Environmental Management System

Llanwern East Waste Management Site
Tata Steelworks Llanwern
Queensway
Newport

June 2016

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1. Description of Our Company

Cuddy Demolition & Dismantling ltd is a private company registered on Companies House with the number: 02892963.

The company operates in the UK in the construction and demolition industry, the company is a member of the Cuddy Group and has implemented the ISO 14001 management plan as well and the WAMITAB waste management protocols.

The operating address of the company is:

Unit 1
Tank Farm Road
Llandarcy
Neath
SA10 6EN

The address for the site for the Bespoke Environmental Permit is:

Llanwern East Waste Management Site
Tata Steelworks Llanwern
Queensway
Newport
NP26 3WN

1.1. Background to the Site

Cuddy Group have a contract with Tata Steel Llanwern to restore the former Llanwern East Waste Management landfill site. The project requires 1m of capping soils to be placed on top of the full 20 Hectare site, leading to a requirement to import 400,000 tonnes of soil to complete the works.

2. Structure and Guidance

1. The Managing Directors, Michael Cuddy and John Cuddy are responsible for all actions and certifications associated with the company Environmental Management System (EMS). If any part of the responsibility for the EMS is delegated or assigned to any employee, it will be documented in element 4.4.1 in the EMS documentation.

2. This manual defines the Company EMS and provides a description of the elements, checklists and resources used by the company.

3 This manual and the elements of the EMS used by Company will be maintained in an electronic document format to the extent possible.

4. Revisions to the EMS are recorded using the following “Record of Revisions” on the bottom of each element in the EMS.
   - Record of Revisions
   - Revision Date Description Sections Affected

5. Cuddy Demolition & Dismantling will conduct one internal audit of the EMS each year during one of their internal safety audits. Third Party audits will be conducted as specified in external agreements or as required by ISO 14001.

6. The waste operations at LEWMS will have a full management review at least once each year to cover the procedures and outlines in this EMS. The management review will be briefed to all relevant employees.

3. EMS General Requirements and Scope

Cuddy Demolition & Dismantling will continually improve this environmental management system and provide evidence of how we meet the requirements. The employees will undergo regular training and audits on the site and its activities will be kept on record to aid in future improvements.

4. Environmental Policy

It is our stated commitment is to accomplish a minimum of three goals with this EMS which are;

1. Ensure compliance with all laws and regulations

2. Strive to reduce environmental impacts through pollution prevention and waste management.

3. Use the EMS to achieve continuous improvement in all activities

5. Planning

Planning actions are an integral part of the “plan-do-check “cycle of continuous improvement at LEWMS, planning involves the use of all elements of the EMS.

5.1 Environmental Aspects

There are many operations and activities associated with the site. These are:

1. Pollution control – All plant and machinery will be properly maintained to ensure there is no risk of polluting the local environment. All waste processing operations will be carried out on an area of hardstanding at the Southern end of the site away from the Hundred Perches Reen on the East of the site.

2. Material Acceptance – Figure 1 shows the required specification for imported materials at the site, the acceptance procedure is shown before it can be brought to the site. Only the appropriate waste streams will be accepted. Chemical testing will take place prior to import as well as validation testing once the material is brought to site. Geotechnical testing will be carried out once the imported wastes have been processed. Any material that does not meet the required specification will be sent away from the site back to its source.

3. Import of materials – Tipper wagons will enter and leave the site on the designated roads and follow the operative’s instructions as to the unloading and loading of materials. A water bowser will be towed around the roadways to wet down the site and ensure dust is not produced during the works.

4. Diesel storage and re-fuelling. – A diesel bowser will be stationed on site in a bunded area with spill kits and diesel nappies. All plant will contain spill kit materials to prevent diesel fuel spilling onto the site and into the local environment.

5. Welfare facilities. – Welfare facilities will be located onsite for site workers when operations are being carried out. The waste form the toilet will be removed by a

licensed waste disposal company and taken offsite. Any electrical equipment in the unit will have valid PAT testing certificates.

5.2 Legal and other Requirements

The site has Planning Consent from Newport Council for the restoration of the former landfill and the placement of 1m thickness of capping soils across the site, this planning consent is shown in Appendix 2.

