

# CORPORATE PROFILE

# **COMPANY CONTACT INFORMATION**

#### **Head Office:**

Rw 10 First Floor, Deo Gratias Plaza No. 26 Psychiatric Hospital Road Rumuigbo, Port Harcourt Tel: 08036669203, 08099305004 Email: <u>gbereogoni@gmail.com</u> <u>Info@gbereogoni.com</u> Website: www.gbereogoni.com

# Contact Persons:

#### **Mene Bless Leol Kpea**

Chief Executive Officer (CEO) Mobile: +234 (080) 36669203 Email: <u>bless.kpea@gbereogoni.com</u> Address: Rw 10 First Floor, Deo Gratias Plaza No. 26 Psychiatric Hospital Road Rumuigbo, Port Harcourt

# Dr. Evidence Ep-aabari Zorgbara(multiple Chartered)

Technical Director Mobile: +2348035435945, +2348099305004 Email: <u>e.evidence@gbereogoni.com</u> <u>evidencez.ez@gmail.com</u> Address: Rw 10 First Floor, Deo Gratias Plaza No. 26 Psychiatric Hospital Road Rumuigbo, Port Harcourt

#### **Detailed Company Profile/Documents**

#### Legal Statement

The contents of this company profile are given on trust and in the understanding that the copyright and information contained herein remain the property of **GBEREOGONI OIL & GAS LTD** and thus shall not be reproduced, photocopied, disposed of and/or utilized by any other except the company or an authorized person to whom it is addressed for no other purpose than objective assessment.

#### HISTORY AND BUSINESS OF THE COMPANY

**GBEREOGONI OIL & GAS LTD** is the product of indigenous conception between a group of Nigerian entrepreneurs with investment spanning Environmental remediation, Oil spill Clean-up Services, Engineering services, Equipment Leasing, Supply of Civil materials, Supply of oil tools, Oil block prospecting & investment, Oil & gas marketing, Geoscientific Studies, Oil, Water, Gas & Soil Testing and General Contracting. Registered in Abuja Nigeria in February 2016. It has its corporate office at 26 Psychiatric Hospital Road Rumuigbo, Port Harcourt, Nigeria.

**Mission statement**: To provide Oil & Gas and environmental services at International best practices to Nigerian Oil & Gas Industry, the Nigerian Government and the global market.

**Vision statement**: To be a company that delivers project and services using innovative technologies, locally sourced creativities, and manpower so as to becoming a major player in the oil & gas and environmental industry.

**Strategies:** To form strategic alliance and partnership with foreign and local players/stakeholders so as to harnessing abundant material and human resources and technologies in host communities, institutions and service providers nationally and internationally.

#### MANAGEMENT POLICY

#### **Introductory Statements**

- In **GBEREOGONI OIL & GAS LTD**, leadership is by example and therefore, the Management is responsible for the safe operations. Management ensures that the project is been executed in line with the HSE plan. Management also ensures that all specific including the legal requirements of the state.
- The management of **GBEREOGONI OIL & GAS LTD** is committed to timely delivery and executing of jobs in line with our client HSE best practices.
- The Management motivates and Sanctions staff for good performances and Non-conformances and ensures reduction of Risk at work site to ALARP through Compliances, Interventions, respect and reporting on unsafe Act/Condition/NM.
- To achieve goal zero in our operations, the management shall ensure that, for any reason a job is consider unsafe, such work must be stop, and review the Task/Procedure & hazards involved and apply the safest method in delivering such job.

MENE BLESS LEOL KPEA Managing Director

#### **HSE POLICY**

It is the policy of **GBEREOGONI OIL & GAS LTD** to provide a safe and healthy work environment for all contractors, sub-contractors and employees. No phase of our operations or administration is considered to be of greater importance than injury and illness prevention. Safety takes precedence over expedience or shortcuts. We believe that accidents are caused by carelessness and that every accident and every injury is avoidable. We will take every reasonable step to reduce the possibility of injury, illness or accident.

It is the responsibility of all employees to maintain a safe working environment. It is the specific responsibility of management to ensure that safety is a primary condition at all times through instrument and control. We have recognized our responsibility to manage in such a way that resources are conserved and utilized effectively.

Accordingly the policy is that **GBEREOGONI OIL & GAS LTD** will, among others:

- Give the highest priority to the health, safety and security of employees, subcontractors and members of the public in order to achieve continuous improvement in HSE performance.
- Maintain professional and competent staff that will perform their jobs in line with HSE policy, and also review and develop new HSE practices and procedures.
- Work with the host communities to promote harmonious relationships.

Ensure that HSE policies will at all times be implemented according to the relevant laws and regulations guiding the operations in the Federal Republic of Nigeria. They shall also reflect the SPDC's standards.

#### **KEY MANAGEMENT PERSONNEL**

1	HRH Mene Bless Leol Kpea	Managing Director
2	Dr. Evidence Ep-Aabari Zorgbara	Director Technical/Operations
3	Sophia Nwikpo	Head of Administration



**Mene Bless Leol Kpea (HRH)** is a traditional ruler, a business mogul and a Graduate of Chemical Engineering with affiliation to several professional bodies including NES, NSE. He has held several positions of authorities in different firms among which include: Chief Executive Officer of Luck-Leo International Ltd, CEO/MD Kpea & Brothers Enterprises, and has

handled several projects to mentions but a few, Project Manager/Business consultant to Kanny Koy Ltd. Project Manager/Consultant to Subadom Global Resources Ltd, Project Manager to Awa Engineering Company Nigeria Ltd (HYPREP remediation projects). Project coordinator on Environmental remediation to Karidav Integrated Services Ltd, and Project coordinator/team lead to JM Global Concept Ltd.

With Over 15 Years post-graduation experience, expert in conflict resolution, he is a consultant and expert in Oil spill response, Clean up and remediation, Environmental Bioremediation, Oil spill pollution consultant, Oil and gas development Consultant, Risk management in reservoir/ well Surveillance. Being trained in Shell's Oil & Gas Opportunity development centre as expert in oil spill response and environmental remediation, he has successfully executed several remediation projects in the SPDC Ogoni Restoration Project (ORP).

He is currently the Managing Director Gbereogoni oil & Gas Limited



**Dr Evidence Ep-Aabari Enoch (Multiple Chartered)** is a Graduate of Geophysic/Geology, with a Post MSc. Seismology/ Oil & Gas Development, MSc. in Exploration Geophysics, MSc. in Environmental Geophysics, and a Doctoral Fellow Dr. Chartered Inst. of Human Resources mgt. Lagos, Doctorate in Human

resources (Benin republic), Doctorate of Environment, Health and Safety, Nevada

(USA). Member of several professional bodies including; FIMC, FCIEHS(USA), FEPHM, FIPMA, FCIHRM, MNES, CPM,CEHS,CEHP(USA),CHRP, ch. HRM, CMC(int'I), IMO, CMS (London).

He is a certified management Consultant, Certified management specialist, Certified personnel manager, Certified human resources manager, certified IMO international trainer with Giolee Nautical institute, certified OHSAS Oilspill international trainer, Oscar IMO certified international trainer South Africa, with over 120 certified training in oil and gas development and oilspill, SHELL open University.

He is a Lecturer in Nigerian Open University and corporate trainer oilspill preparedness.

With over 18years Post Graduation experience in oilspill response, Clean up and remediation, Dr. Evidence E.E. is a Bioremediation expert, Oil spill pollution consultant, Oil and gas development consultant trained in Shell's oil & gas opportunity development centre as Development Geoscientist with bias to 3D seismo-structural interpretation and development Geophysics.

He is a consultant to several organizations including; Giolee global Resources Nigeria, Dekonta Czech Republic, Rolling hills USA, CCH LLC USA, Inkas Environmental Canada, and Nautical institute UK, and DS Chemicals, USA.

He is currently the Lead consultant to Giolee Global, Principal consultant Biogeophysical Limited and among all; he is the **Executive Director Technical Gbereogoni Oil & Gas Limited** 

#### **ORGANIZATIONAL CHART**



#### **TEAM OF CONSULTANTS**

**Dr.Ep-Aabari Evidence Enoch** (multiple Chartered) FCIEHS(USA)CMS (UK), FEPHM, FIPMA, FCIHRM FIMC, CMC, Cpm, CEHP,MNES, OSHA, IMO (Internationally certified Trainer), B. Tech Geology/Geophysics, M. Sc. Exploration, M.Sc. Environmental geophysics, PhD Environmental, Health and Safety(Nevada): Managing consultant – SME Geophysics application and Bioremediation.

**HRH Mene Bless Leol Kpea** B.Eng. in Chemical Engineering University of Port Harcourt: Managing Director and Lead consultant – corporate external relations.

**Engr BatomBari Lezor-** B. Tech Civil Engineering, Nigerian Society of Engineers (NSE), COREN Outcome-Based Education in Engineering Certified Evaluator, APICS/Association for Supply Chain Management (ASCM) SCOR-P, Ethics & Integrity in Procurement -United Nations Procurement Division (UNHQ) New York, USA, Diploma and Certificate: Procurement Management in the Public sector-International Training Centre of the

International Labour Organisation (ITCILO), Turin, Italy, Public Procurement Management for the Leadership of Public Procurement Regulatory Authorities, Public Procurement Management.

**Vincent Egbeja** – B.Sc. Microbiology, M.Sc. Bioremediation, IMO, OHSAS: Lead consultant, environmental governance, assurance and assessment, SME Bioremediation.

**Nlemadim Uchenna** – B.Sc Microbiology, Msc Microbiology NEBOSH, IMO 1-3, BOSIET, HUET: Lead oilspill response options, SME Oilspill Technologies and HSE, international instructor.

**Chineyem Maduekwe** – B.Sc Botany, Msc environmental Technology & Management, PhD (in view): Lead EIA, PIA, EER<sub>1</sub> Environmental audit, monitoring and biodiversity. SME – Environmental monitoring/Evolution.

**Ueyaagu, Rogers Mene** MIAIA, ASLT, B.Tech Science Lab. Tech (University of Port Harcourt), M.Sc. Environmental Technology and Management (University of Port Harcourt). Environmental Management and SME Bioremediation

**Tawa Joan Ibeh** – B.Sc Microbiology (Igbinedion University, Okada), M.Sc Coventry University, Coventry, UK: Lead consultant; Energy and Environmental Management; Assessment and analysis of contaminated land, Environmental impact assessment, hazard and critical control point; Integrated and pollution preventive control;

Impact of Oil in developing countries; Environmental audit and law; Research method; Use of environmental friendly solvent (palm oil) for the removal of PAHs in crude oil contaminated soil; Strong background on key environmental issues and method of mitigation; Advanced and excellent knowledge of ISO 14001 Environmental Management System; and Industrial Microbiology.

Uduak Ukpong (Ms) B.Sc Geology, M.Sc. Environmental Geology

# OUR PARTNERSHIP/CONSORTIUM

Following our strategy, we have carefully researched, investigated thoroughly and then formed strategic partnership/alliances with the following companies to enable us with super-added capacity/competence to provide effective cum efficient quality services needed in the industry

- 1) Rolling Hills Chem LLC
- 2) Dekonta
- 3) EA Trade Ltd
- 4) Eptombari & Bright Resources
- 5) Geozee Associates
- 6) Kpea & Brothers Enterprise
- 7) Luck-Leo International Ltd
- 8) Tuas Global Resources Ltd
- 9) JM Global

# OUR CLIENTS

- 1. Shell Petroleum Development Company
- 2. HYPREP
- 3. Napims
- 4. Niger Delta Ministry/NNDC
- 5. Chevron Nigeria Limited
- 6. Nigerian National Petroleum Corporation
- 7. Kanny Koy Limited
- 8. Awa Engineering Nigeria Limited
- 9. Giolee Global Resources
- 10. Anasami Construction Nig. Ltd
- 11. Jahcon International Ltd

#### **OUR SERVICES**

**GBEREOGONI OIL & GAS LTD** offers comprehensive and high-quality Oil Spill Response and Remediation consultancy Services with superadded with Health Safety & Environmental support services. The details of the services presently include the following:

- Training, consultancy and manpower development
- Supply of Oil Spill Response Equipment
- Clean up of Oil Spill impacted sites
- Environmental process design
- Bio-Remediation and environmental engineering
- Mangrove Nursery
- Environmental Restoration (Re-Mangroving)
- Environmental assurance, governance and monitoring
- Provision of Waste Management Services
- Environmental assessment and tier2 assurance and governance
- Sampling, analysis and laboratory services
- General Waste Stream Treatment/Disposal
- Environmental Impact Assessments
- Environmental waste management
- Pipeline / Facility Surveillance Services
- Supply of other oilfield equipment and services
- Supply of House Boat, Tug Boat and Personnel Carrier Boat.
- Supply of oil tools, bolt and nuts, valves, metal bearings and seals.
- Cost and planning consultant
- Manpower supply (temporary staff hiring technical and administration)
- Procurements
- Engineering services
- Borehole Drilling and Installation
- Pipe fitting, welding/Pipeline maintenance services
- Pipeline flushing, external and internal inspection
- Pigging services.
- > Non-Detective testing (NDT)/ NDE Services

#### BIOREMEDIATION

**GBEREOGONI OIL & GAS LTD** innovated and uses the most advanced and effective technology in bioremediation of recalcitrant hydrocarbon compounds. Our bioremediation processes involves:

1. **Bio-stimulation**. This process conditions the impacted site to stimulate the multiplication and the growth of naturally occurring microbes that use the hydrocarbon compounds as food and dies once the pollutants have been eliminated.

2. **Bio-augmentation**. This involves the pre-selection, training and augmenting with non-pathogenic certain microbe harvested from the same environment as impacted site to eat hydrocarbon. We integrate this process to biostimulation to ensure that the proper degraders are present to perform the rapid breakdown of target contaminant.

#### **IMPACT ASSESSMENT/STUDY**

We undertake the services to completely assess environmental impacts using geomatic survey as well as receptors characterization through: impact areas delineation, coordinates and elevations, Biodiversity receptor and Ecosystem sensitivity, lateral and vertical soil delineation, soil and groundwater description and characterization, sub-sectional areas and composite sampling, risk characterization/quantization and prioritization, Biochemical analysis and documentation

#### **ENVIRONMENTAL RESTORATION**

**GBEREOGONI OIL & GAS LTD** also specializes in environmental restoration of remediated site especially in the swamp via a robust process of mangrove nursery and replanting.

#### **OIL SPILL RESPONSE**



Oil Spill Recovery and Clean up



Recovery of Free phase crude oil

# **TRAINING & INDUCTIONS**



Training and presentation on Oil spill response



Skimmer Deployment Training



Training and induction of workers

#### ASSESSMENT AND MONITORING BOREHOLE





# NUTRIENT AMENDMENT: Petroleum Remediation Product (PRP)

Gbereogoni Oil & Gas Ltd is the sole producer and distributor of the highly petroleum bioremediant (PRP). This product has a very high efficacy and has been used in many HYPREP remediation site in Ogoniland and beyond.



Product (PRP) and Technology Defence on Remediation Option at Abuja NOSDRA Headquarter





Bioremediation Product (PRP) and Technology Defense at HYPREP Office Port Harcourt- July, 2017



PRP in concentrated and diluted forms

#### WASTE MANAGEMENT

At Gbereogoni Oil & Gas Ltd, we undertake the services of waste management including: Solid waste and Liquid waste (recovered crude oil from spilled areas),



Solid waste management



Waste management of Recovered Crude

# ENVIRONMENTAL RESTORATION-REMANGROVING

Gbereogoni Oil and Gas Limited specializes in environmental restoration involving

- Mangrove replanting and restoration
- ➢ Re-vegetation
- ➢ Reforestation
- ➤ Conservation of nature



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Mangrove replanting

#### **EQUIPMENT LEASING**

We specializes in the leasing of heavy duty equipment ranging from Excavators, swam buggies, