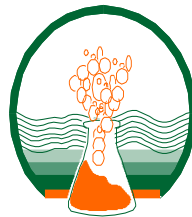


# **ENVIRONMENTAL AND CHEMICAL SERVICES LIMITED**

## **COMPANY PROFILE**



### **POLLUTION CONTROL & MANAGEMENT CONSULTANTS**

HEAD OFFICE: FLAT 13, CHINDA ESTATE, BY RSUST MAIN GATE  
MILE 3 DIOBU, PORT HARCOURT.

08033384134, [envichemical@gmail.com](mailto:envichemical@gmail.com)

BRANCH OFFICES: 69 ODUKPANI STREET, ESSIEN TOWN, CALABAR, 087-235553;

**APRIL 2020**

## 1.0 INTRODUCTION

Environmental & Chemical Services Limited (E&CSL) is a Nigerian company offering consultancy, and management services in all aspects of Environmental Assessment, Environmental Engineering, Pollution Control and Waste Management. The company was established in 1998 growing steadily to its present size with two regional offices located at Port Harcourt and Calabar. Environmental & Chemical Services Limited has developed expertise in five major areas in the process of managing a wide range of industrial and environmental problems within the Industrial, Manufacturing and Oil and Gas Sectors of the Nigerian economy.

- Environmental Assessments
  - Environmental Impact Assessment
  - Environmental Audit Report
  - Environmental Evaluation Report
  - Post Impact Assessment
  - Environmental Compliance Monitoring
  - ESM Development and Review
  - Specialized environmental studies eg Soot Monitoring, Environment Carrying Capacity study etc
- Waste Management
- Pollution Control (Ambient air/Stack Emission Monitoring, Combustion Analysis, water quality monitoring)
- Soil Remediation
- Quality Assurance

Based on the above areas of expertise, Environmental and Chemicals Services has executed numerous projects as listed in **Appendix 2**.

Environmental & Chemical Services Limited has proficiency in capacity and technology with the upsurge in environmental challenges and awareness worldwide and in particular Niger Delta Region of Nigeria.

Environmental & Chemical Services Limited is principally position to provide quality environmental consultancy services to your organization In E&CS every contract, large or small, is handled by a project manager with a multi-disciplinary team of experts to conduct large scale investigations as required **see Appendix 1.**

Innovation at Environmental & Chemical Services Limited is our strongest competitive advantage which lies in our experience and commitment to develop customized, innovative solutions for our customers. Our client-centric philosophy is built on a solid foundation supported by experience, Equipment and Technology **See Appendix 3.** Our commitment to Sustainable Development is illustrated across every aspect of our operations which are from employing the best International practices, continuous monitoring of our environmental performance and adhering to world class standards in providing a safe and a healthy work environment for our client / employees. Our commitment to sustainability and our industry leading best practices allows us to protect the life of our natural resources, and provide our clients with a wide range of dependable and economical “green” alternatives.

Occupational Health and Safety (OHS) is our first priority. We are committed to providing a safe and healthy working environment for all our employees, subcontractors and the public. Environmental & chemical Services Limited has an established Health, Safety and Environment unit whose objective is to provide support in all aspects of health and safety related to field and administrative operations. Our Health and Safety program also includes the annual training of all employees on critical health and safety topics. Our employees have over the years, participated in industry safety programs which at every level in our organization has allowed us to champion and positively influence the awareness and the critical importance of Health and Safety to industries.

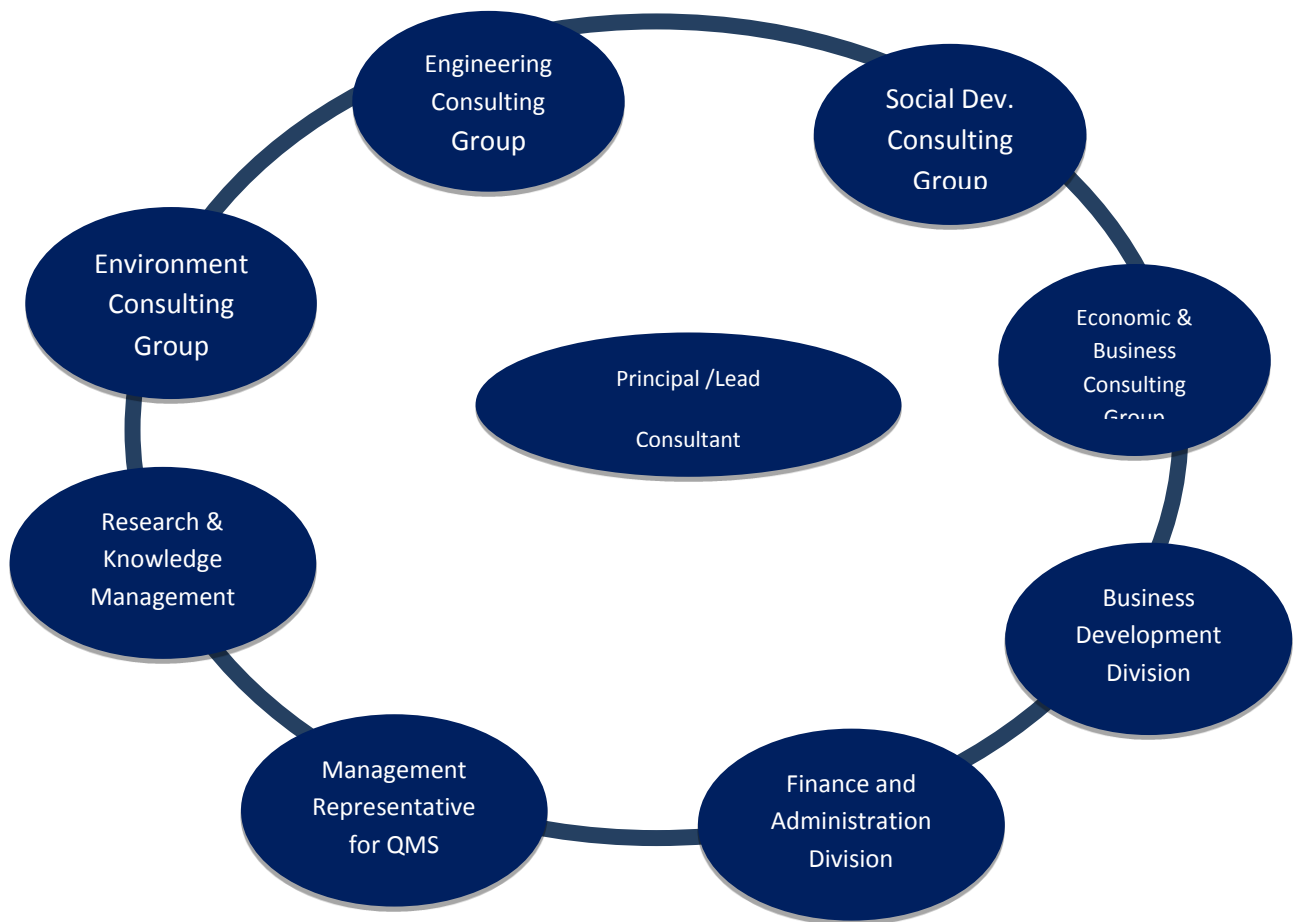
Environmental & Chemical Services Limited in compliance to Nigerian regulatory guidelines is accredited to operate as an Environmental Consultant and an Oil & Gas Industry service company. **(See Appendix 4)**

- Department of Petroleum Resources (DPR)

- Federal Ministry of Environment (FMEnv)
- National Environmental Standards and Regulations Enforcement Agency (NESREA)

### 1.1 Organizational Structure

Environmental & Chemical Services Limited is a professionally run limited liability corporate entity composed of four advisory groups supported by a management representative for effective implementation of quality management system, a research and knowledge management unit, finance and administration division and business development division. The company is managed by consulting experts through its Managing Director.