The bespoke permit application requires an EMS to be in place and cover all associated operations the company intends to carry out on site. Any unauthorised activities will not take place and measures will be put in place to prevent improper site uses occurring.

The records of these permits and regulations will be kept on site and in Cuddy Demolition & Dismantling's office for any employees or auditors to see.

5.3 Objectives, Targets and Environmental Programs

The company is very aware of the environment and negative effects the construction industry can produce. Its employees are highly trained in the operation and use of the plant and heavy machinery and the adverse consequences these operations could have on the environment if uncontrolled.

Cuddy Group are involved in making plant operatives aware of pollution control and prevention and the continuing objective to prevent any activities occurring on site. When operations are being carried out at the site, the supervisor will be carrying out toolbox talks to help the operatives carry out their activities in a safe, environmentally friendly manner.

5.4 Waste Types Accepted

Only waste soils are required at the site, the specification criteria is shown in Figure 1. The intention is to also bring in greenfield sources of soil under the CL:AIRE Direct Transfer route as well as importing waste materials.

No out of spec materials will be accepted to the site, unless there is an agreement by the Project Engineers and Tata. The imported quantities will be restricted to a maximum of 400,000 tonnes over the duration of the project. At the time of writing this EMS in June 2016 there has already been over 100,000 tonnes of soil imported to the site.

Waste shall only be accepted if:

(a) It has been identified as a suitable waste type in the approved waste recovery plan.
(b) It conforms to the description in the documentation supplied by the producer and holder.
(c) Its chemical, physical and biological characteristics make it suitable for its intended use on the site.

(d) Any excavated soil from potentially contaminated sites has been shown by prior chemical analysis and assessment to be suitable for the intended use without risk of pollution.
(e) It is visually inspected on arrival and at the point of deposit to ensure it complies with the specification.

4.7.2 Testing of Restoration Soils

The testing requirements for the restoration soils discussed in the previous section is formalised in the following flow chart and Tables 4-11 and 4-12 shown below:

Flowchart - Minimum Testing Schedule for Materials to be Considered for use at East Waste Management Site

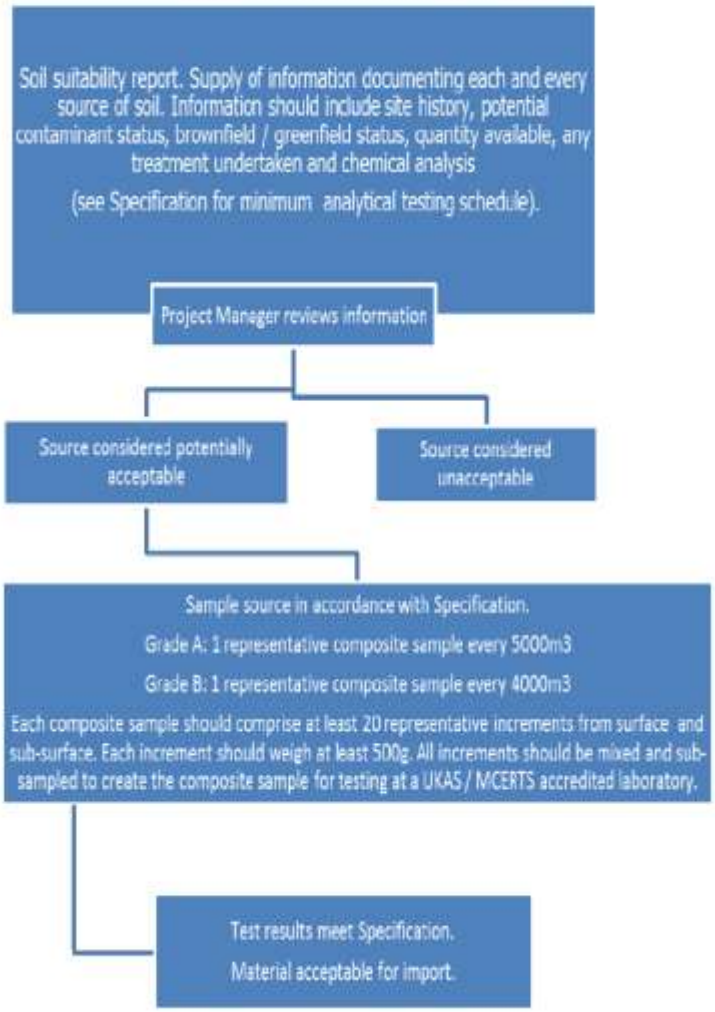


Table 4-11 Chemical testing schedule for evaluation of materials to be considered for use in landfill restoration

