbon and ion-exchange media are held within steel pressure vessels on site, and the media becomes gradually spent through the course of treatment, ultimately requiring replenishment / exchange with fresh media. Both these media will be sent for off-site to suitably licenced facilities for regeneration and re-use.

Suspended solids / precipitates will accumulate at the bottom of settlement tanks during treatment, eventually requiring removal. The solids will be chemically characterised prior to removal, either for reuse or disposal off-site at a suitably licenced facility.

Any NAPL separated from the oil-water separator will be decanted into an IBC stored within the water treatment system bund, and will be chemically characterised prior to off-site removal for reuse or disposal at a suitably licenced facility.

B5.3 STORAGE OF WASTES

All wastes generated as part of the treatment process will accumulate gradually within the elements of the treatment system (settlement tanks / pressure vessels) within the system bund, prior to their eventual emptying as described in the above section. As such, no additional waste storage facilities or areas for quarantine are required on site.

B8 MANAGEMENT SUPERVISION

B8.2 SITE SUPERVISION PLAN FOR TECHNICALLY COMPETENT MANAGER

The Technically Competent Manager (TCM) will attend site daily during the commissioning of the system and weekly thereafter. The TCM will inspect the setup of the treatment facilities on site prior to commencement of the treatment works. The TCM will spend the remaining time on inspection audits of the treatment process during the remediation. The majority of audits will be carried out during the active phase of works. The WAMITAB certificate for the TCM can be found in Appendix D.

The treatment system is designed to run 24 hours a day, 7 days per week with minimal supervision required. Monitoring and maintenance activities will be carried out by Celtic engineers during normal site working hours.

The system, to be housed within a bund of 110% capacity, will be fully automated with multiple safety devices, including tank high levels sensors, bund high level sensors and pressure sensors. All information will be fed to a central Programmable Logic Controller (PLC), which will be programmed to automatically detect and react appropriately to any detected issue. Remote system access and telemetry will enable notification of Celtic personnel in the event of any fault. The site will be accessible to Celtic engineers 24 hours per day, 7 days a week in the event of a callout.

As part of the maintenance program all level switches, pumps and emergency cut off switches are manually triggered weekly to ensure they are in good working order and are fit for use. All water treatment systems will be secured with fencing to prevent unauthorised access.

B9 CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

A conceptual site model illustrating the source-pathway-receptor relationship has been carried out for works occurring under the Mobile Treatment Licence. This is presented in Table 1 overleaf.

Table 1 – Conceptual Site Model Risk Assessment

SOURCES	PATHWAYS	POTENTIAL RECEPTORS	NOTES (Including Control Measures)	RISK AFTER CONTROL
Operational water treatment system (Surface water influent potentially impacted by organic & inorganic contaminants) Potential vapour generated from water treatment system (if NAPL present in influent)	<ul style="list-style-type: none"> Direct Contact Leakage / spillage Vapour inhalation 	<ul style="list-style-type: none"> Site workers Site visitors Groundwater beneath the site Gwent Levels SSSI (70m to south) Surface Soils 	<ul style="list-style-type: none"> Potentially Complete Pollutant Linkage: Workers inspecting the treatment system may come into contact with Contaminants. Controlled by information, inductions, good working practices, wearing appropriate PPE and RPE, signage, Site monitoring, Site welfare facilities and by following Method Statements. The water treatment systems will be contained within bunds of capacity of 110% volume or more of the total system components capacity. High level float switches will ensure that the system is automatically switched off should any leakage occur within the system. Regular inspections of the treatment system and pipework will also be carried out by a competent engineer. Any impacted waters will undergo treatment prior to discharge. Weekly sampling of effluent will ensure only water acceptable to the discharge consent is discharged. 	Low
Effluent discharge	<ul style="list-style-type: none"> Direct Contact Leakage / spillage 	<ul style="list-style-type: none"> Site Staff Groundwater beneath the site Surface Soils Gwent Levels SSSI (70m to south) 	<ul style="list-style-type: none"> Potentially Complete Pollutant Linkage: Effluent for discharge will be monitored continuously by in-situ sensors and by sampling on a weekly basis to ensure compliance with the discharge consent. All pumped surface water requiring treatment will be treated via on site treatment plant prior to discharge to the MEWD and the treated water is expected to be of high quality posing negligible human health and environmental risk. Staff will be trained, inducted and have suitable PPE to minimise risk of exposure. 	Negligible
Chemical reagents used in the treatment process (acid/alkali solutions and coagulant)	<ul style="list-style-type: none"> Direct contact Leakage / spillage 	<ul style="list-style-type: none"> Site Staff Groundwater beneath the site Surface Soils Gwent Levels SSSI (70m to south) 	<ul style="list-style-type: none"> Potentially Complete Pollutant Linkage: All chemicals present on site will be appropriately stored within their proper containers and within a water treatment system bund of 110% capacity of all system items. Maximum of 1m3 of each reagent will be stored on site within the bund. Weekly inspection of all containers and dosing equipment & pipework will be carried out by a systems engineer, with any defects reported and addressed appropriately. Staff will be trained, inducted, will be working under Safe Systems of Work and have suitable PPE to minimise risk of exposure. A safety shower conforming to EN15154 will be present on site in case of the unlikely event of contact with chemical reagents 	Low

Wastes generated from the treatment process (solids, spent media, potential NAPL)	<ul style="list-style-type: none"> ▪ Direct contact ▪ Vapour inhalation ▪ Leakage / spillage 	<ul style="list-style-type: none"> ▪ Site Staff ▪ Groundwater beneath the site ▪ Surface Soils ▪ Gwent Levels SSSI (70m to south) 	<ul style="list-style-type: none"> ▪ Potentially Complete Pollutant Linkage: All wastes generated through the treatment process will accumulate within water treatment system components (tanks & pressure vessels) and within a water treatment system bund of 110% capacity of all system items. IBCs, stored within the water treatment system bund, will be used to store any separated NAPL prior to off-site disposal or reuse. ▪ Workers inspecting the treatment system may come into contact with Contaminants. Controlled by information, inductions, good working practices, wearing appropriate PPE and RPE, signage, Site monitoring, Site welfare facilities and by following Method Statements. 	Low
Noise emitted from system during active site works	<ul style="list-style-type: none"> ▪ Noise emissions during dewatering and remedial operations 	<ul style="list-style-type: none"> • Site Staff • Adjacent third-party workers • Public at site boundary. 	<ul style="list-style-type: none"> • Incomplete Linkage: Staff at the site will have limited contact with any prolonged noise emitting activity. Noise will be monitored during works using a decibel meter. Should noise levels be above trigger levels set for the site then works will be stopped and noise reducing measures will be employed. In addition, the potential effects of noise emitting activities will be mitigated by relevant PPE if required. • Incomplete Linkage: No significant impact to adjacent third-party workers as system is low noise, <70 dBA. Celtic will undertake noise monitoring to confirm levels. • Incomplete Linkage: No significant impact to the public at site boundary, the system is low noise - <70dBA. Celtic will undertake noise monitoring to confirm levels. 	Low

B10 POLLUTION CONTROL

Celtic will undertake background monitoring and design a monitoring programme to be implemented during the site works. Background levels, Occupational Exposure Limits (OEL's) and risk derived values will form the basis for site specific trigger values.

Monitoring records will include:

- determinants monitored;
- details of measurements (date, time, frequency, location);
- results;
- interpretation and review of results with trigger values;
- validation of accuracy; and

Should monitoring exceed the site-specific trigger values, control measures specified in the site-specific contingency method statement will be implemented. This may include the physical covering of tanks, ventilation, filtering or active extraction.

The contingency plan will be designed and operated to:

- prevent hazard to human life, property or the environment;
- control and minimise any immediate risks of pollution of the environment;
- ensure the immediate initiation of necessary investigations and management; and
- actions to identify, mitigate and remediate the causes of the exceedance.

Monitoring and Control of Ambient Gases, Vapours and Aerosols

Mobile treatment plant under the control of Celtic is highly unlikely to give rise to emissions of vapours and aerosols during normal operation. In open areas of the site, normal air circulation will prevent the accumulation of semi volatile and volatile organic carbons (SVOCs, VOCs and vapours).