The Strategic Units – Environment Consulting Group, Economic & Business Consulting Group, Engineering Consulting Group, and Social Development Consulting Group - are responsible for delivering the high quality services to our clients. Additionally, there is a senior professional

designated as Management Representative who is responsible for supervising the quality of all delivered consulting projects and the processes used for assurance of the quality. In addition, a senior level staff designated as 'Quality Assurance Manager' is allocated to each project for ensuring the quality of services delivered to the client.

### **Knowledge Management**

Our knowledge management model, **IDEA**, revolve around four interrelated premises:

**Infrastructure-** Providing and maintaining state of the art enabling IT infrastructure for knowledge management,

**Decoding and developing** a pool of in-house knowledge based on our consulting experience and by undertaking objective specific quality researches in our focused market segments,

**Enabling tools-** Developing our own analytical tools and models to facilitate our teams for efficient execution of the assignments and delivery of quality services to our clients, and

**Augmentation-** Enhancing and updating the knowledge of our people by sponsoring them to attend relevant academic and training programs.

These knowledge management practices have enabled us to develop a readily available knowledge base as well as analytical tools and models which significantly enhance the efficiency of our people and quality of services delivered to our clients.

### **Project Execution and Management**

We understand the value of our clients' resources and time. We are efficient project managers and our well designed quality management procedures ensure to deliver the quality services to our clients on time and in a cost effective way. Based on our experience of serving our clients and latest project management practices worldwide, we have developed a set of project execution principles and practices which guide our teams to serve our clients in best of their interest. Environmental & Chemical Services Limited multi-disciplinary professional and technical staff provide the foundation for total scope of environmental services. We are adequately positioned

to assist our clients meet their environmental objectives in a very efficient and business-like manner.

### **1.2 Infrastructural Capacity**

Environmental & Chemical Services Limited has a fully equipped Office in Port Harcourt which is Information and Communication Technology (ICT) and Business Continuity compliant. Environmental & Chemical Services Limited is furnished with hi-tech and state-of-the- Art In-situ monitoring equipment readily deployable at all times to collect necessary real-time scientific data. (See Appendix 2)

### **1.3 Quality Assurance / Quality Control**

Environmental & Chemical Services Limited operations are managed and administered according to strict Quality Assurance under the control of specific procedures, which ensures that Client needs and requirements are achieved. All operational procedures conform to International Standard of Quality Management System (ISO 9001: 2015) & Environmental Management System (ISO 14001:2015). The QA/QC programme in accordance with international and National regulatory recommendations covers all aspects of operations like administration, fieldwork exercise, sample collection and handling, laboratory analyses, data management, stakeholder's engagement and report preparation.

## **APPENDIX 1**

### **EXPERT CVs OF TEAM MEMBERS**

### K-1 CURRICULUM VITAE (CV)

<b>Position</b>	Project Lead/MD
<b>Name of Expert:</b>	Olu Andah Wai-Ogosu
<b>Date of Birth:</b>	01/September 1948
<b>Country of Citizenship/Residence</b>	Nigerian/Nigeria

**EDUCATION:**

The American University, Centre for Technology and Administration, Washington DC., USA.  
 M.Sc. (Environmental Systems Management) 1976 - 1978  
 Catholic University of America, Washington DC., USA BA (Biological Science) 1972 – 1975

**TRAININGS:**

- Emerging Environmental monitoring technology by Nigerian Environmental Society, (NES)
- Registered Environmental Specialist Training & Certification by National Registry of Environmental Professionals (NREP) USA. Oct 2008
- Objective & Principle of Waste Management, Waste Mgt Planning and Material Recovery by Waste Management Society of Nigeria October 2008.

**EMPLOYMENT RECORD RELEVANT TO THE ASSIGNMENT:**

<b>Period</b>	<b>Employing organization and your title/position. Contact information for references</b>	<b>Country</b>	<b>Summary of activities performed relevant to the Assignment</b>
<b>1997 till date</b>	Environmental & Chemical Services Limited / Lead Partner	Nigeria	Managing a team of technical, scientific and engineering staff, writing plans and reports, keeping up to date with changes in environmental legislation and initiatives including directives, producing educational resources, liaising with regulatory bodies such as the Environment Agency
<b>2000 till date</b>	Rivers State University of Science and Technology/ Senior Research Fellow, Environmental Impact Assessment (EIA) and Pollution Control	Nigeria	Involved in Capacity Building. provide research guidance and support for over 150 students in Environmental Sciences : PHD students in Environmental Microbiology and Environmental Management; MPhil students in Environmental Management. Provided practical experience opportunities for numerous Industrial Attachment students and NYSC members interested in Environmental Management and Pollution Control.



<b>October 1984 to May 1997</b>	National Fertilizer Company of Nigeria (NAFCON) Ltd/Manager, Environmental Pollution Control Dept.	Nigeria	Inspect and evaluate the environment, equipment and processes in working areas to ensure compliance with government safety regulations and industry standards, safety assessment, risk assessment, exposure assessment, environmental modeling, Assists in conducting research, including literature reviews, data collection and expert interviews
<b>May 1980 – August 1983.</b>	Vibelko (Nig) Ltd./ Assistant to the Company Chairman	Nigeria	Supervised all constructional and contractual obligations of the company. Directly managed the environmental department of the company. Represented the Chairman in vital meetings, supervised staff strength of 200.
<b>Nov. 1978-Nov. 1979</b>	Port Harcourt Local Government Council/ Environmental Officer	Nigeria	Developed Sanitation Programmes for the Municipality. Executed all the Programmes. Supervised a workforce of 500 mostly of junior staff, comprising of Drivers, heavy equipment operators drainage/sewage workers, landscaping labourers etc. Liaise with then Local Government Ministry Officials. During this period, produced a technical plan for the Council titled “Environmental Sanitation, the case of Port Harcourt”
Jan. 1977 - Jan. 1979	General Electric Co., Software Supercentre, Rockville, Maryland USA/ Environmental Officer	Nigeria	Development Indoor Pollution Control Programmes. Supervised execution and monitoring of programmes. Supervised staff strength of 11

#### MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS AND PUBLICATIONS:

- Waste Management Society of Nigeria (WAMASON)
- Nigerian Environmental Society (NES)
- Science Soil Society of Nigeria (SSSN)
- Chemical Society of Nigeria (CSN)
- Nigeria Society of Agronomist
- Nigerian Institute of Safety Professionals (NISF)

#### LIST PUBLICATIONS

- Environmental issues in contemporary Eleme: Awareness and strategies for sustaining acceptable standards. Paper presented at Eleme LGA Vision 2010.

