

INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE Auditor Credentials Form

Facility Audited:

Orica Box to Sparge Bulk Cyanide Transfer Facility (Transfer Facility) in Ghana,

West Africa

Date: 14 March 2018

Auditor and Technical Specialist Credentials:

Lead Auditor:

Dale Haigh

Auditor Certification Date:

From 2010

Certifying Organization:

Institute of Environmental Management and Assessment (IEMA)

Telephone Number:

+44 (0)1522 540 069

Address:

IEMA, City Office Park, Tritton Road, Lincoln, LN6 7AS, UK

Web Site Address:

www.iema.net

Minimum experience:

4 Audits in past 7 years as Lead Auditor

Year	Type of Facility, Type of Audit Led	Country Netherlands	
2017	EHS audit of large scale chemical manufacturing facility		
2017	Recertification transportation audit for Verhad Transportation	Ghana	
2016	Transportation audit under ICMI for Catoni, Georgia	Georgia	
2016	EHS and process review of pharmaceutical manufacturing facility in UK. Lead Auditor.	UK	
2015/2016	EHS compliance and due diligence audit at an engineering manufacturing facility in Ireland. Lead Auditor.	Ireland	
2015/2016	EHS compliance and due diligence audit at 6 hazardous waste treatment facilities in Ireland and the UK. Lead Auditor.	Ireland / UK	
2015	EHS compliance including explosive atmosphere assessment at 2 Eaton facilities in Cambridge and Titchfield in the UK. Lead Auditor.	UK	
2014	EHS compliance audit for pharmaceutical manufacturing facility in Tilburg, Netherlands. Lead Auditor	Netherlands	
2014	Lučební závody Draslovka a.s. Kolín, ICMI Manufacturing Recertification, Transport Specialist Auditor	Czech Republic	
2014	Bombardier Transportation EHS compliance audits for 3 sites in Plymouth, Crewe and Mansfield. Lead Auditor.	UK	
2010 to 2014	Risk based EHS, process, management of change and Business continuity reviews for over 20 pharmaceutical contract manufacturing facilities at various locations including UK, Finland, France, Germany, Italy, Norway, Spain, Sweden and Switzerland, with reviews of other work in South Africa, South America and China. Led reviews and was sole reviewer on behalf of Pfizer. Helped train small team of reviewers (6) to provide world wide support to Pfizer. Lead Auditor for > 20 sites.	Europe	
2013	Hebei Chengxin Transport Co Ltd, Lead Auditor	China	
2013	EHS compliance audit at 5 Eaton facilities in Burton on the Wolds, Bristol, Aldridge, Luton, Watford, UK. Lead Auditor. Also provided review role for several other facilities in the UK.	UK	





Year	Type of Facility, Type of Audit Led	Country	
2012	Lead auditor for EHS review of chemical manufacturing facility in the UK and identification of related issues at other facilities worldwide (Arizona Chemicals) in Chester le Street, UK. Lead auditor.	UK	
2011	Freight Forwarders Tanzania, ICMI Re-certification Audit, Transport Specialist Auditor	Dar es Salaam, Tanzania	
2011	Freight Forwarders Kenya, ICMI Re-certification Audit, Transport Specialist Auditor	Mombasa, Kenya	
2011	Orica Chemicals Bag to Bulk transfer facility, Production and Trsnport Specialist Auditor	Lima, Peru	
2010	Project Manager for assessment of contaminant storage and landfill at a chemical manufacturing facility in the UK. Included assessment and review of mercury, lead, arsenic, cadmium and zinc management options for contaminants. Lead auditor.	UK	
2010	EHS audit (including chemical process review, emergency response, hazardous material management and assessment of chemical exposure), and limited scope HAZOP for fuel cell manufacture for packaging facility in Ireland. Lead auditor.	Ireland	
2010	EHS Compliance review for two automotive manufacturing facilities in UK and subsequent EHS system development at one facility. Lead auditor.	UK	
2010	EHS audit of chemical works in the UK for third party and identification of issues relevant to development of new manufacturing process on Site. Lead auditor.	UK	
2010	Waste minimisation review of pharmaceutical manufacturer in UK. Included review of manufacturing and R&D activities, identification of waste stream, review of storage, handling and treatment facilities and development of minimisation and improved treatment recommendations. Lead auditor.	UK	

Cyanide-related Operations Experience

Each auditor must have at least 3 years; at least one auditor must have at least 7 years' experience

Auditor	Yrs.	Relevant Position Titles	Types of Operations
Dale Haigh	25	Production and Transport Technical Specialist and Lead Auditor	Dale is a senior Environmental, Health and Safety (EHS) consultant, project manager/director and Associate with Golder Associates and has over 25 years' experience applied to a wide range of EHS services. He is certified as a production and transport specialist and lead auditor with the International Cyanide Code and has significant chemical industry experience. Dale has previously completed transportation and production ICMI audits in Europe, South America, Asia and Africa.





Statement of No Conflict

I certify that I have not audited any component of this facility for which I was responsible for design or development; nor have I within the past year been an employee of the facility, its parent company, or associated affiliates. Excluding audits, I have not derived more than 30% of my income within the past 5 years from the facility, its parent, or associated affiliates. I have not participated in more than two consecutive Cyanide Code audits of this facility. I have participated in at least 3 health, safety, and/or environmental audits in the past 7 years and am familiar with standard audit procedures as well as with the protocols developed by the International Cyanide Management Institute for implementation of the Code.

Signed	Name	Signature	Date
Lead Auditor*	Dale Haigh	DHangh	14 March 2018

Use additional pages if necessary

R. Ote LVTH STEFMANN (Solverter)

> SOLICITORS THE FORGE, MAIN ROAD PLUMTREE, NOTTM NG12 5NB

^{*}The lead auditor's signature must be certified by notarization or equivalent.





As a global, employee-owned organisation with over 50 years of experience, Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

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