Prior to and during the initial active works phase, Celtic staff will undertake daily monitoring of volatile organic compounds (VOCs) using a Photo Ionisation Detector (PID) at monitoring points around the active works area (D2488_5022_A2, Appendix A) when the site is manned and the system is operational. There will be 1 static monitoring point located at the water treatment system and one downwind of the water treatment system which will move dependant on wind direction. The PID will be operated, calibrated and maintained in accordance with the manufacturer's instructions. Measurements will be recorded in the site diary and in the Health & Safety File. Concentrations will be compared with OELs for any volatile compounds identified from laboratory VOC characterisation. A copy of the records will be made available to The Environment Agency on a monthly basis.

Representative samples of gases, vapours and aerosols will be taken within the operational area if routine PID monitoring identifies a significant hazard. If such sampling is required, passive samples will be taken using desorption tubes at each of the monitoring stations.

Should VOCs exceed the trigger level in the treatment area (RPE at 1 ppm 8 hour TWA and Stop works at 10 ppm 8 hour TWA); the action plan will be implemented. This will include RPE at the lower trigger level, and evacuate the operational area if the upper trigger level is reached. Only resume work when VOC concentrations have dropped below the upper trigger level or

contingency control measures are in place. Control measures may include increased ventilation, filtering or active extraction.

Dust, Fibres and Particulates

Celtic are only providing water treatment services at the site and cannot control dust, fibres or particles produced by others on site.

Odour

Odours will be monitored on a daily basis within and at the perimeter of the active works area and records will be kept in the site diary. It is unlikely but possible that during the treatment of water from excavations vapour odours may be emitted. This is more likely during maintenance of the system as at times the closed treatment system may have to be isolated and opened. If these odours become an issue on-site then contingency plans will be put in place to reduce the odour.

Methods of reducing odours are to include;

- Pre-assessing the wind direction and strength prior to operations.
- Pre-assessing the time of maintenance prior to operations.

If the odour becomes too high, operations will be ceased and the treatment area should be doused with industrial deodoriser spray designed for industrial operation use.

The level of odour will be assessed based on the following criteria:

Table 2 – Odour Assessment

Level of Odour Observation	Actions
No to very faint odour	No action
Occasional faint to moderate odour	Increase monitoring frequency
Frequent moderate to strong odour	Implement mitigation actions

Control of Noise

All remedial processes will be carried out utilising low intensity works, where possible. Any noise generating activities will be carried out during normal site operational hours, 8:00 am until 6:00 pm Monday to Friday. The treatment system comprises very few moving parts, with noise generation expected to be negligible. However, all of the noise emitting equipment in excess of 70 DbA 1m from source will be within a housing to minimise noise emission. On-site workers will be provided with suitable PPE. Monitoring will be undertaken on a regular basis using a hand-held calibrated sound level meter.

The system is designed to be low noise and not to exceed noise levels within or outside the working area.

Control of Extracted Water

The pumped water will be passed through settlement tanks, sand filters and granular activated carbon (GAC) prior to being discharged to the MEWD. Sample points would be located both before and after all vessels to allow for adequate sampling, as required. Discharge samples from the system have been allowed for on a weekly basis and from intermediate sampling points, as required.

Fuel Storage

Storage of up to 2,000 litres of diesel will be required for the generator as part of the works, noting that any fuel will be stored within a bunded fuel tank. A spill kit will also be available adjacent to stored fuel throughout the treatment works.

Control of Litter

The nature of the work does not pose a risk of litter migration outside the site boundary. The site will be operated in a safe, tidy and hygienic manner. Operatives will be required to dispose of any litter generated on site during daily routine tasks where safe to do so. A skip will be used for any large items of general waste.

The site diary will record that monitoring checks have been carried out daily to confirm points above.

B11 EMISSIONS MONITORING PLAN

Prior to any works commencing on site, a baseline environmental monitoring survey will be completed to assess the current environmental conditions within the area of the site. This survey will be completed prior to works commencing to ensure representative data is collected. A minimum of two monitoring rounds will be carried out for the baseline survey which will include monitoring points within the treatment system area and at the compound fenced boundary.

The survey will include assessments of pre-work dust, noise, vapour and odour levels. This data will be retained on site and used to assess the environmental impact of the remediation works as they progress. This baseline data will be available for inspection by any concerned party, including NRW.

Once works have commenced and in line with the terms and conditions of Celtic's Mobile Plant Permit and its deployment, environmental monitoring will be undertaken during active site works to ensure the works have no adverse impact on the immediate and wider environments. It is proposed that 2 air quality monitoring locations will be used on site, one within the water treatment system and another at the compound boundary at a downwind location. It should be noted that Celtic's works are being undertaken on an active development site and therefore significant background interference from third party activities may affect any monitoring results collected by Celtic. Any such emissions likely to have been generated by a third party during Celtic monitoring events will be commented upon in the monitoring sheet.

The proposed monitoring points are shown on Drawing D2488_5022_A2, Appendix A.

Monitoring will be carried out at these locations from the start of the works until the works are complete. The monitoring will comprise, noise via hand held noise meters, odour by qualitative assessment and vapour via Photo Ionisation Detector (PID). These are summarised in Table 3, below.

Table 3 – Emissions Monitoring Plan

	Ambient Vapour / Odour	Ambient Noise	Treated Water
Sampling Method(s)	Photo Ionisation Detector (PID) / Qualitative odour assessment	Decibel Noise Meter	Laboratory Analysis / in-situ monitoring
Trigger Level	RPE - 1 ppm VOC (8 hour TWA) Stop Work – 10 ppm VOC (8 hour TWA) NB: This is based on most conservative TWA (8 hour) for the COCs (benzene).	Lower exposure action values are: 80 dB (A) and 135 dB (C) Upper exposure action values are: 85 dB (A) and 137 dB (C) Exposure limit values are: 87 dB (A) and 140 dB (C) 5 dB (5 min TWA) above background monitoring data at site perimeter monitoring locations.	Subject to agreed discharge criteria
Baseline (All Locations)	2 rounds	2 rounds	Not applicable
Active Works Phase	Daily when system is manned and operational	Daily when system is manned and operational	Continuous in-situ monitoring of pH, EC and turbidity Weekly sampling
Post Works	2 rounds	2 rounds	Not Applicable

*The most toxic compound/marker recorded at the site is benzene and we will conservatively assume this represents 100% of the total vapour emissions for Total VOCs recorded during monitoring. If VOCs are detected at or above 1ppm (15 min TWA), representative samples/monitoring will be undertaken to identify individual compounds and appropriate actions taken as necessary.

Contingency Control Measures

In the event that the monitoring plan trigger levels are reached or additional control measures are deemed necessary by the wider project team, additional contingency control measures will be implemented. These are detailed below.

In the unlikely event of unacceptable odour and/or vapour levels, open top tanks will be covered and if necessary, active extraction will be carried out with routing of extracted air to appropriate air treatment. In addition, a de-odouriser system will be considered.

In the unlikely event of unacceptable noise levels, working methods and plant will be reviewed. In addition, acoustic barriers on temporary fence panels can be deployed around noise producing items such as the generator.

Should the effluent quality deteriorate, as indicated by continuous in-situ monitoring or chemical analysis, the discharge will be ceased and investigation will be carried out.

B12 RECORD KEEPING – COMMISSIONING, OPERATING AND MAINTENANCE

Prior to delivery to site, valid maintenance certificates will be required for all plant and equipment, together with valid calibration certificates for appropriate items (monitoring instruments etc). During the works a weekly maintenance checklist, including checks on all applicable system components, will be carried out by a Celtic engineer.

On completion of the setting up of the treatment working area, the Technically Competent Manager (TCM) will inspect the setup of the treatment facilities on site prior to commencement of the treatment works. Prior to the commencement of the treatment works, to commission the works, the TCM will complete Celtic's Mobile Treatment Licence/Environmental Permit Compliance form Pre Operational Check and also check that the site meets the provisions of Celtic's Health, Safety and Environmental Integrated Management System by using Celtic's Site Works Inspection Audit Form. The forms are included in Appendix C.

During the works, a diary will be maintained by the site manager, together with details of site staff. Monitoring recorded as part of the environmental monitoring plan will be recorded and retained electronically for the duration of the works. The site manager will check the environmental monitoring data on a daily basis of any exceedances of trigger levels and the monitoring technicians will have a brief to inform the site manager for any exceedances for immediate management/contingency action. The site will also self-audit on a monthly basis using Celtic's Site Works Audit form in Appendix C to ensure compliance with Celtic's Health, Safety and Environmental Plan and IMS.

The pro-forma for the environmental monitoring that will be undertaken at the site can be found in Appendix B.