- “Implications of Environmental Non-Compliance” Paper presented at the monthly (March 2005) Technical Meeting of the Nigerian Environmental Society, in Port Harcourt, Rivers State
- “Public Relations in Environmental Management” Paper presented at the Nov, 2004 Professional Meeting of the Nigerian Institute of Public Relations (NIPR), Port Harcourt, Nigeria
- “Environmental Management Plan for the Onne – Eleme – Okrika Industrial Belt”, Paper presented at the 2004 (11<sup>th</sup>) Biennial International HSE Conference on the Oil and Gas Industry in Nigeria, Port Harcourt -2004.
- Wai-Ogosu, O.A and N.O Umesi (Ed). Ambient Air Assessment of Mobile Producing Nig Unlimited (MPNU) NGL Gas Plant Start-up and stabilization. Final Report of work done under Work Order 1110090 /28/9/98. Submitted to Mobile Producing Nig Unlimited (MPNU) Bonny, 1999.
- Environmental Protection; Problems, Progress, Practice, Principles, and Prospects. Text of a Paper presented at the Rivers Zone of Rotaract District 9140, Port Harcourt, Nigeria –June 27, 1992.
- “Emission from Nitrogenous Fertilizer Plant: the case of NAFCON, Onne, Nigeria” Presented to Military Student Officers of the Nigerian Command and Staff College, Jaji, on the occasion of their visit to NAFCON Ltd, Onne, Nigeria-Feb. 6, 1992.
- “Environmental Auditing, A Systems Approach to Evaluate Environmental Problems” – 1987. Published in Vol. 1. NJIS. Nigerian Journal of Interdisciplinary Studies, 1991.
- Published in the Proceedings of an International Seminar Sponsored by NNPC/Nigeria Federal Ministry of Works & Housing, Nov. 9-12, 1987. Environmental Pollution Monitoring Action Plan: NAFCON Approach.

**LANGUAGE SKILLS (INDICATE ONLY LANGUAGES IN WHICH YOU CAN WORK):**

- English
- Yoruba
- Igbo
- Efik

**ADEQUACY FOR THE ASSIGNMENT:**

<b>Detailed Tasks Assigned on Consultant’s Team of Experts:</b>	<b>Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks</b>
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment and Resettlement Action Plan of 132kV Transmission Lines and Associated Sub-stations (Maiduguri-Bama-Gwoza - Gulak (NTEP Project) – TCN/ AfDB Project, 2018
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment and Resettlement Action Plan of 330kV Transmission Lines and Associated Sub-stations Kano-Jogana-Katsina – TCN /AFD project, 2018
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment (ESIA) of Biliri (Gombe State) 133/32Kv Sub-Station (Sub-Consultant)- World Bank Project April 2015
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment (ESIA) of New Kano (Kano State) 133/32KV transmission Sub-Station (Sub-Consultant)- World Bank Project April 2015
Team Leader, Project Management, Fieldwork & Report writing	Environmental Audit of Power Holding Company of Nigeria (PHCN) Successor Companies. March 2014
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment of Indorama Eleme Petrochemical Multipurpose Jetty Project, Federal Ocean Terminal (FOT) Onne, Rivers State, Nigeria. (Foster wheeler Italy & Environmental & Chemical Services Nigeria /Metaspec Consult Limited Nigeria) IFC – August 2012
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment of the Proposed Ammonia, Urea Plants in Indorama Eleme Petrochemicals Limited Eleme, Port Harcourt, Rivers State Nigeria by Indorama Eleme Fertilizer and Chemicals Limited. (Foster wheeler Italy & Environmental & Chemical Services Nigeria /Metaspec Consult Limited Nigeria) IFC – November 2012
Team Leader, Project Management, Fieldwork & Report writing	Environmental and Social Impact Assessment for the Proposed OBOB -Eleme Gas Pipeline Project by Indorama Eleme Fertilizer and Chemicals Limited, Port Harcourt Rivers State, Nigeria (Foster wheeler Italy & Environmental & Chemical Services Nigeria /Metaspec Consult Limited Nigeria) IFC – December 2012

Team Leader, Project Management, Fieldwork & Report writing	Environmental Evaluation Review of Uquo Marginal Field Development Project for Frontier Oil Limited, Eket, Akwa Ibom state. November 2014
Project Management, Fieldwork & Report writing	Post Environmental Impact Assessment of SPDC Ltd Oil Blow out at Kpean in Khana Local Government Area (in Ogoni Kingdom) in April 2001
Project Management, Fieldwork & Report writing	Post Impact Assessment of November 26 <sup>th</sup> spillage from SPDC 24 Nkpoku MF - Bomu MFT/L Crude line passing through Agbonchia Village in Eleme Local Government, Rivers State; 2006

**EXPERT'S CONTACT INFORMATION: (e-mail [envichemical@yahoo.co.uk](mailto:envichemical@yahoo.co.uk)  
Phone : 08033384134)**

## K-2 CURRICULUM VITAE (CV)

<b>Position Title and No.</b>	QHSE/QA Supervisor
<b>Name of Expert:</b>	Adeyemi Adewale Jonathan
<b>Date of Birth:</b>	04/July 1973
<b>Country of Citizenship/Residence</b>	Nigerian/Nigeria

### EDUCATION:

Rivers State University of Science and Technology	In-view	PhD Env. Mgt
Rivers State University of Science and Technology	2008-2017	M.Phil Env. Mgt
Ladoke Akintola University of Technology Ogbomosho	1995-2000	B.Tech Agronomy

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### TRAININGS:

- Project Management course training by DexNova Consulting Limited Dec 2013
- Lead Auditors Training and Certification for Quality Management System (ISO 9001) by Bureau Viritas (IRCA Certified) Oct 2009
- Lead Auditors Training and Certification for Environmental Management System (ISO14001) by Bureau Viritas (IRCA Certified) Oct 2008
- Registered Environmental Specialist Training & Certification by National Registry of Environmental Professionals (NREP) USA. Oct 2008
- Objective & Principle of Waste Management, Waste Mgt Planning and Material Recovery by Waste Management Society of Nigeria October 2008.
- Health, Safety & Environment (HSE) Level 3 Course by G-Platinum Petroserve (NISP), July 2003
- Basic & Practical First Aid Certification by Red Cross, Aug 2007