Minimum Testing Requirements and Specification for Chemical Quality (all values mg/kg unless specified)			
	Testing Frequency	Specification	
		A Grade	B Grade
pH (unitless)	Grade A: 1 composite sample every 5000m3 Grade B: 1 composite sample every 4000m3	5.5 – 8.5	5.5 – 8.5
Total Petroleum Hydrocarbons (C6 - C40)		500	1000
Total PAH		100	Speciated (see below)
Total BTEX		6	Speciated (see below)
Polychlorinated Biphenyls (PCBs)		1	1
TOC (%)			
Total phenol		420	2000
Asbestos (% w/w)		Non detect	Non detect
Arsenic		43	400
Beryllium		55	400
Boron Water Soluble		45	5000
Cadmium		1.8	150
Cr III		8000	8000
Cr VI		2.1	20
Copper		500	500
Lead			500
Mercury (Inorganic)		80	100
Nickel		230	1500
Selenium		120	10000
Vanadium		18	2500
Zinc		618	2000
Sulphate (g/l)		0.4	0.4
Total Cyanide		10	10
Benzene			50
Toluene			50
Ethylbenzene			50
Xylene (o, m & p)			50
Acenaphthene			50
Acenaphthylene			50
Anthracene			50
Benz(a)anthracene			8
Benzo(a)pyrene			8
Benzo(b)fluoranthene			10
Benzo(ghi)perylene			50
Benzo(k)fluoranthene			18
Chrysene			8
Dibenzo(ah)anthracene			2
Fluoranthene			50
Fluorene			50
Indeno(123cd)pyrene			5
Naphthalene			18
Phenanthrene			50
Pyrene			50

NOTE
PM – Project Manager
Exceedance of Specification may be acceptable following review by PM and consultation with Tata and NRW.
Material may be rejected even if chemical specification is satisfied if PM considers visual or olfactory observations are unsatisfactory.
If material is a waste it must not be classified as hazardous waste
Other parameters may need to be tested and leachate tests performed depending upon soil source.

Table 4-12 Geotechnical testing schedule for evaluation of materials to be considered for use in landfill restoration

Minimum Testing Requirements and Specification for Physical Quality of Soil		
	Testing Frequency	**Specification**
Particle Size Distribution BS 1377 Part 2 Method 9	1 per 5000m^3/ minimum 1 per source	100% passes 125mm, 90%-100% passes 63mm, 15% to 100% passes 2mm, >15% passes 0.063mm
Un-drained Shear Strength of Remoulded material	1 per 5000m^3/ minimum 1 per source	>45kPa
Direct Shear using Large Shear Box Test to determine interface shear strength parameters of soil against Pozidrain 6S250D.NW8	Per source	Low normal stress distribution of 10, 15 and 20 kPa to applied for test. Testes to be completed under dry conditions with remoulded soil at natural (as placed) moisture conditions
Contraries (e.g. metal, wood, glass, plastic)	1 per 5000m^3/ minimum 1 per source	<1% w/w contraries. Contraries must not compromise grading
Inspection for visible invasive weeds and fibres & olfactory signs of contamination	Visual inspection of all sources	No invasive weeds or fibres visible and no olfactory signs of contamination
Sharp objects that may comprise capping system	Visual inspection of all sources	No visible sharp objects capable of potentially damaging capping systems
NOTE Material will be inspected at source and upon arrival. Material found to be potentially unacceptable will be quarantined pending further evaluation.		

All testing is to be undertaken in an UKAS accredited Quality Assurance Laboratory.

The results of all the testing shall be provided to the Engineer prior to the placement of any soils on the capping project.

Figure 1: Detailed testing criteria for imported soils to the Llanwern East Waste Management Site.

6. Implementation and Operation

The company operates under the conditions highlighted in the EMS by ensuring the constant training of the employees in the operation of the site and the safest, most environmentally friendly methods of carrying out all necessary operations.