APPENDICES

APPENDIX A

DRAWINGS

A
B
C
D
E
F
G
H
I
J



Legend
Site Coordinates:
336365, 186408

Celtic Operating
Site Boundary

0	Final	20/08/20
REV	COMMENT	DATE



Columbus House
Village Way
Cardiff
CF15 7NE
029 2036 8636

Centrix House
Crow Lane East
Newton Le Willows
WA12 9UY
01925 273222

enquiries@celtic-tech.co.uk
www.celtic-ld.com

Client
St Modwen

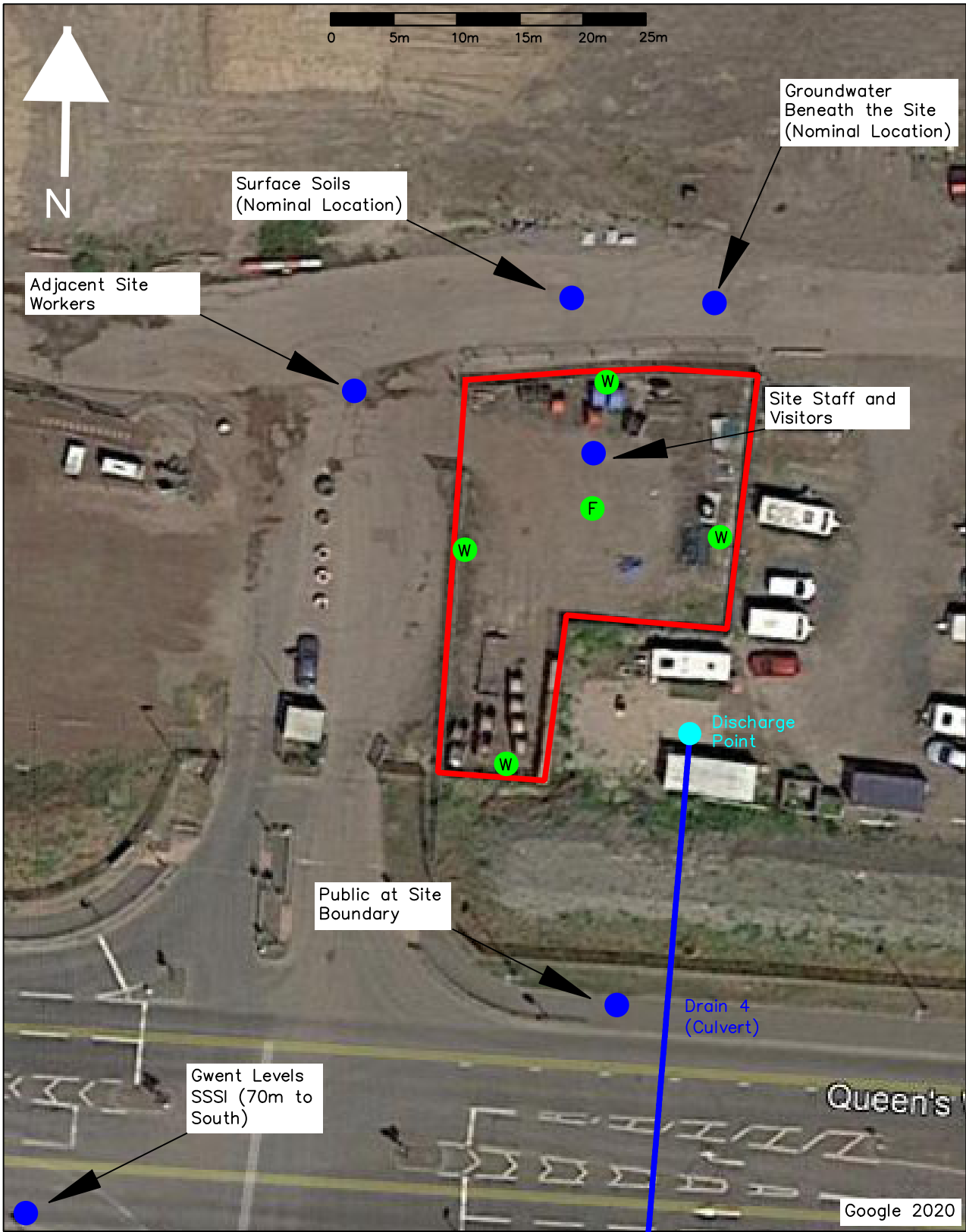
Project
Llanwern

Title
Site Location Plan

Drawn by	JT	Checked	MH	Date	08/20	Authorised	Date	20/08/2020
Original Scale	NTS	Date	20/08/20	Rev	0	Paper	A3	

Drawing Number
D2488/5022/A1

A
B
C
D
E
F
G
H
I
J



Legend

Site Coordinates:
336365, 186408

Celtic Operating Site Boundary (All treatment plant within this boundary)

Environmental Monitoring Location (Subject to Wind) W

Environmental Monitoring Location (Fixed) F

Receptors

Note that there is no existing drainage on site other than the culverted Drain 4 shown on this plan (discharging to MEWD)

1	Revised	15/10/20
0	Final	20/08/20
REV	COMMENT	DATE



Columbus House
Village Way
Cardiff
CF15 7NE
029 2036 8636

Centrix House
Crow Lane East
Newton Le Willows
WA12 9UY
01925 273222

enquiries@celtic-tech.co.uk
www.celtic-ld.com

Client
St Modwen

Project
Llanwern

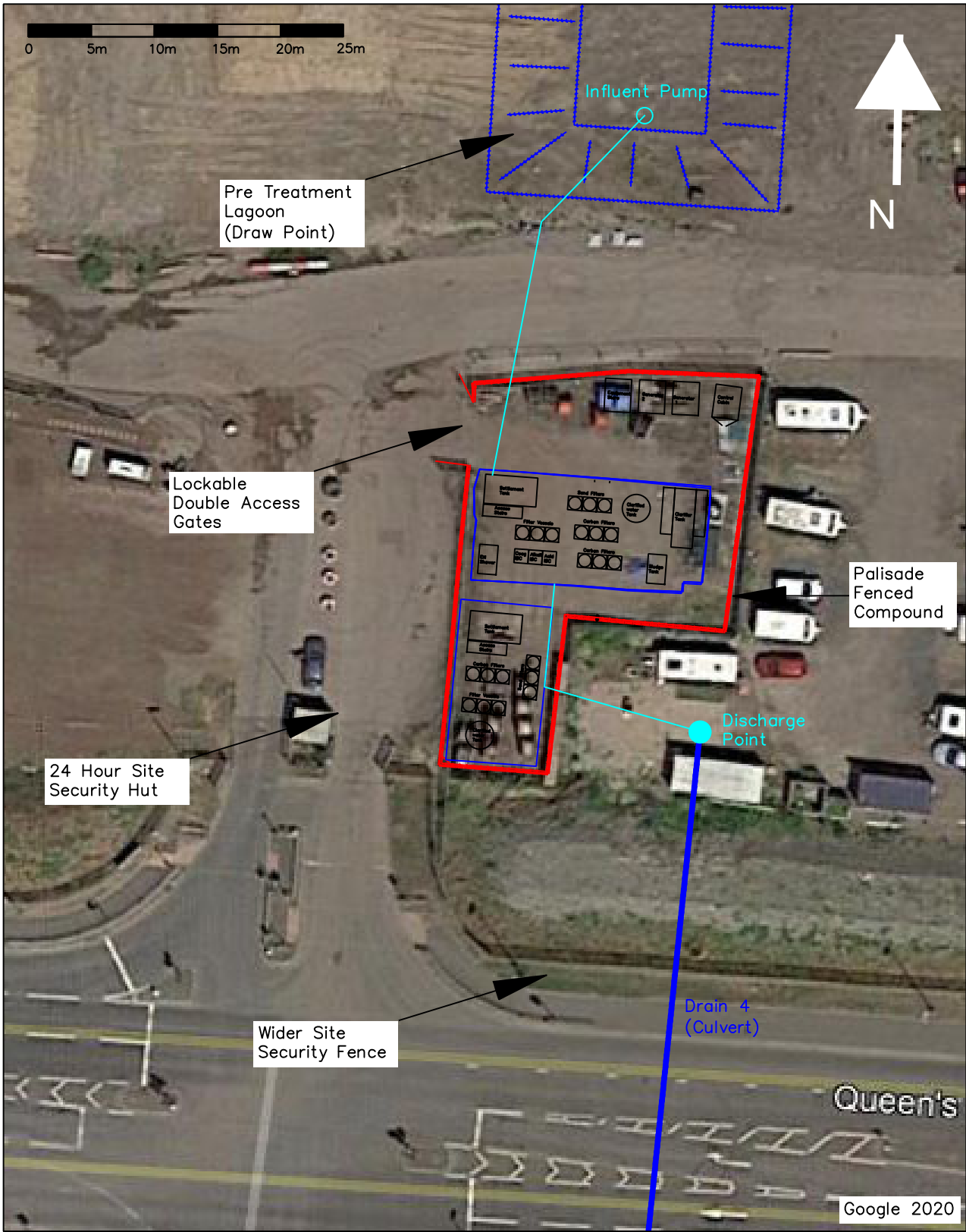
Title
Receptors and Monitoring Locations