**EMPLOYMENT RECORD RELEVANT TO THE ASSIGNMENT:**

<b>Period</b>	<b>Employing organization and your title/position. Contact information for references</b>	<b>Country</b>	<b>Summary of activities performed relevant to the Assignment</b>
<b>Feb 2009 - Till date</b>	Metaspec Consult Limited / Lead & Managing Consultant  Michael Oladeji/ 08056384823	Nigeria	Managing a team of technical, scientific and engineering staff, writing plans and reports, keeping up to date with changes in environmental legislation and initiatives including directives, producing educational resources, liaising with regulatory bodies such as the Environment Agency
<b>Jan 2008 – Dec 2008</b>	Tropical Services Nigeria Limited/ Operations Manager South South  Mr Jimi Adeleye / 08023258879	Nigeria	Overseeing the use of all resources within organisations, implementing environmental policies and practices, developing schemes for recycling, pollution reduction and pollution prevention, ensuring compliance with environmental legislation, auditing, analyzing and collating environmental performance data and reporting information to internal staff, clients and regulatory bodies, managing environmental strategy budgets, liaising with internal staff including senior managers and directors, providing environmental training to staff at all levels
<b>June 2004 - August Jan 2008</b>	International Energy Services Limited Port Harcourt  Engr Wole Ajayi / 08033731888	Nigeria	Inspect and evaluate the environment, equipment and processes in working areas to ensure compliance with government safety regulations and industry standards

<b>Feb 2002- March 2004</b>	Lighthouse Petroleum Engineering Company Warri/ Environmental Officer  Adeola Bamgboye/08074742578	Nigeria	safety assessment, risk assessment, exposure assessment, environmental modeling, Assists in conducting research, including literature reviews, data collection and expert interviews
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#### MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS AND PUBLICATIONS:

- National Registry of Environmental Professionals (NREP) USA.
  - Nigerian Conservation Foundation (NCF)
  - Nigerian Red Cross Society (NRCS)
  - Waste Management Society of Nigeria (WAMASON)
  - Nigerian Environmental Society (NES)
  - Chemical Society of Nigeria (CSN)
  - Nigerian Institute of Safety Professionals (NISP)
  - Soil Science Society of Nigeria (SSSN)
  - Water Supply & Sanitation Collaborative Council (WSSCC) United Nations
  - Gas Processors Association (GPA)
- 

#### LIST PUBLICATIONS

- Adeyemi, J. A., Ewa, E. E., Iwara A.I. & Njar, G. N. (2013) Assessment of water Quality of the calabar River using multivariate statistical Technique. Journal of Applied Sciences Resaerch. Vol.9 No. 5. 3354-3363.
- Iwara, A. I., Gani, B.S., Adeyemi J.A & Ewa, E. E (2013) Effect of road construction on adjoining soil properties of Tinapa resort, south southern Nigeria.  
<http://www.losrjournals.org>
- Ewa, E. E., Iwara, A. I. Adeyemi , A, Eja, E. I. Ajake, A, O. Otu, C. A (2011) Impact of industrial Activities on water Quality of Omoku Creeks, Sach Journal of Environmental Studies Vol. 1, No. 2. <http://www.Sachajournal.com/document/Ewa001-pdf>

- Iwara, A. I Ewa, E.E; Ogundele, F. O; Adeyemi J. A; Otu, C. A. (2011) Ameliorating Effects of palm Oil Mill in Ugep, Cross River State, South – Southern Nigeria. International Journal of Applied Science and Technology Vol. 5, No. 5. <http://www.ijastnet>
- Adeyemi J. A Ewa, E. E., Iwara, A. I, Alade, A. O, (2013) Spatio-temporal Distribution to phytoplankton in the industrial Area of Calabar River. Nigeria. Advances in Environmental Biology Vol. 7 (B) Pg. 466-470 ISSN- 1995-0756. <http://www.aensiweb.com>
- Adeyemi A.J, Adebayo T.O, Adedeji A.T. (2006) Effects of *Heliotropium europaeum* on Laboratory rats. Ladoke Akintola University of Technology Science journal Vol. 3. 137654

**LANGUAGE SKILLS (INDICATE ONLY LANGUAGES IN WHICH YOU CAN WORK):**

- English
- Hausa
- Yoruba

**ADEQUACY FOR THE ASSIGNMENT:**

**Detailed Tasks Assigned on Consultant’s Team of Expert:**

Project Management, Fieldwork & Report writing

<b>Detailed Tasks Assigned on Consultant’s Team of Experts:</b>	<b>Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks</b>
HSE Coordinator /Environmental Mgt Expert	Environmental Impact Assessment of Ibeto Cement Mining Lease EIA, Cross River State. (Environmental & Chemical Services Limited) March 2019
HSE Coordinator /Environmental Mgt Expert	Environmental Impact Assessment (EIA) of proposed staff Multi-purpose Cooperative Limited service station by Total Exploration and Production Nigeria Limited (TEPNL), Port Harcourt, Rivers State. October 2018
HSE Coordinator	Environmental Impact Assessment (EIA) of proposed staff Multi-purpose Cooperative Limited service station by Total Exploration and Production Nigeria Limited (TEPNL), Port Harcourt, Rivers State. October 2018



/Environmental Mgt Expert	
HSE Coordinator /Environmental Mgt Expert	Environmental Evaluation Studies of Indorama Eleme Petrochemical Complex, Eleme LGA, Rivers State. August 2018
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment and Resettlement Action Plan of Proposed 132kV Transmission Lines and Associated Sub-stations (186 km Maiduguri – Bama – Gwoza – Gulak (Adamawa) under the Nigeria Transmission Expansion Project NTEP) Transmission Company of Nigeria – TCN/ AfDB Project, June 2018
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment and Resettlement Action Plan of Proposed 330kV Transmission Lines and Associated Sub-stations. 261.65 km Katsina- Daura- Gwiwa (Jigawa) –Tsamiyar kara (Kano) –Kura (kano) – TCN /Agence Française de Développement (French Agency for Development) project, April 2018
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Management Plan for Eco tourism Hostel Accommodation at Akamkpa LGA, Cross Rivers State for Caritas Nigeria / Catholic Secretariat of Nigeria. August 2017
HSE Coordinator /Environmental Mgt Expert	Environmental Impact Assessment of 1ton /hour Rotary Kiln Double Chamber High Temperature Incinerator Eleme LGA, Rivers State. Eka Ata Onne Nigeria Limited. February 2017
HSE Coordinator /Environmental Mgt Expert	Environmental Monitoring of Evacuation Road, Odukpani LGA, Cross Rivers State for Larfage Holcim (UNICEM) and Environmental & Chemical Services Limited. February 2017
HSE Coordinator /Environmental Mgt Expert	Environmental Impact Assessment (EIA) of Ekakpare/Otughievwen/ Okwagbe/ Otutuama/Isaba Proposed Road Project, Ughelli LGA, Delta State Niger Delta Development Commission. April 2016
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment (ESIA) For Geregu III Power Station, Geregu, Ajaokuta LGA, Kogi State Benchmark Power International Standard Energy Limited (BPISEL) Egypt. March 2016
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment of Granular NPK Fertilizer Plant for Indorama Eleme Petrochemical Limited (IEPL), EPCL Complex, Eleme LGA, Rivers State, Nigeria. March 2016

HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment of Phosphoric Acid Storage and Associated Underground Pipping for Indorama Eleme Petrochemical Limited, FOT, Onne, Rivers State, Nigeria. March 2016
HSE Coordinator /Environmental Mgt Expert	Environmental and Social Impact Assessment for proposed Ibeto Cement 6000 Metric Tonnes per day Factory at Nkalagu, Ishielu LGA, Ebonyi State. October 2015
HSE Coordinator /Environmental Mgt Expert	Environmental Impact Assessment of Abonnema Housing Estate, Akuku Toru LGA, Rivers State. June 2015
HSE Coordinator	Environmental and Social Impact Assessment (ESIA) of Biliri (Gombe State) 133/32Kv Sub-Station (Sub-Consultant)- World Bank Project April 2015
/Environmental Mgt Expert	Environmental and Social Impact Assessment (ESIA) of New Kano (Kano State) 133/32KV transmission Sub-Station (Sub-Consultant)- World Bank Project April 2015
HSE Coordinator	Environmental and Social Impact Assessment (ESIA) of Kabba (Kogi State) 303/132KV and 133/32KV transmission substation (Sub-Consultant). World Bank Project. April 2015
/Environmental Mgt Expert	Environmental and Social Impact Assessment (ESIA) of 9th Mile, Abor (Enugu State) 330/132KV and 133/32KV transmission substation (Sub-Consultant)- World Bank Project. April 2015
HSE Coordinator	Environmental and Social Management Plan (ESMP) for Sagamu (Ogun State), 133/32kv transmission substations. (Sub-Consultant) World Bank Project - August 2015
/Environmental Mgt Expert	Environmental and Social Management Plan (ESMP) for Awka (Anambra State), 133/32kv transmission substations. (Sub-Consultant) World Bank Project - August 2015
Air Quality expert	Environmental and Social Management Plan (ESMP) for Yandev (Benue State) 133/32K transmission substations. (Sub-Consultant) World Bank Project - August 2015
Team leader	Environmental and Social Management Plan (ESMP) for Gusau (Zamfara State) 133/32kv transmission substations. (Sub-Consultant) World Bank Project - August 2015

Team Leader	Environmental and Social Impact Assessment of proposed Granite Quarry Akamkpa LGA, Cross River State for STEMCO Limited. November 2014.
Team Leader	Environmental Impact Assessment for the proposed Mcklapton Energy Limited Thermal Desorption Unit waste Treatment Facility, Odukpani, Cross River State. September 2014
Team leade	Environmental Impact Assessment of Concrete Bridge to link Igbokoda and Zion Igbokoda in Igbokoda LGA, Ondo State. February 2014
	Environmental Evaluation Based Environmental Impact Assessment (EIA) Study of Gbaran-Ubie Node Integrated Oil and Gas Project for Shell Petroleum Development Company of Nigeria (SPDC) & Mika Enterprises (Nigeria) Limited. March 2013
Air Quality expert	Preliminary Environmental Impact Assessment/ EIA Terms of Reference and Scope of Work of the Proposed 300km Sango Ota-Shagamu-Ijebu Ode-Ore-Benin City (Lot 1) Standard Gauge Railway Line Project. August 2013
Air Quality expert	Preliminary Environmental Impact Assessment/ EIA Terms of Reference and Scope of Work of the Proposed 500km Benin – Onitsha- aba & Onitsha-Abakaliki Lot 2 (A & B) Standard Gauge Railway Line Project. August 2013.
Team Leader	Environmental Impact Assessment of Federal University Otuoke Permanent Site, Ogbia LGA, Bayelsa State. February 2013
Team Leader	Environmental Impact Assessment Port Harcourt Monorail Project for HAALP Consult Limited. 2011
Team leader	Environmental Impact Assessment of Proposed 450km Ibafo- Ibadan-Jebba Gas Pipeline for Entec Power & Utilities Company. October 2011
Air Quality expert	Environmental Impact Assessment (EIA) of Terminal Gas Station (TGS) at Ishiagu, Ebonyi State for Federal Ministry of Petroleum. 2012
Team Leader	Environmental Impact Assessment (EIA) of Calabar – Enugu- Ajaokuta 409km Gas Pipeline (Cross River, Akwa Ibom, Abia, Enugu, Edo & Kogi State) February 2012
Air Quality expert	Environmental Impact Assessment (EIA) of Calabar –Okopedi 36km Spur Gas Pipeline. September 2011

Team leader	Environmental Impact Assessment (EIA) of Lucky Fibre – Dangote Flour Mills 12km Gas Pipeline Ikorodu, Lagos State for Environmental Associates. March 2010
Air Quality expert	Environmental Impact Assessment of proposed Multipurpose Jetty Onne Oil & Gas free Zone for Indorama Eleme Petrochemical Limited and Environmental & Chemical Services Limited. IFC August 2012
Air Quality expert	Environmental Impact Assessment of proposed Ammonia, Urea Plant in Eleme Petrochemical Complex for Indorama Eleme Petrochemical Limited & Environmental Chemical Services Limited. IFC November 2012
Air Quality expert	Environmental Impact Assessment of proposed Eko Beach Estate, East Mole, Victoria Island, Lagos State for Satellite Oil & Gas International Limited and Environmental & Chemical Services Limited. 2012
Air Quality expert	Environmental Impact Assessment of proposed Perform Plant in IEPL Complex by Aurus Packaging Limited. June 2011
Air Quality expert	Environmental Impact Assessment (EIA) of Ikpa, Ikot Okpo Udo, Biomin Plus Spur to Ikot Ubo Road Construction (Akwa Ibom State) for Niger Delta Development Commission and Mannaline Integrated Services Limited. 2011
Team leader	Environmental Impact Assessment (EIA) of Sangana Shoreline Protection in Bayelsa State for the Niger Delta Development Commission & Herock Nigeria Limited. 2010
Team Leader/Noise expert	Environmental Audit of Power Holding Company of Nigeria (PHCN) Successor Companies. (Afam Power Station, Egbin Power Station, Sapele Power Station, Ughelli Power Station, Geregu Power Station, Olorunsogo Power Station, Omotosho Power Station, Ijora Power Station, Calabar Power Station, Oji River Power Station, Kainji Power Station, Jebba Power Station, Shiroro Power Station, Abuja Electricity Distribution Company, Benin Electricity Distribution Company, Eko Electricity Distribution Company, Enugu Electricity Distribution Company, Ibadan Electricity Distribution Company, Ikeja Electricity Distribution Company, Jos Electricity Distribution Company, Kaduna Electricity Distribution Company, Kano Electricity Distribution Company, Yola Electricity Distribution Company, Port Harcourt Electricity Distribution Company and Transmission Company of Nigeria) World Bank Project-March 2014

**EXPERT'S CONTACT INFORMATION: (e-mail [wela22ng@yahoo.com](mailto:wela22ng@yahoo.com))**

**Phone : 08037203989)**

### K-3 CURRICULUM VITAE (CV)

<b>Position Title.</b>	Field Monitoring Supervisor
<b>Name of Expert:</b>	Nwachukwu Solomon
<b>Date of Birth:</b>	28/February 1987
<b>Country of Citizenship/Residence</b>	Nigerian/Nigeria

#### EDUCATION:

Rivers State University (RSU)	MSc Soil Physics/Conservation	Awaiting Result
Rivers State University (RSU)	PGD Environmental Soil Science	2016
Rivers State University of Science and Technology now (RSU)	BSc Math/Computer Science	2013