6.1 Resources, Roles, Responsibility and Authority

The EMS has been written by Cuddy Demolition & Dismantling Ltd who are the operators of LEWMS. The managing director constantly liaises with the site operatives to ensure the EMS is implemented thoroughly throughout the onsite activities.

6.2 Competence, Training and Awareness

The waste manager for the company, Leighton Hughes is trained under the WAMITAB qualification, he will make one visit to the site each week for a minimum for one hour while the site is operation, this visit will be to ensure operations are being correctly carried out and any waste materials are appropriately controlled. Site operators are trained and competent to operate heavy plant under the CPCS scheme and to operate and recognise any issues with the plant and equipment. This training helps to identify any potential future issues relating to pollution of the surrounding environment or emission problems. All plant, including transport wagons are regularly serviced by the Cuddy Group' qualified fitters. This ensures that emissions are under control and that the machinery is well maintained to prevent leakage or excessive noise.

6.3 Communication

Communication is key to any company. The Managing Director is in direct communication with the site operatives, waste manager and site supervisor. This guarantees that everyone is aware of site activities, changes, issues or improvements and is able to act quickly to control any site issues.

6.4 Environmental Management System Documentation

The EMS will stay on site and in Cuddy Group's office in paper form, as new versions are issued they will replace the old ones. Records of the EMS will be stored on the Cuddy Groups internal servers and issued to any relevant parties upon request. It will be able to be viewed by any member of the Cuddy Group, should they wish to view it.

Safety audits will also be stored on site and on the Cuddy server and made available to anyone within the Cuddy Group.

6.5 Operational Control

Operating techniques and methods will be regularly audited on site and in the office environment to confirm that the operational procedure is complying with all set out in the EMS.

All operations on site will also be governed by Risk Assessments and Method Statements to ensure every possible risk has been identified to all employees and are adequately controlled.

6.6 Emergency Preparedness and Response

Any site issues, such as machinery problems, fuel spillage or unacceptable waste types being brought to site will be immediately reported to the Managing Director and the companies Health, Safety and Environmental Manager will respond by coming out to site to control the situation and put the necessary measures in place to prevent it re-occurring.

7. Monitoring and Measurement

If there is excessive dust or noise being produced on the site then measures will be taken to suppress dust levels by using a towable water bowser sprinkler system. This will be towed around the site haul roads to prevent high levels of dust being produced and blown around the steelworks site.

Should any unacceptable waste be brought to the site, which looks suspicious and has the potential to cause environmental pollution or contamination then samples will be taken for chemical testing and analysis, if it is potentially harmful the waste will be removed from site and disposed of in an appropriate and safe manner.

All plant will be regularly serviced to make sure that all hydraulics and systems are functioning correctly and efficiently, service records of these actions will be kept and stored in the company's main office.

7.1 Non-conformance, Corrective and Preventative Actions

Any non-conforming activities highlighted in the regular company and site audits will be brought to the attention of the Managing Director. It will then be his responsibility to ensure that all employees are adequately briefed and trained in the area of non-conformance. This will enable the employees to learn from any mistakes they may make and continue forwards using the correct working procedures.

7.2 Records

All records related to the EMS, audits and operations at LEWMS will be stored in the Cuddy Groups office. These records will be filed and available to be viewed by any relevant party.

7.3 Environmental Management System Audit

Cuddy Group's Health, Safety and Environmental Manager carries out twice yearly internal audits of the company, site and the EMS, to make certain that the protocols are been followed in the correct manner. Records are kept of each of these audits and are stored at the company offices.

7.4.1 Audit Checklist

The audit checklist will follow the ISO 14001 regulated series of forms produced by the Cuddy Group. The auditor will follow each of the guidelines strictly to effectively identify any

potential problems. This audit checklist will also be regularly viewed by an independent external company. Any issues they highlight will result in changes made to the forms before the next internal audit is carried out onsite. The audit checklist will ensure the guidelines and protocols laid out in the EMS are being adhered to onsite.

8. Management Reviews

The Managing Directors of Cuddy Demolition and Dismantling Ltd certify the adequacy and completeness of activity related to the EMS at each annual management review.

Changes to the EMS are recorded at the end of the EMS under the following headlines:

- Record of Revisions for this EMS Manual
- Revision Date Description Sections Affected

Appendix 1.