Drawn by	Checked	Date	Authorised	Date
JT	MH	08/20		20/08/2020
Original Scale	Date	Rev	Paper	
NTS	20/08/20	0	A3	

Drawing Number
D2488/5022/A2



A
B
C
D
E
F
G
H
I
J



Legend

Site Coordinates:
336365, 186408

Celtic Operating Site Boundary
(All treatment plant within this boundary)

Water Treatment Bund Outline

1	Revised	15/10/20
0	Final	20/08/20
REV	COMMENT	DATE

Celtic enGlobe

Columbus House
Village Way
Cardiff
CF15 7NE
029 2036 8636

Centrix House
Crow Lane East
Newton Le Willows
WA12 9UY
01925 273222

enquiries@celtic-tech.co.uk
www.celtic-ld.com

Client
St Modwen

Project
Llanwern

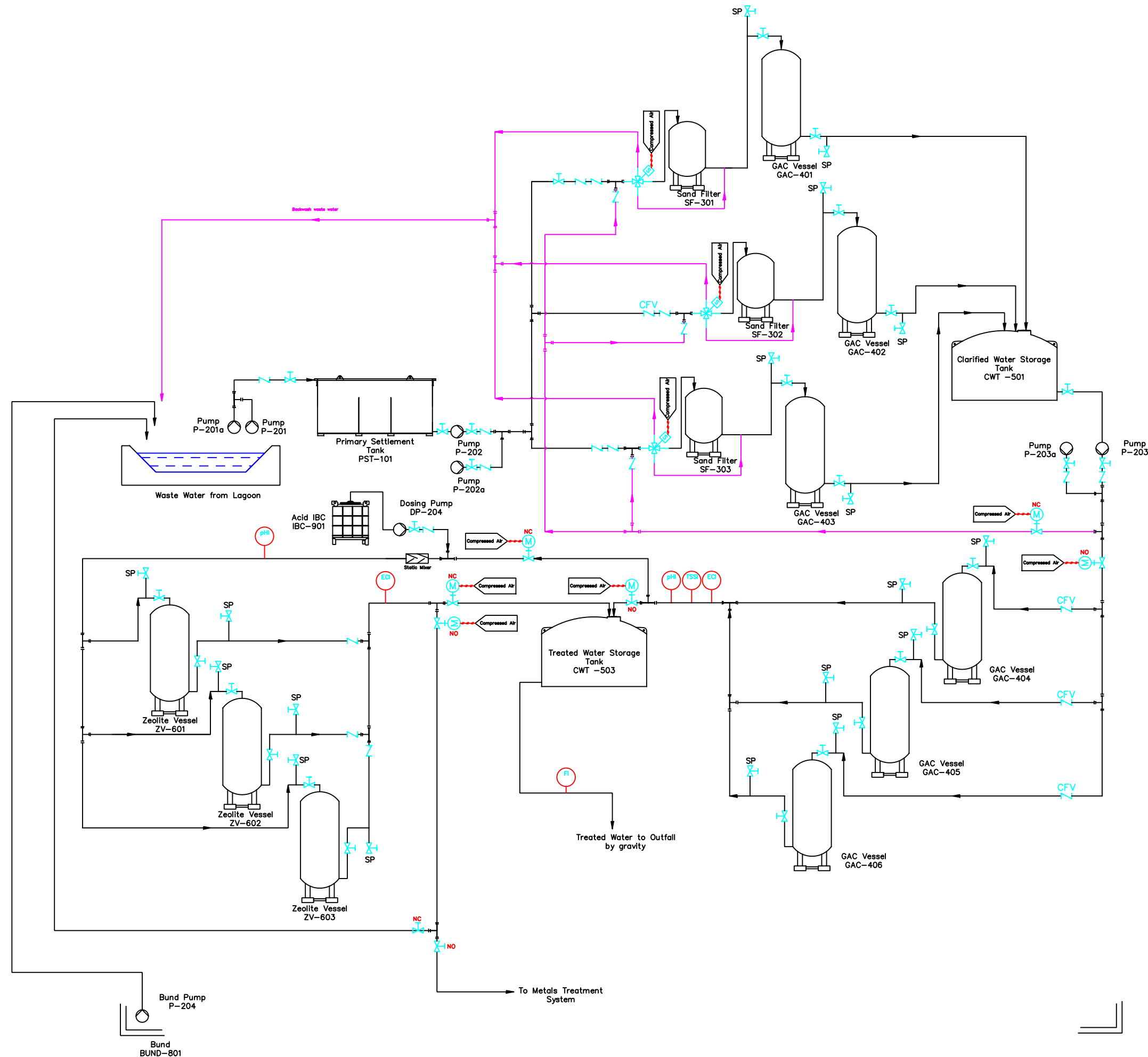
Title
Site Security & Layout Plan

(Draft Plant Layout)

Drawn by	Checked	Date	Authorised	Date
JT	MH	08/20		20/08/2020
Original Scale	Date	Rev	Paper	
NTS	20/08/20	0	A3	

Drawing Number
D2488/5022/A3

Legend



0	Final	14/07/20
REV	COMMENT	DATE



Columbus House
Village Way
Cardiff
CF15 7NE
029 2036 8636

Centrix House
Crow Lane East
Newton Le Willows
WA12 9UY
01925 273222

enquiries@celtic-tech.co.uk
www.celtic-ld.com

Client
St Modwen

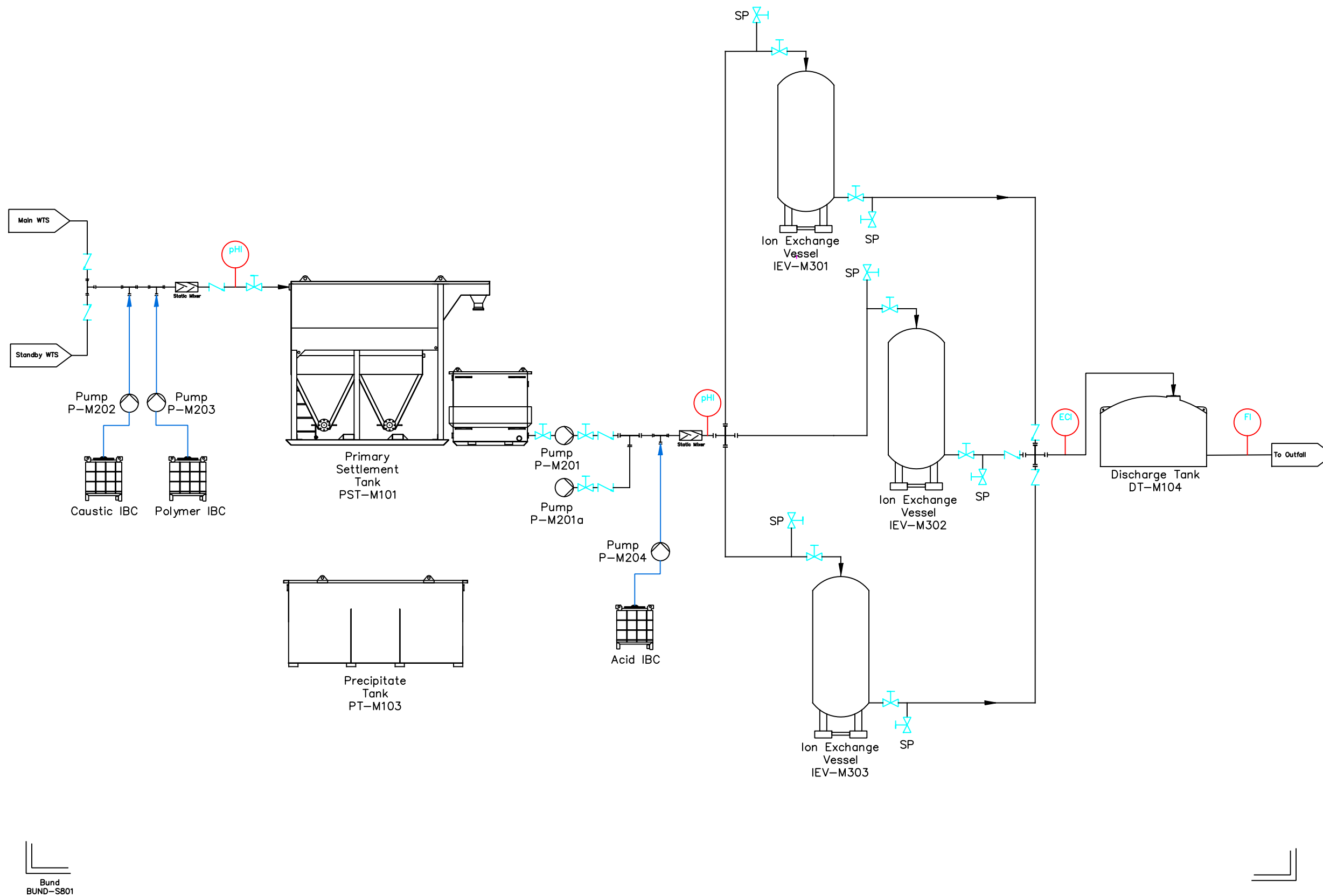
Project
Llanwern

Title
Water Treatment System
Process Flow Diagram
(Draft)

Drawn by JT	Checked RD	Date 07/20	Authorised 15/7/20
Original Scale NTS	Date 14/07/20	Rev 0	Paper A3

Drawing Number
D2488/5022/A4

Legend



Bund
BUND-S801

0	Final	14/07/20
REV	COMMENT	DATE



Columbus House
Village Way
Cardiff
CF15 7NE
029 2036 8636

Centrix House
Crow Lane East
Newton Le Willows
WA12 9UY
01925 273222

enquiries@celtic-tech.co.uk
www.celtic-ld.com

Client
St Modwen

Project
Llanwern

Title
Optional Additional
Treatment:
Process Flow Diagram
(Draft)

Drawn by	Checked	Date	Authorised	Date
JT	RD	07/20		15/7/20
Original Scale	Date	Rev	Paper	
NTS	14/07/20	0	A3	

Drawing Number
D2488/5022/A5

APPENDIX B

MONITORING PROFORMAS

SAR-PC-32 Environmental Monitoring/ Occupational Monitoring Proforma

Site:

Date:

Round Number:

Weather:

Wind Direction:

PID Calibration

mB:

Passed:

Y/N

VOC

NOISE

DUST

ODOUR

Location	Time	Average over 5 mins (ppm)	Peak over 5 mins (ppm)	Average over 5 mins (dBA)	Peak over 5 mins (dBA)	TSP (µg/m ³)		PM10 (µg/m ³)		PM2.5 (µg/m ³)		PM1 (µg/m ³)		Intensity 1-5	Extent 1-5	Comments (Action required?/ Action taken)
						5 mins	15 mins	5 mins	15 mins	5 mins	15 mins	5 mins	15 mins			
Use below to record readings in work areas for occupational safety items i.e. at dig face (Voc's and noise), within system unit or adjacent to pumps (no																

Odour Monitoring Criteria

Intensity

- 1 No detectable odour
- 2 Faint odour (barely detectable, need to stand still and inhale facing into the wind)
- 3 Moderate odour (odour easily detected while walking & breathing normally, possibly offensive)
- 4 Strong odour (bearable, but offensive odour)
- 5 Very strong odour (very offensive, possibly causing nausea)

Extent (assuming odour detectable, if not then 0)

- 1 Local & transient (only during brief periods when wind drops or blows)
- 2 Transient as above, but detected away from installation boundary
- 3 Persistent, but fairly localised
- 4 Persistent and pervasive up to 50m from plant or installation boundary
- 5 Persistent and widespread (odour detected >50 m from installation boundary)

APPENDIX C

INSPECTION AND AUDIT FORMS

Mobile Treatment Permit/ Environmental Permit Compliance Audit Form

Project Name:

Project Number:

Auditor:

Signed:

Date:

Event Type: ☐ Routine

☐ Incident Response

☐ Other

Please specify

Site Life Status: ☐ Operational

☐ Pre-operational

☐ Post-operational

Compliance Assessment

Key to completion:

A = Assessed/ Assessed in part (no evidence of non-compliance)

ATL = Approach to Limit

NA = Not Applicable

N = Not Assessed

Compliance Classification Scheme (CCS)

CCS Cat 1 Breach - A non compliance which has a potentially **major** environmental effect

CCS Cat 2 Breach - A non compliance which has a potentially **significant** environmental effect

CCS Cat 3 Breach - A non compliance which has a potentially **minor** environmental effect

CCS Cat 4 Breach - A non compliance which has **no** potential environmental effect

Infrastructure

- 1) Engineering for prevention and control of emissions
- 2) Closure and decommissioning
- 3) Site drainage engineering (clean and foul)
- 4) Containment of stored materials
- 5) Plant and equipment

Assess

Conditions Breached

Comments:

General Management

- 1) Staff competency/ training
- 2) Management system and operating procedures
- 3) Materials acceptance
- 4) Storage, handling, labelling and segregation

Comments:

Doc. No & Issue		Prepared by	Approved by	Date	Page
SAR-MI-05	2	Gareth Palmer	Virginie Rebouilleau	18/03/2013	1 of 2

Mobile Treatment Permit/ Environmental Permit Compliance Audit Form

Incident Management

- 1) Site security
- 2) Accident, emergency and incident planning

Assess

Conditions Breached

Comments:

Emissions

- 1) Air
- 2) Land and groundwater
- 3) Surface water
- 4) Sewer
- 5) Waste

Comments:

Amenity

- 1) Odour
- 2) Noise
- 3) Dust/ fibres/ particulates and litter
- 4) Pets, birds and scavengers
- 5) Deposits on road

Comments:

Monitoring and Records, Maintenance and Reporting

- 1) Monitoring of emissions and environment
- 2) Records of activity, site diary
- 3) Maintenance records
- 4) Reporting and notification to the Environment Agency

Resource Efficiency

- 1) Efficient use of raw materials
- 2) Energy efficiency

Corrective Actions for Any Breached of Conditions/ Visit Comments

Doc. No & Issue		Prepared by	Approved by	Date	Page
SAR-MI-05	4	Trevor Bamber	Sam Valbonesi	30/09/2014	2 of 2

MTL Notes For Completion

CCS Cat 1 Breach - A non compliance which has a potentially MAJOR environmental effect

E.G. - Contamination spillage to waterway or drainage linked to waterways. Dusts to residential property etc.

CCS Cat 2 Breach - A non compliance which has a potentially SIGNIFICANT environmental effect

E.G. - On site contaminative spillage due to filled/ broken bunds. Unbundled contaminated stockpiles etc

CCS Cat 3 Breach - A non compliance which has a potentially MINOR environmental effect

E.G. - Uncovered plant/ stockpiles releasing odours/vapours, excessive noise, unlocked IBCs, missing monitoring etc.

CCS Cat 4 Breach - A non compliance which has NO POTENTIAL environmental effect

E.G. Uncompleted site diary, uncompleted EA monitoring reports, missing signage and paperwork

ATL = Approach to Limit - E.G. Environmental reports due, dusts near site limit etc.

NA = Not Applicable - E.G. No discharge to drainage etc.

N = Not Assessed - E.G. Deposits on road as outside MTL etc.

Infrastructure

1) Engineering for prevention and control of emissions

E.G Are covers on the stockpiles/biopiles/treatment system if required? Are open excavations backfilled/covered when practical to reduce emissions? Is appropriate sound proofing used?

2) Site drainage engineering (clean and foul)

E.G Are drainage plans available? Is it suitable for used i.e. damaged. Is discharge agreed? Is it protected?

3) Containment of stored materials

E.G Are fuels/oils/gasses/sample containers etc. appropriately stored.?

4) Plant and equipment

E.G. Is there any obvious damage? Is it dirty/oily? Does the plant compare to schematic drawing? Is the MTL area in the correct place as shown on the MTL application?

5) Signage

E.G. Is all plant, waste and/or stockpiles signed appropriately? Is MTL sign prominent and as required?

6) Site Security

Is the MTL Area appropriately protected from unauthorised access? Has security been considered/used?

7) Accident, emergency and incident planning

Is hospital location plan, incidence response flow chart and emergency contacts signage posted?