#### TRAININGS (Selected few):

Online Lead Auditors Training Course for Quality Management System (ISO 9001:2015) by Adviersa Expert Solutions Ltd	2018
Online Lead Auditors Training Course for Environmental Management System (ISO 14001:2015) by Adviersa Expert Solutions Ltd	2018
Online Lead Auditors Training Course for Occupational Health and Safety (ISO 45001:2018) by Adviersa Expert Solutions Ltd	2018
Webinar on “how to integrate ISO 14001 and 9001” by Adviersa Expert Solutions Ltd	2020
Webinar on “how to make transition from OHSAS 18001 to ISO 45001” by Adviersa Expert Solutions Ltd	2020
Webinar on ISO 9001:2015 clause 4(context of the organization, interested parties and scope) by Adviersa Expert Solutions Ltd	2020
HSE 1, 2, 3 Novelle Center	2015
Environmental Technology Trade Fair by NES	2015
NESREA Environmental Consultant Training	2014

**EMPLOYMENT RECORD RELEVANT TO THE ASSIGNMENT:**

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
Feb 2008 - Till date	Environmental and Chemical Services Ltd	Nigeria	<ul style="list-style-type: none"> <li>• Prepare work plans, reports, and correspondence for external review</li> <li>• Direct field activities including collection of soil, sediment, groundwater, and air samples for EMP Compliance Monitoring. Data Interpretation and QA/QC</li> <li>• Develop project budgets and prepare invoices</li> <li>• Assessment and compilation of environmental data, interpretation of environmental regulations, and preparation of environmental reports</li> <li>• Quarterly environmental monitoring reporting</li> <li>• Prepare and review consultant Requests for Proposals (RFP).</li> <li>• Coordinate with colleagues to carryout environmental monitoring</li> <li>• Review consultant work, including technical and/or environmental reports, for accuracy; ensure project deliverables, timelines and budgets are met</li> <li>• Contractor liaison/oversight for environmental investigation and remedial programs</li> <li>• Develop schedules, manage project logistics and write Environmental Site Assessment&amp; Impact reports</li> <li>• Plan and implement environmental compliance monitoring (including groundwater, surface water, and leachate sampling) and other environmental monitoring required by Waste Management Facility</li> </ul>

			<ul style="list-style-type: none"> <li>• Develop, modify and implement Standard Operation Practices (SOPs) for monitoring and sampling programs.</li> <li>• Assisted with business development activities and proposal writing</li> </ul>
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**MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS AND PUBLICATIONS:**

- Nigerian Environmental Society

**LIST PUBLICATIONS (Thesis)**

- Design and Implementation of Hospital Information Management System (HIMS) Case of Le Meriden Hospital Port Harcourt – BSc (Computer Science)
- Effect of organic super soil on soil properties and the performance of tomato (*solanum lycopersicum*) in port Harcourt – PGD (Environmental Soil Science)
- Effect of seasonal flooding on agricultural soil quality of some selected soils in Ogoni land – MSc (Soil physics and Conservation)
- Combustion analysis: A tool for effective plant management system – Technical paper yet to be published

**SELECT COMPUTER SKILLS:**

- Microsoft office (Word, Excel, Power point); Modelling (Surfer 16, iNoise, NoiseAtWork, Screen model) Statistical Analysis (Minitab, SPSS)

**LANGUAGE SKILLS (INDICATE ONLY LANGUAGES IN WHICH YOU CAN WORK):**

- English
- Igbo

**ADEQUACY FOR THE ASSIGNMENT (Recent Jobs):**

Detailed Tasks Assigned on Consultant’s Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks (2016 till date)
Soil Consultant	Environmental and Social Impact Assessment (ESIA) for the Proposed Skill Acquisition Centre 2016 by Ministry of Niger Delta

Soil Consultant	Environmental and Social Impact Assessment (ESIA) for the proposed Indorama Fertilizer Train 2 Project 2018 World Bank Approved
Soil Consultant	Environmental Evaluation Study of Indorama Fertilizer and Chemicals Ltd December 2019
Soil Consultant	Environmental Audit Report of Indorama Fertilizer Facility 2018
Soil Consultant	Environmental Audit Report of Indorama Petrochemicals Facility 2018
Coordinator	Routine Environmental compliance monitoring of Tenaris 2015 till date
Coordinator	Routine Environmental compliance monitoring of Pipe Coater Nigeria 2015 till date
Coordinator	Routine Environmental compliance monitoring of Indorama Fertilizer 2016 till date
Coordinator	Routine Environmental compliance monitoring of Indorama Petrochemicals 2014 till date
Coordinator	Routine Environmental compliance monitoring of Indorama Pet Nigeria Ltd 2016 till date
Coordinator	Routine Environmental compliance monitoring of Indorama Ventures 2016 till date

**EXPERT'S CONTACT INFORMATION:**

**E-mail** [temperatesolo@yahoo.com](mailto:temperatesolo@yahoo.com)

**Phone** : 08032906022



## **APPENDIX 2**

### **ENVIRONMENTAL AND CHEMICAL SERVICES LTD, PREVIOUS WORK EXPERIENCE/COMPANY PROFILE**

#### **ENVIRONMENTAL CONSULTANT TO:**

- Indorama Petrochemicals Limited
- Indorama Fertilizer and Chemicals Limited
- Indorama Pet Nig Limited
- Indorama Ventures Packaging Limited
- OIS Indorama Port Limited
- Ibeto Cement Company Limited
- Anam Resources Limited
- Fidella Oil and Gas Limited

**APPENDIX 3**

**PRIMARY EQUIPMENTS**

## EFFLUENT MONITORING EQUIPMENT

Equipment	Model	QTY	Capability
Portable pH Meter	ecoTestr pH1	1	Measures acidity and alkalinity level in aqueous sample Temp compensation automatic resolution -5°C to 105°C, Temp. Accuracy ±0.5, pH mode – 1.99 to 19.99 pH, Resolution: 0.01pH, Accuracy: ± 0.01pHb, pH Accuracy: ±0.01pH)
Conductivity/TDS Meter	ECTestr	1	Measurement of conductivity, total dissolved solids and temperature of aqueous samples
Portable Turbidimeter	HACH	1	Turbidity measurement (Range 0-1000NTU (=FNU) Manual range of 0-9.99, 0-99.9, and 0-1000NTU, Accuracy ±2% repeatability±1% or 0.0NTU), stray light <0.04NTU
Portable Microprocessor Turbidity Meter	Hanna Instrument HI 93703	1	Turbidity of Aqueous samples
Oxygen Meter	EXTECH Exstik DO600	1	Dissolved Oxygen Accuracy:0.5% +0.5% F.S, Resolution:0.01, Temp Range: 0-50°C
Residual chlorine Kit	HACH Chlorine Kit	1	Measures free and total chlorine concentration
Liquid Sampler	Liquid Effluent grab		Representative capture of sample
Sediment Sampler	Wildco instrument Eckman grab		For sediment Sampling
General			
GPS	GPSMAP 76CSx	1	For sampling station geo-referencing
Digital Camera	Olympus	1	
Field sample preservator	Coolers, HCl, etc	2	For life samples preservations