WAMITAB Certification

WAMITAB

Waste Management Industry
Training and Advisory Board

The Chartered Institution of Wastes Management

Certificate No. CCC4045

Continuing Competence Certificate

This certificate confirms that
Leighton John Hughes

Has met the relevant requirements of the Continuing Competence scheme for the period between 1 March 2009 to 29 February 2012 for the following award(s):

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

Awarded: 09/03/2012

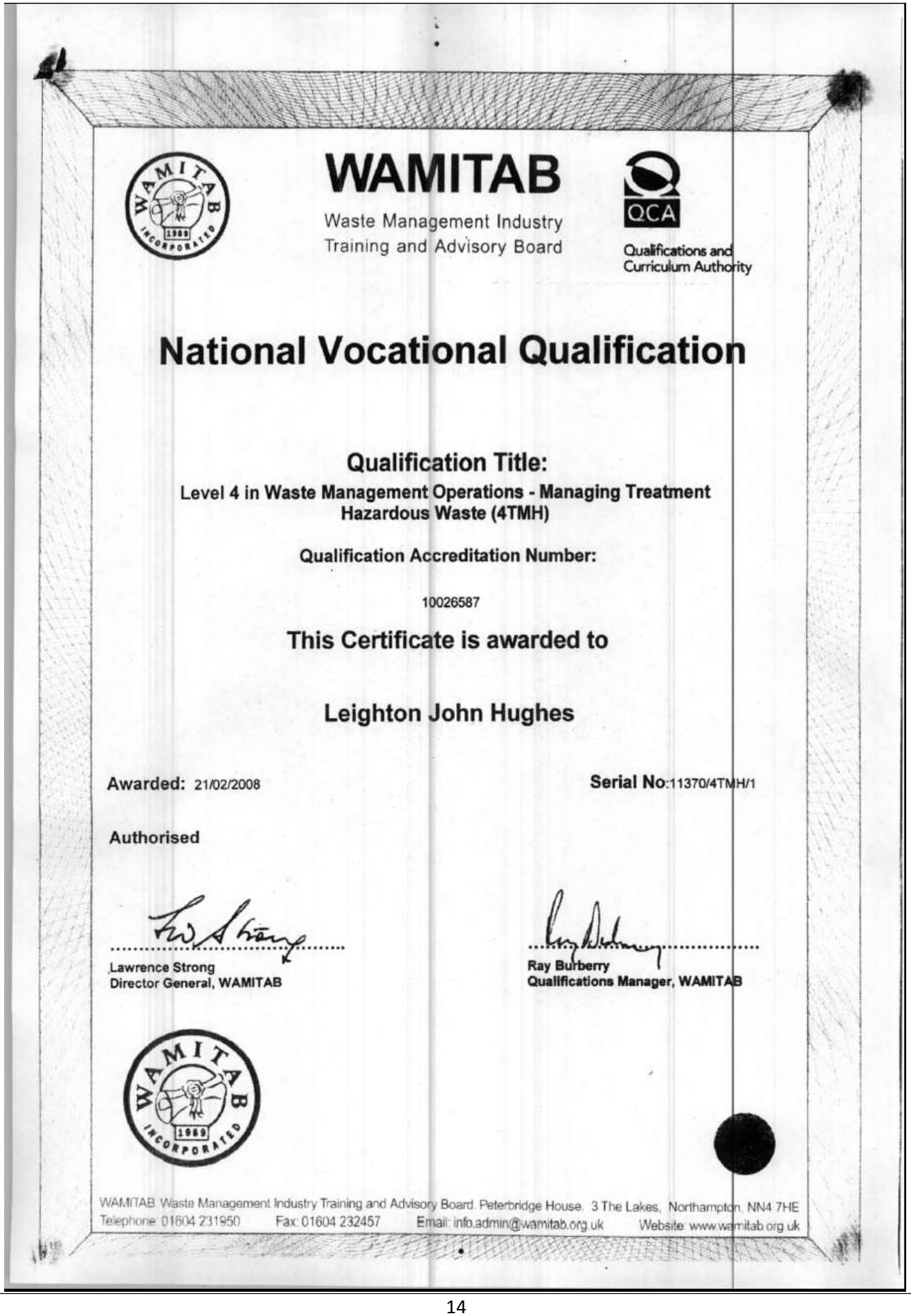
Authorised

WAMITAB Director General

CIWM Chief Executive Officer

This certificate needs to be renewed during the period between 1 March 2012 and 28 February 2014