Amenity - Site Appearance and Condition

1) Odour and Noise

E.G Are there any obvious odours or noise associated with the MTL works at the site boundary or at the site cabins?

2) Surface water

E.G Are there any significant surface water bodies at the site affected by the MTL works? Are they protected?

3) Land and Groundwater

E.G Is the ground beneath the MTL/quarantine area protected from emissions/leachate?

4) Waste

E.G Is the waste kept in covered lockable skips? Liquids in locked IBCs? Waste stockpiles covered?

5) Dust/ fibres/ particulates and litter

E.G Is significant dust etc. associated with the MTL works blown around the site? Is there litter or discarded treatment kit within the MTL areas or bunds? Is the MTL area generally untidy?

6) Deposits on road

E.G. Is there mud/liquids/debris on the roads associated with the MTL Works?

General Management

1) Staff competency/ training

Please complete all pages (2 pages total)

E.G. Is the member of staff working under the MTL fully conversant with the MTL regime and licence rules?

2) Operating procedures

E.G. Are the appropriate RAMS, PPE/RPE understood and in operation?

3) Materials acceptance

E.G. For bio - Is there assessment of excavations/quarantine by physical, olfactory or chemical means?

E.G. for HVE - Has the contamination been delineated and productive wells targeted?

4) Storage, handling, labelling and segregation

E.G. Is material under MTL appropriately stored and labelled. Are stockpiles segregated or treatment batches signed?

Monitoring and Records, Maintenance and Reporting

1) MTL Application

Is a copy of the MTL application, the licence, agreement and associated correspondence held on site?

2) MTL Monitoring Locations

Are the locations signed and do they match the MTL drawing? Are they protected from damage and theft?

3) Environmental Monitoring

Is the monitoring undertaken in accordance with the MTL requirements?

4) Maintenance records

Is maintenance and weekly checks undertaken in accordance with manufacturers and MTL requirements?

5) Records of activity, site diary

Are operational times recorded? Is the site diary compliant with the MTL requirements?

6) Reporting and notification to the Environment Agency

Are all the required reports sent to the EA on time? Are copies held on site?

Resource Efficiency

1) Efficient use of raw materials

E.G. Is diesel being used appropriately i.e. is electricity available?

2) Energy efficiency

E.G. Is correct size genny used? Is running time reviewed? Is treatment system or turning optimised?

SITE WORKS AUDIT INSPECTION FORM

No	Overview of Amendment and Text affected	Effective Date	Authorisation
1	First Issue	24/05/13	VR
2	Update of logos, footers and first page	7/8/16	J Fuller
3	Update, hyperlinks to intranet IMS forms added, update alongside SOP08 undertaken	18/7/18	T Bamber
4	Electrical Inspection requirements on Construction sites and PAT testing of 110volt equipment	11/10/18	T Bamber
5			
6			
7			
8			
9			
10			

SITE WORKS AUDIT INSPECTION FORM

Contract No:		Date:	
Site:		Client:	
Project Manager:		Site Personnel:	
Auditee:		Auditor:	
Activities been undertaken at time of audit:			
<i>Requirements</i>	YES/NO	COMMENTS	
ON ARRIVAL AT SITE			
Site is Secure			
Site is Adequately Signed			
Site Access Road Clear of Contamination			
MPL Notice as required			
Site PPE rules			
SITE INDUCTION			
Site File		Site Specific SHE Plan Report No:	
Welfare Provision			
PPE			
Manual Handling			
Emergency Actions and Reporting			
Records of Induction and Training			
SITE OFFICE			
Site Diary and Visitors Book			
Server Connection & Phone connection			
CDM			
Work Under CDM Requirements			
F10 Posted			
Role of CELTIC (circle all applicable)	<div style="display: flex; justify-content: space-around; align-items: center;"> PC PS/Coordinator SC Designer </div>		

SITE WORKS AUDIT INSPECTION FORM






DISCHARGE / ABSTRACTION / OTHER CONSENT		
(where appropriate) Available		
Conditions audited.		
Monitoring data available.		
OCCUPATIONAL HEALTH		
Noise		_____ dB(A) [Mobile App estimation or Calibrated SPL meter ¹]
Clean / Dirty Segregation		
Personal Hygiene e.g. hand washing		
OH Monitoring Programme?		
SITE HOUSEKEEPING & CLEANLINESS		
Toilet/Hygiene Facilities		
Cabins/ office		
General Site Conditions		
SERVICES		
Auditor to confirm compliance with SOP1. Site services survey must be undertaken before any excavation		
Auditor must also check that all services are "marked- out" in accordance with SOP1 and site service drawings.		
All excavations/ BH's marked on plans containing services.		
Service Plans Available		
Services Located and Marked on site		
Hand/Vac Excavated Pits Completed		
Borehole Clearance Sheets Completed SAR-PC-47		
SUB CONTRACTORS		
Wearing Appropriate PPE for Tasks		
Machinery of Adequate Standard and Repair		
Equipment Certificates cited and valid		

¹ Delete as applicable


SITE WORKS AUDIT INSPECTION FORM

SITE WORKS		
Equipment		
Appropriate for use		
In a good working condition/ inspected		
SAMPLING		
Samples Stored Correctly		
Correct containers available		
Method of Sampling Correct		
Complete Logs and Records undertaken		
Custody Sheets Available and Up to Date		



Office Facilities

	<p>All CELTIC sites shall have a clearly identified site office. The office shall project a professional and organised appearance, and must not be cluttered or used to store equipment or contaminated PPE.</p> <p>A means of heating the office must be provided.</p>	<i>Observations</i>
	<p>Not site boots or contaminated PPE in the office.</p> <p>No equipment other than small, clean hand-held items such as monitoring instruments, data loggers etc.</p>	<i>Observations</i>
	<p>Current and up to date project plans and time schedules should be displayed. We should also post Quality, Safety and Environmental Policies, and any site specific SHE objectives.</p>	<i>Observations</i>
	<p>Project organ gram, site plans and emergency procedures should be displayed in the office.</p> <p>Refer to (SAR-PC-01) Project Management for further guidance</p>	<i>Observations</i>
	<p>Office Notice board and compulsory postings. We are legally required to fill inⁱ and post the "Health and Safety Law" poster and a current copy of our Employers Liability Insurance Certificate.</p>	<i>Observations</i>




Security

	<p>Sites shall be kept secure to prevent unauthorised access. Temporary fencing must be kept in good order and checked weekly.</p>	<i>Observations</i>
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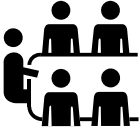
SITE WORKS AUDIT INSPECTION FORM

 WARNING CCTV in operation	Where there is a risk of theft, vandalism, arson or unauthorised occupancy, consideration shall be given to out of hour's surveillance, such as a security guard service or closed circuit television.	Observations
	Tools, equipment and monitoring devices must be locked away or removed from site when not in use. Inventories of all assets shall be kept and checked regularly.	Observations



Signage

	Adequate signage shall be installed to satisfy Safety, Health, Environmental and Corporate Branding requirements. All signs shall be of professional quality and should, where possible, bear the CELTIC brand and logo.	Observations
 All visitors must report to site office	EN standard symbols ⁱⁱⁱ shall be used on signs whenever practicable. At site entrances the standard CELTIC sign shall be mounted in a prominent position. Instructions for visitors and a summary of site rules, including PPE requirement shall be clearly visible.	Observations
	Where applicable Mobile Plant Licence ^{iv} / Environmental details must be displayed in accordance with the Environment Agency's (NRW or SEPA) requirements. Copy of Company licence EAWML 30379 document should also be held on site. Refer to Celtic MTL/Env Permit for further information available on the intranet	Observations





Facilities for Visitors

		Where practical, consideration should be given to facilities for visitors, including clients, contractors and enforcing agencies. Heated meeting room facilities may be required for on-site visits and meetings.	Observations
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Welfare Requirements

		Welfare facilities include toilets, washing, clothes drying facilities, changing and rest areas and wholesome drinking water	Observations
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SITE WORKS AUDIT INSPECTION FORM

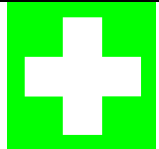

		Separate smoking and eating facilities. The means of preparing a hot drink must be provided.	<i>Observations</i>
		In addition to the provision of welfare facilities, regular maintenance, cleaning, and where necessary, emptying of them will be required.	<i>Observations</i>

Fire Precautions & Emergency Preparedness







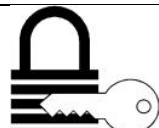

	Flammables such as fuels and gasses shall be stored and used away from sources of ignition. Smoking shall be permitted in designated areas only Flammable wastes shall be kept to a minimum and stored in covered skips	<i>Observations</i>
	Flammable chemicals shall be clearly marked with EN conforming safety labels	<i>Observations</i>
	All buildings, offices, storage units and process cabins shall be equipped with the appropriate fire extinguisher conforming to BS EN 3 or BS 6165. All fire extinguishers must be inspected and certified by a competent person annually. Only attempt to tackle fire if it is safe to do so.	<i>Observations</i>
	All potentially explosive atmospheres shall be identified and the required control measures shall be clearly communicated to all. Only authorised personnel are permitted to work with potentially explosive atmospheres.	<i>Observations</i>
	Fire escape routes and muster points shall be clearly identified, with due considerations to lighting etc. in times of poor visibility.	<i>Observations</i>
	A means of raising alarm shall be provided. Type and means of operation shall depend on site circumstances Refer to site specific emergency plan.	<i>Observations</i>
	Appropriate spill response facilities must be available. Take prompt action in the event of any spillage. Refer to site specific emergency plan.	<i>Observations</i>

SITE WORKS AUDIT INSPECTION FORM

First Aid









	First aid facilities shall available in site offices, decontamination units and at other site cabins, as appropriate. Contents shall be subject to regular stock check.	<i>Observations</i>
	Eyewash facilities shall available in site offices, decontamination units and at other site cabins, as appropriate. Contents shall be subject to regular stock check.	<i>Observations</i>

Chemicals


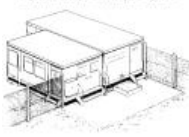
	All chemicals used on site must be suitably stored so that they do not pose a risk to site staff or the environment. (SAR-PC-07 COSHH Assessment)	<i>Observations</i>
	No chemicals will be allowed on site until a Material Safety Data Sheet has been received and a risk assessment has been conducted.	<i>Observations</i>
	All storage facilities shall be clearly identified.	<i>Observations</i>
	All chemical containers shall be labelled with contents and standard safety information, such as hazard classification, risk and safety phrases and safety symbol.	<i>Observations</i>
	Small containers of chemicals shall be kept in a locked, bunded, flameproof cabinet that contains an inventory, maximum storage allowances if applicable, and an indication of where material safety data sheets are held. Flammables and corrosives shall not be stored together.	<i>Observations</i>
	Larger containers such as Drums, IBC's, Bowsers shall be stored in a designated bunded area, unless internally bunded. ^v Bunds shall be a minimum 110% stored volume and should not be allowed to fill with rainwater.	<i>Observations</i>
	Drums, IBC's, Bowsers etc. shall be locked when not in use.	<i>Observations</i>
	Where applicable emergency eyewash stations and showers shall be provided wherever chemicals are used, stored or decanted. Mains-fed units are preferable to small stored water units.	<i>Observations</i>

SITE WORKS AUDIT INSPECTION FORM

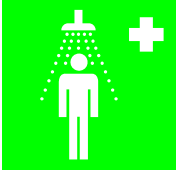
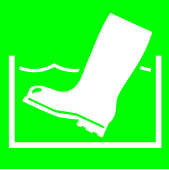


Electrical Safety

	No control panel to be opened without a qualified electrician and independent isolation from the supply. A Permit to Work (Electrical) (SAR-PC-24) is to be issued.	Observations
	All portable electrical appliances (e.g. with a 13A plug) shall be safety (PAT) tested at least on an annual basis.	Observations
	Fixed electrical installations, e.g. those operating on 415 volts and above or permanently hard-wired in place, must be installed by a competent electrician and certified as safe. . A Permit to Work (Electrical) (SAR-PC-24) is to be issued.	Observations
	Damaged or faulty equipment shall be immediately isolated, if safe to do so, locked off if possible, and reported to the site manager	Observations
	All Welfare cabins, Plant & Equipment, and Treatment Systems should be Electrically certified and inspected. All Electrical installations should be tested on installation and at least every 12 months unless the cabins have been moved, altered or damaged. In this instance the frequency should be increased up to every 3 months (on construction sites) based on risk and environments hazards	Observations
	Hand held electrical equipment for use out of doors shall operate from an isolating transformer 110volt, centre tap to earth (CTE). No use of 240Volt Tools on site. 110volt (CTE) Equipment tools require a weekly check, monthly formal inspection and test every 3 months.	Observations
	Contact with overhead services can be fatal Service plans available on site and restricted access observed in place	Observations
	Contact with any underground services can be fatal. Refer to Standard Operating Procedure (SOP-01) Service Identification for further guidance.	Observations





Decontamination facilities

	 <p>Contaminated and clean areas shall be clearly segregated by suitable fences Contaminated and clean areas shall be clearly identified with signs. Personnel access and egress shall be through suitable decontamination facilities.</p>	Observations
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SITE WORKS AUDIT INSPECTION FORM

		<p>Showers and washing facilities must be included in the decontamination unit to deal with accidental contact with contaminants</p> <p>Boot washing facilities shall be provide at the dirty entrance to the decontamination facility</p>	Observations
		<p>Vehicle access and egress shall be through suitable decontamination facilities.</p> <p>Open wagons must be sheeted</p> <p>Vehicles wheels must be washed to remove mud. Mud must not be allowed to contaminate the highway.</p>	Observations


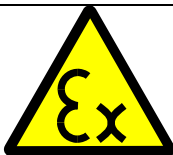



Excavations

	<p>All excavations must be fenced and clearly signed. Where practicable, excavations shall be in filled or covered when unsupervised.</p> <p>Fencing to be a minimum of 2.0m from the edge of any excavation.</p>	Observations
	<p>Contact with underground services can be fatal.</p> <p>Refer to Standard Operating Procedure (SOP-01) Service Identification for further guidance.</p>	Observations
	<p>Temporary works and excavation support should be subject to approved design as applicable.</p>	Observations
	<p>Approved specialist contractors should be used if Confined space access is required. Access will only be permitted to an excavation with an approved permit. see (SAR-PC-26)</p> <p>Excavations in contaminated land are considered CONFINED SPACES. Permits and access controls must be enforced.</p>	Observations







Plant and Equipment

	<p>Internal Supplied Equipment subject to compliance with Engineering and Equipment procedures. (SAR-EC)</p> <p>Operations manuals, commissioning checklists, and weekly inspections in place.</p>	Observations
	<p>All plant and equipment shall meet the latest standards.</p> <p>Evidence of conformance to European standards should be sought from suppliers.</p>	Observations


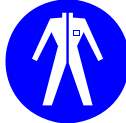
SITE WORKS AUDIT INSPECTION FORM

	<p>LOLER: Lifting equipment (including chains, slings, hooks, eyebolts, crane, HIAB etc) must have a certificate of inspection, and the operator must be certified as a competent person.</p> <p>A weekly check of the lifting equipment will be carried out and recorded on (SAR-PC-21)</p>	Observations
	<p>All equipment that may contain or create potentially explosive atmospheres shall be identified and the required control measures shall be clearly communicated to authorised personnel. (SAR-PC-09) is to be consulted if working within potentially explosive atmospheres.</p>	Observations
	<p>Site Managers/ Site Engineers should make themselves familiar with the operation and maintenance procedures for all equipment on site (hired and internal) prior to the use of the equipment. A hard copy of any available operation and maintenance manuals should be kept on site.</p>	Observations
	<p>Weekly PUWER inspection required (SAR-PC-20)</p> <p>Plant and equipment register established and maintained for the duration of site works</p>	Observations
	<p>Lift plans must be completed and sent for approval to company AP using (SAR-PC-25) to all lifts taking place.</p>	Observations




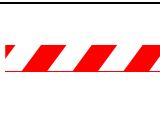




Site Apparel and Personal Protective Equipment (PPE/RPE)

		<p>All issued PPE/RPE should be signed for and a register kept on all sites of issued PPE, appropriate training given as required in the use of issued PPE.</p>	Observations
		<p>Site staff shall dress in appropriate apparel for the work being undertaken. For all site locations and activities, the company issued uniform of cotton drill shirt and trousers must be worn. Clean company uniform and clean boots or shoes must be worn in the Site Office. NO site PPE is allowed in Welfare and office areas.</p>	Observations
		<p>Non-contaminated areas. Company uniform, CELTIC HI-VIZ vest, Hardhat and gloves. Steel toe capped boots.</p>	Observations