**GASEOUS EMISSIONS & POINT SOURCE MONITORING EQUIPMENT**

Equipment	Model	QTY	Capability
Ambient Air quality & Gaseous point source emission analyzer	Aeroqual 500 Testo 350XL gas analyser	1	Gas analyser automatically extracts atmospheric air sent through the analyser gas sensors for the determination of pollutant gases of interest (SO <sub>x</sub> , VOC, O <sub>3</sub> , NO <sub>x</sub> , CO, H <sub>2</sub> S, C <sub>x</sub> H <sub>y</sub> , and Ambient temperature).
	Biosystem Gas Analyser	1	
	RKI GX 2003 Gas Analyser	1	
	GA – 21 Plus Flue Gas Analyzer		
Suspended particulate matter (SPM)	Airmetrics minivol sampler	1	A mini-volume portable air sampler (Airmetric <sup>®</sup> ) with a pre-weighed membrane filter (45µm) is used to collect particulate matter. After sampling, the membrane filter was dried in a desiccator and weighed to the nearest milligram. Measuring the mass of particulate matter and dividing by the volume of air calculated the mass concentration (gravimetry).
	Kanomax Handheld laser Particulate Counter Model 3887	1	A hand held portable laser counter air sampler with a probe used to collect particulate matter.
Noise	Extech 407735 Sound meter	1	Noise Level at each point is measured with a pre-calibrated digital readout. Sound level meter with measuring range of 30 – 130 dB (A), accuracy of ±1.5 dB (A) noise meter. The sensor of the noise meter was directed towards the source of noise and the average reading over a period of two minutes was taken to be the Noise-level at each point. The noise levels were measured in decibels (dB).
Wind direction and speed	Acurite	1	A combined Wind Vane and Anemometer is used in determining wind direction and speed. The wind speeds were measured in m/s.
Ambient Temperature, Absolute Pressure and Relative Humidity	Acurite	1	A multi-parameter digital barometer was used to measure temperature in °C, Absolute pressure in Pa and relative humidity as %, Atmospheric pressure, relative humidity and ambient temperature measurement. The logger is equipped with an atmospheric pressure probe (Barometer), relative humidity (Hygrometer) and a temperature probe (Thermometer).
Digital Barometer (Weather station)	Acurite	1	Atmospheric pressure, ambient temperature and relative humidity measurement
Heat & sun radiation	Skye Data Hog Paranometer	1	Measure the heat transfer from a source in w/m <sup>3</sup>
Naturally occurring radioactive material (NORM)	Radiation Alert Tm Monitor 5	1	Measures radiation materials of alpha ,beta ,gamma etc in MR/hr
Soil Equipment			
Soil Auger		1	For collection of soil samples
Soil pH meter		1	For measurement of soil pH

**APPENDIX 4**

**PERMITS AND CERTIFICATES**

RC 336122



CORPORATE AFFAIRS COMMISSION  
FEDERAL REPUBLIC OF NIGERIA

## Certificate of Registration of Increase in Share Capital

COMPANIES AND ALLIED MATTERS ACT 1990  
*Pursuant to section 102 (2)*

**E&CS ENVIRONMENTAL AND CHEMICAL SERVICES  
LIMITED**

*With reference to the ordinary resolution and notice of increase in  
share capital dated the Twenty-Eighth day of February, 2019  
presented for filing on the Eighth day of March, 2019  
in respect of the above named company:*

*This is to certify that the increase in share capital  
From =N=1,000,000 to =N=5,000,000 by the creation  
of 4,000,000 Ordinary Shares of N1.00 each  
has been registered with the Commission  
This Twelfth day of March, 2019*

Receipt No: CAC/RRR/330285653456  
For =N=20,315.00K



A handwritten signature in black ink, appearing to read 'Azuka Obiageli Azinge'.

**AZUKA OBIAGELI AZINGE**  
Registrar - General

1201269







# ENVIRONMENTAL & CHEMICAL SERVICES LIMITED

Pollution Control and Management Consultants

13<sup>th</sup> February, 2020

The Hon Minister  
Federal Ministry of Environment  
Federal Secretariat  
Mabushi, Abuja

Thro: The Zonal Controller  
Port Harcourt, Rivers State



Attention: Head Pollution Control Dept

Hon Minister,

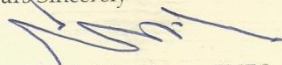
**RE: RENEWAL OF ENVIRONMENTAL AND CHEMICAL SERVICES LTD FMENV  
ACCREDITATION PERMIT**

We hereby apply to renew our permit as an Environmental Consultant which expired on 30<sup>th</sup> January 2020. Enclosed with the application are:

- Evidence of payment (Remita receipt) for One Hundred Thousand (100,000) Naira.
- Copy of the expired permit

Thank you for your cooperation

Yours Sincerely

  
Olu Andah Wai-Ogosu *FNES*  
MD/CEO

- Engr. O. Andah, E. Andah Esq.,
- Dr. Eme Andah

**Corporate Head Office**  
Flat 13, Chinda Estate  
off RSUST Road, P. O. Box 8033, Port Harcourt  
+234 08074761827, 08033384134  
enichemical@yahoo.co.uk, enichemical@gmail.com

**Calabar Office**  
69 Odukpiani Road, Essien Town, Calabar  
+234 (0) 87-235553





FEDERAL REPUBLIC OF NIGERIA  
**PERMIT TO OPERATE AS AN OIL INDUSTRY SERVICE COMPANY**

**MAJOR CATEGORY**

PERMIT NO: DPR/OGISP/19/7595640/N178990

This Permit is hereby granted to

ENVIRONMENTAL AND CHEMICAL SERVICES

LIMITED

of Flat 13 Chinda Estate, Off Rsust Road

Port Harcourt , Rivers, Nigeria

to render the service to the Oil Industry in the Category listed hereunder:

ONSHORE ENVIRONMENTAL/ WASTE MANAGEMENT  
- ENVIRONMENTAL ASSESSMENT/STUDIES (EIA, EER, EAR, PIA)

This Permit expires on the Saturday, December 19, 2020

Fee Paid: ₦ 25,000.00

Dated 19th day of Decemeber 20 19

Director of Petroleum Resources

This permit does not cover "Supply of Expatriate Manpower" in any guise



**National Environmental Standards and Regulations Enforcement Agency (NESREA)**



*Certificate of Accreditation*

*This is to certify that*

**CERT NO: 190**

**Environmental & Chemical Services Ltd**

*with C.A.C. Registration No: RC: 336122*

*has been accredited to carry out environmental consultancy services in the following area(s):*

1. Environmental Audit
2. Environmental Studies

20<sup>th</sup> September, 2019

19<sup>th</sup> September, 2020

**Date of Issue**

**Expiry Date**

Director, Partnership & Education

Director, Planning and Policy Analysis

Director, Inspection and Enforcement

Director, Environmental Quality Control

Legal Adviser

Director General/CEO

*Note that you are expected to operate within the extant laws, regulations and guidelines.*