00016940



WAMITAB

Waste Management Industry
Training and Advisory Board

QCA
Qualifications and
Curriculum Authority

National Vocational Qualification

Qualification Title:

Level 4 in Waste Management Operations - Managing Treatment Hazardous Waste (4TMH)

Qualification Accreditation Number:

10026587

This Certificate is awarded to

Leighton John Hughes

Awarded: 21/02/2008

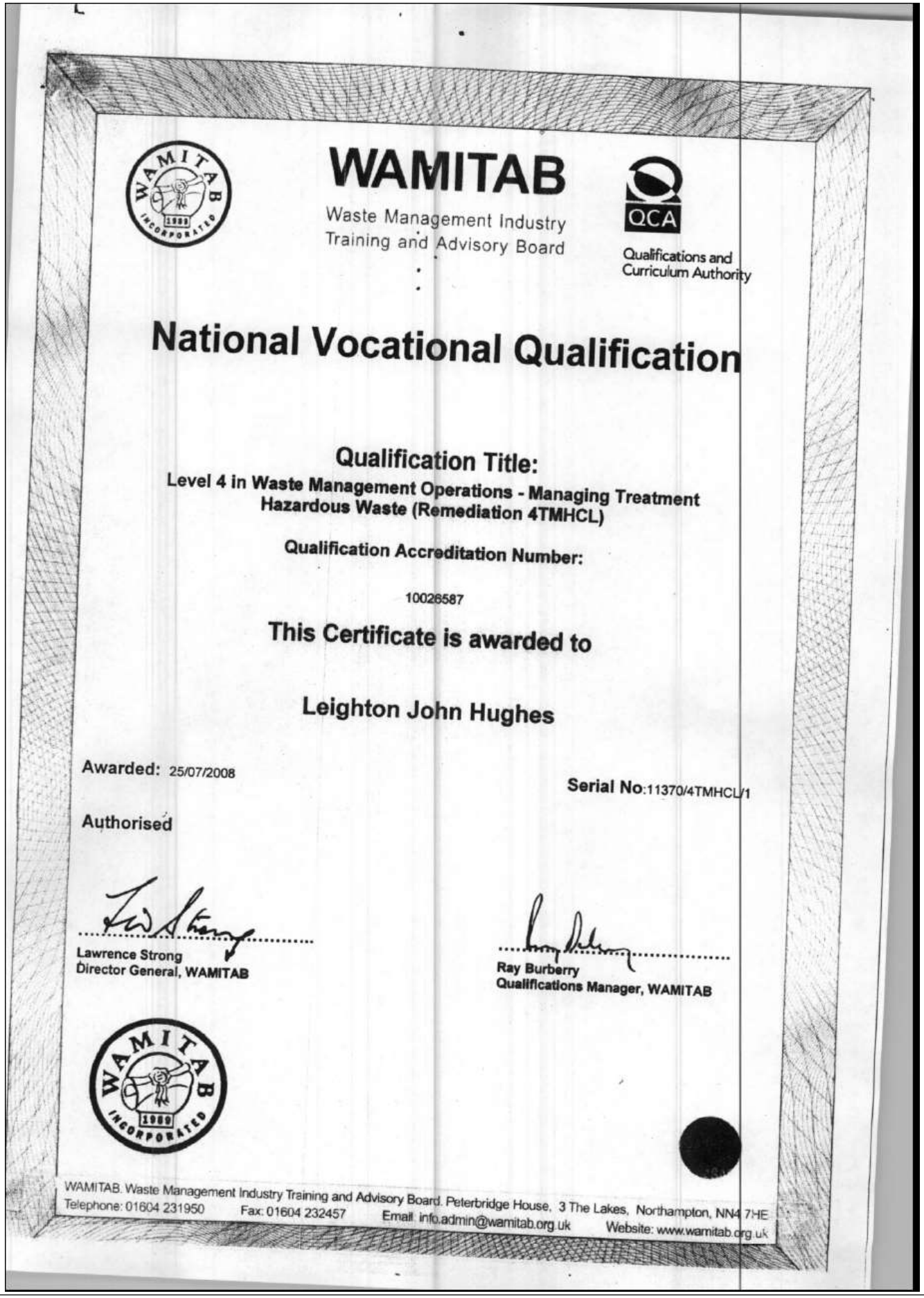
Serial No:11370/4TMH/1

Authorised

.....
Lawrence Strong
Director General, WAMITAB

.....
Ray Burberry
Qualifications Manager, WAMITAB

WAMITAB Waste Management Industry Training and Advisory Board. Peterbridge House. 3 The Lakes, Northampton, NN4 7HE
Telephone: 01604 231950 Fax: 01604 232457 Email: info.admin@wamitab.org.uk Website: www.wamitab.org.uk



WAMITAB

Waste Management Industry Training and Advisory Board

QCA

Qualifications and Curriculum Authority

National Vocational Qualification

Qualification Title:

Level 4 in Waste Management Operations - Managing Treatment Hazardous Waste (Remediation 4TMHCL)

Qualification Accreditation Number:

10026587

This Certificate is awarded to

Leighton John Hughes

Awarded: 25/07/2008

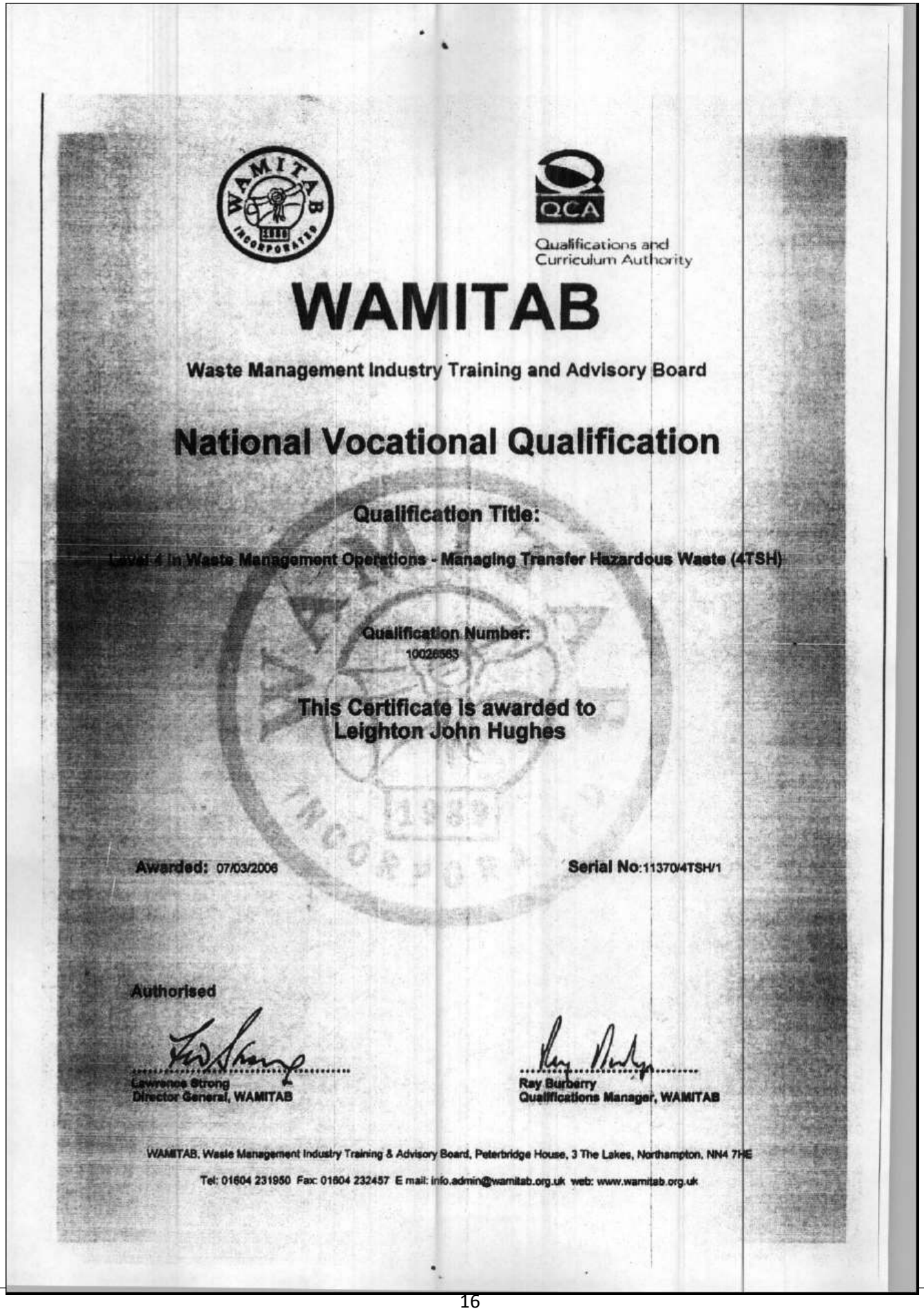
Serial No:11370/4TMHCL/1

Authorised

Lawrence Strong
Director General, WAMITAB

Ray Burberry
Qualifications Manager, WAMITAB

WAMITAB. Waste Management Industry Training and Advisory Board. Peterbridge House, 3 The Lakes, Northampton, NN4 7HE
Telephone: 01604 231950 Fax: 01604 232457 Email: info.admin@wamitab.org.uk Website: www.wamitab.org.uk



Qualifications and Curriculum Authority

WAMITAB

Waste Management Industry Training and Advisory Board

National Vocational Qualification

Qualification Title:

Level 4 in Waste Management Operations - Managing Transfer Hazardous Waste (4TSH)

Qualification Number:
10026563

This Certificate is awarded to
Leighton John Hughes

Awarded: 07/03/2006

Serial No: 11370/4TSH/1

Authorised

Lawrence Strong
Director General, WAMITAB

Ray Burberry
Qualifications Manager, WAMITAB

WAMITAB, Waste Management Industry Training & Advisory Board, Peterbridge House, 3 The Lakes, Northampton, NN4 7HE

Tel: 01604 231950 Fax: 01604 232457 E mail: info.admin@wamitab.org.uk web: www.wamitab.org.uk

wamitab

Certificate No. CCC7602

Continuing Competence Certificate

This certificate confirms that

Leighton John Hughes

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current to 29 February 2016:

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

Expiry Date: 29/02/2016

Awarded: 12/03/2014

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00045608

wamitab

Certificate No. CCC12641

Continuing Competence Certificate

This certificate confirms that

Leighton John Hughes

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 04/04/2016

TSH	Transfer - Hazardous Waste
TMH	Treatment - Hazardous Waste

Awarded: 04/04/2016

Expiry Date: 04/04/2018

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00105615

Appendix 2

Planning Consent

IMPORTANT - This decision notice affects your property and should be placed with the Title Deeds of the property.

APPLICATION No. 1/12215

ish Steel Corporation
o R Stainer
obw Vale Works
obw Vale
went

BOROUGH OF NEWPORT
TOWN AND COUNTRY PLANNING ACT, 1971

OTICE OF GRANT OF PLANNING PERMISSION

In pursuance of its powers under the above Act, the Council of the Borough of
wport hereby grants permission for the following development proposed in your application
ated 21.10.83 and shown on the plan(s) accompanying such application:-

Extension of existing waste tip by increasing height by 10 feet
at
Llanwern Steelworks, Newport, Gwent

bject to the following conditions:-

1. The development must be begun not later than the expiration of five years beginning with the date of this permission.

2. The development shall be carried out in its entirety at one and the same time and fully in accordance with the proposals shown in the application and in the plans and particulars accompanying such application as varied or amended by this permission and the conditions set out hereunder:-

3. Within 3 months of tipping attaining the permitted levels the site shall be graded and covered with a minimum depth of 150 mm topsoil on 1m of clean subsoil. The approved landscaping scheme shall be carried out thereafter and not later than the next following planting season. Any planted material which dies within 2 years of planting shall be repleced with similar stock not later than the next following planting season.

BEFORE YOU START DEVELOPMENT
PLEASE DISPLAY
DO YOU NEED BUILDING REGS APPROVAL?

for the reasons stated below:-

1. To conform with the requirements of Section 41 of the Town and Country Planning Act 1971.

2. To ensure that the development is carried out as a whole and not in part only.

3. To enhance the appearance of the development.

Chief Executive,
Civic Centre,
Newport,
Gwent, NP7 4UR.

18 JAN 1984