SITE WORKS AUDIT INSPECTION FORM

		Contaminated areas. Refer to PPE assessment. As per non-contaminated areas, with the addition of boiler suit, Tyvek suit, waterproof coveralls and respiratory protective equipment as required. PPE assessment see (SAR-PC-08) RPE assessment see (SAR-PC-09)	Observations
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Traffic and Pedestrian Controls

		Pedestrian walkways must be clearly marked and separated from vehicle traffic. Traffic management plan (SAR-PC-46) and Traffic management drawing must be in place. Consider phased working	Observations
		Where pedestrians may come across vehicles, suitable warning signs and traffic demarcation must be used. Traffic management plan (SAR-PC-46)	Observations
		Slippery surfaces and trip hazards should be avoided or removed as much as possible. If they cannot be eliminated, suitable signs or other visual indicators should be used	Observations
		Appropriate site traffic rules shall be established and maintained. Traffic management plan (SAR-PC-46)	Observations


Working near the Highway

	All works on or near a highway or pedestrian walkway shall conform to the Code of Practice: Safety at Street works & Roadwork's 2001. Such works may require a permit from the local or highway authority. Chapter 8 signage and fencing. Street works compliant design, competent persons.	Observations
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Working Near the Public

	Specific risk assessments and method statements should be considered where works might involve contact with the public. Children and the elderly or sensory-impaired are particularly at risk from entering working areas.	Observations
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Working at Height

	All scaffolds must meet the requirements of EN39, BS5974, 1990, the Construction (Health, Safety and Welfare) Regulations 1996 and be inspected by a competent person prior to use, after modification and every seven days thereafter.	Observations
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SITE WORKS AUDIT INSPECTION FORM

	Ladders should be used for access to a workplace only and must not be used as a working platform. Ladders should be tied, firmly footed and free from defects. WAH assessments to be undertaken for all operations	<i>Observations</i>
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Waste Management

 NO FIRES	 NO SOLVENTS	Fires must not be lit or permitted in skips or waste containers. Liquid wastes must not be poured into skips or waste containers. Refer to (SOP-06) Management and Waste Hierarchy for further guidance.	<i>Observations</i>
 RECYCLABLE ALUMINIUM ONLY		Recyclable materials should be separated wherever practicable (consider Waste hierarchy) Skips shall be locked when not in use to prevent fires, entrapment and unauthorised dumping. Refer to (SOP-06) Management and Waste Hierarchy for further guidance.	<i>Observations</i>
		All skips must be covered and clearly marked with contents and CLP symbols Care shall be taken to prevent spillage and pollution. Waste shall only be removed by licensed carriers. Duty of care audit required on all Waste carriers.	<i>Observations</i>
	All sites producing Hazardous Wastes must be registered with the Environment Agency/SEPA/NRW as applicable.		<i>Observations</i>

SITE WORKS AUDIT INSPECTION FORM

OVERALL ASSESSMENT OF SITE
<p>Comments and Observations not Covered in the Checklist:</p> <p><i>Initial findings report will be left on site at completion of Audit setting out remedial actions and action timescales.</i></p>

References and Key legislation.

The Health & Safety (Consultation With Employees) Regulation 1996
 The Health & Safety (Information for Employees) Regulations 1989
 The Employers Liability (Compulsory Insurance) Act 1969 regulations 1998
 The Construction (Design & Management) Regulation 2007
 Safety Signs & Signals Regulations 1996
 Pollution Prevention and Control (PPC) (England and Wales) Permitting 2009
 The Waste Management Licensing (Scotland) Regulations 2008
 The Workplace (Health, Safety & Welfare) Regulations 1992
 Highly Flammable Liquids & Liquefied Petroleum Gasses Regulations 1972
 The Dangerous Substances and Explosive Atmospheres Regulations 2002
 The Fire Precautions Regulatory Reform (Fire Safety) Order 2005
 Health & Safety (First Aid) Regulations 1981
 The Control of Substances Hazardous to Health Regulations (C.O.S.H.H.) 2002 and 2005
 The Chemical Hazard Information for Packaging & Supply Regulations (C.H.I.P.) 2002 plus 2005 amendment
 EH40 Occupational Exposure Limits
 The Control of Pollution (Oil Storage) (England) Regulations 2001
 HS(G)107 Maintaining Portable and Transportable Electrical Equipment
 The Electricity at Work Regulations 1989
 HS(G)85 Electricity at Work – Safe Working Practices
 HS(G)141 Electrical Safety on Construction Sites
 HS (G)S6 Avoidance of Danger from Overhead Electrical Lines
 HS(G)47 Avoiding danger from underground services
 The Protection of Workers and the General Public during the Development of Contaminated Land – HS G (1990).
 The Highway Code
 The Construction (Health, Safety & Welfare) Regulations 1996
 The Confined Spaces Regulations 1997
 The Provision & Use of Work Equipment Regulations (P.U.W.E.R) 1998
 The Lifting Operations and Lifting Equipment Regulations (L.O.L.E.R) 1998
 The Personal Protective Equipment Regulations 1992
 The Waste Management Regulations 1996
 Waste Management – The Duty of Care – DEFRA Code of Practice
 Hazardous Waste (England and Wales) Regulations 2005 amended 2009

Additional Legislation and Regulations considered by this Audit inspection:

The Health and Safety at work act (HASAWA 1974)
 The Environmental Protection Act (EPA) 1990
 The New Roads and Street Works Act 1991
 The Construction (Head protection) Regulations 1989
 The Display Screen Equipment Regulations 1992
 The Lead at Work Regulations 2002
 The Manual Handling Regulations 1992
 The Vibration at work Regulations 2005
 The Work at Height Regulations (WAH) 2005 and amended 2007
 The Pressure Systems Safety Regulations 2000
 The Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) Regulations 1995
 The Site Waste Management Plans Regulations 2008
 Trade Effluent (Prescribed Processes and Substances) (Amendment) Regulations 1990

INTEGRATED MANAGEMENT SYSTEM MANUAL

APPENDIX D

WAMITAB CERTIFICATE

WAMITAB

WASTE MANAGEMENT INDUSTRY TRAINING AND ADVISORY BOARD

CERTIFICATE No: 11253

CERTIFICATE OF TECHNICAL COMPETENCE

This Certificate confirms that

Gavin Sean Rodway

has demonstrated the standard of technical competence required for the management
of a facility of the type set out below

Facility Type:

Level 4 in Waste Management Operations -

Managing Treatment Hazardous Waste (4TMH)



Authorising Signatures:

Director General

Director

Date of issue:

04 February 2010



Continuing Competence Certificate

This certificate confirms that

Gavin Rodway

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 04/09/2020

TMH	Treatment - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste
CLR	Contaminated Land Remediation

Expiry Date:
04/09/2022

Verification date: 20/08/2020

Authorised:

Director of Qualifications and Standards

Learner ID: 17539

Certificate No.: 5168801

Date of Issue: 04/09/2020

CIWM Chief Executive Officer



The Chartered Institution
of Wastes Management



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WAMITAB

WASTE MANAGEMENT INDUSTRY TRAINING AND ADVISORY BOARD

CERTIFICATE No: 06839

CERTIFICATE OF TECHNICAL COMPETENCE

Can we please keep Trevor Bamber as a TCM option for the site? He is due to take his continuing competency test within 2 weeks

This Certificate confirms that

Trevor William Dennis Bamber

has demonstrated the standard of technical competence required for the management of a facility of the type set out below

Facility Type:

Level 4 in Waste Management Operations -

Managing Treatment Hazardous Waste (4TMH)



Authorising Signatures:

Director General

Director

Date of issue: 25 May 2005



Certificate No. CCC17459

Continuing Competence Certificate

Can we please keep Trevor Bamber as a TCM option for the site? He is due to take his continuing competency test within 2 weeks

Trevor William Dennis Bamber

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 17/04/2018

TSH	Transfer - Hazardous Waste
TMH	Treatment - Hazardous Waste
CLR	Contaminated Land Remediation

Awarded: 17/04/2018



Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer



**The Chartered Institution
of Wastes Management**



00110050

South East (Registered Office)

Unit 8, Commerce Park
Brunel Road
Theale, Reading
Berkshire
RG7 4AB

t. 0118 963 5819
f. 01189 930 2371
www.celtic-ltd.com

South West

Columbus House
Greenmeadow Springs
Tongwynlais
Cardiff
CF15 7NE

t. 029 2036 8636
f. 029 2036 8637
www.celtic-ltd.com

North West

Centrix House
Crow Lane East
Newton le Willows
St Helens
WA12 9UY

t. 01925 273 222
f. 029 2036 8637
www.celtic-ltd.com



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