ORIGINAL COPY

TCC NO : 10595862  
TAX OFFICE : MSTO PORT-HARCOURT(PH)  
DATE : 27-Feb-2020

TAX CLEARANCE CERTIFICATE

Name of Company : E&CS ENVIRONMENTAL & CHEMICAL SERV. LTD



RC NO : RC336122  
Date of Incorporation : 02-06-1998  
TIN : 03452851-0001  
Effective Bussiness Address : FLAT 13, CHINDA ESTATE, OFF RSUST ROAD, MILE III D

This is to certify that the above named company has rendered Income Tax, Value Added Tax, Information Technology Development Levy, Education Tax, as well as other tax returns and paid the assessed taxes in accordance with the relevant tax laws for all years including the past three assessment years as detailed hereunder:-

	Assessment Year 2017	*Nature	Assessment Year 2018	*Nature	Assessment Year 2019	*Nature
Turnover	33,742,584.00		36,425,480.00		49,501,000.00	
Assessable Profit/Loss	604,819.00		692,100.00		744,894.00	
Total Profit	201,606.00		230,700.00		248,298.00	
Tax Payable	64,343.00		104,987.00		131,687.00	
Tax Paid-Companies Income Tax Receipt No	WT0606617585		WT060895926		060895926	
Date	21-Aug-2014		18-Dec-2015		18-Dec-2015	
Tax Outstanding(If any)	NIL		NIL		NIL	
Petroleum Profit Tax Receipt No. & Date						
Tax Outstanding(If any)	NIL		NIL		NIL	

\*Nature of Assessment:(i)Best of Judgement(ii)Self Assessment(iii)Minimum Tax(iv)Pre-Operation Levy(POL)  
(v)Government(Additional,Audit,Investigation)(vi)Others(Please Specify)

Source of Income : CONSULTANCY  
Other comments : IN BUSINESS  
This Certificate Expires On : 31st of December 2020  
(Not Later than the end of the current year of Assessment)



Official Stamp Impression

Jonathan O. Onah  
Tax Controller

Name & Rank Of Approving Officer

**APPENDIX 5**

**EVIDENCE OF JOB COMPLETION CERTIFICATES**





FMENV/EIA/ 000850

FEDERAL MINISTRY OF ENVIRONMENT  
&  
ENVIRONMENTAL IMPACT STATEMENT

Certificate

1. Project Identifies GAS PIPELINE FROM OBIANU/OBRIKOM GAS PLANT TO INDRAMAYA ELEME FERTILIZERS & CHEM. PLANT
2. Proposed date of project commencement: 18th APRIL, 2013.
3. Project Proponent: INDRAMAYA ELEME FERTILIZERS AND CHEMICALS LIMITED.
4. Project Location: IMO & RIVERS STATE.

COMMENTS(i) The approval covers the construction, laying and operation of an 18" diameter pipeline, including two valve stations and ancillary facilities along a length of 83km & 11.4km to transport natural gas from Obianu/Obrikom Gas Plant to Indoramaya Eleme Petrochemical Complex. (ii) All crossings (Rail Roads, Creeks/Rivers, existing pipelines) shall be by Horizontal Direct Drilling (Thrust-boring) with casing, and not less than 1.2 metres below ground level. (iii) There shall be Environmental Audits, Post Impact Assessments & Compliance Monitoring on the project to be approved by FMENV which shall be facilitated by IERCL. (iv) IERCL shall fully apply a robust Environmental Management Plan (EMP) for the project.

5. CERTIFICATION: The Federal Ministry of Environment by the power conferred on it by section 42 of EIA Act No. 86 of 1992 hereby certifies that GAS PIPELINE FROM OBIANU/OBRIKOM GAS PLANT TO INDRAMAYA ELEME FERTILIZERS & CHEM PLANT. Project as proposed may proceed subject to above comments.

Date of Issue: 18th APRIL, 2013.  
 Sign: *Musa*  
 Permanent Secretary

Date: 06-02-15  
 Expiry Date: 17th APRIL, 2018

NOTE: Federal Ministry of Environment shall not be liable to any claim(s) under this permit.







FMEnv/EAu/ 000078

FEDERAL MINISTRY OF ENVIRONMENT  
ENVIRONMENTAL AUDIT (EA) STATEMENT & CERTIFICATE

1. Facility /Project Identity: INDORAMA PET NIGERIA LIMITED (IPNL).
2. Facility /Project Owner: INDORAMA.
3. Facility /Project Location: RIVERS STATE.
4. Facility /Project Commencement Date: 2012.

5. **CERTIFICATION:** The Federal Ministry of Environment by the Powers conferred on it by Section 20 of 1999 Constitution of the Federal Republic of Nigeria, Environmental Impact Assessment (EIA) "Act. CAP LFN 12 of 2004, S.I.8, S.I.9 & S.I.15 hereby certifies that your Company shall continue its activities subject to the following:"

(i) The Management of IPNL shall ensure that all metal scraps are evacuated. (ii) The Management of IPNL shall ensure that safety signs are put in place within the facility. The Management of IPNL shall develop a stand-alone Environmental Management Plan (EMP) for the facility. (iv) The Management of IPNL shall carry out Environmental Compliance Monitoring (ECM) on the facility annually with the Federal Ministry of Environment. (v) The Management of IPNL shall ensure that Environmental Audit on the facility is conducted every three (3) years and report submitted to the Federal Ministry of Environment for evaluation and certification.

Date of Issue: 7th May, 2018.

Expiry Date: 6th May, 2021.

Sign: [Signature]

Seal of the Ministry

PERMANENT SECRETARY

Date: 6th June 2018

**NOTE:** Federal Ministry of Environment Shall not be liable to any claim(s) under this permit



FMEEnv/EAu/ 000077

FEDERAL MINISTRY OF ENVIRONMENT  
ENVIRONMENTAL AUDIT (EA) STATEMENT & CERTIFICATE

- 1. Facility /Project Identity: INDORAMA VENTURES PACKAGING NIG. LTD. (IVPNL)
- 2. Facility /Project Owner: INDORAMA.
- 3. Facility /Project Location: RIVERS STATE.
- 4. Facility /Project Commencement Date: 2012.

5. **CERTIFICATION:** The Federal Ministry of Environment by the Powers conferred on it by Section 20 of 1999 Constitution of the Federal Republic of Nigeria, Environmental Impact Assessment (EIA) "Act. CAP LFN 12 of 2004, S.I.8, S.I.9 & S.I.15 hereby certifies that your Company shall continue its activities subject to the following:"

(i) The Management of IVPNL Shall ensure that the drainages within the facility are regularly kept clean. (ii) The Management of IVPNL shall ensure that all waste materials are evacuated from the facility on regular basis. (iii) The management of IVPNL shall develop a contingency plan for the facility in event of emergency and such plan should be documented. (iv) The Management of IVPNL shall carry out Environmental Compliance Monitoring (ECM) on the facility annually with the Federal Ministry of Environment. (v) The Management of IVPNL shall carry out Environmental Audit on its facility every three (3) years and report submitted to Federal Ministry of Environment for evaluation and certification.

Date of Issue: 7th May, 2018.

Expiry Date: 6th May, 2021.

Sign: [Signature]  
PERMANENT SECRETARY

Seal of the Ministry

Date: 6th June 2018

**NOTE:** Federal Ministry of Environment Shall not be liable to any claim(s) under this permit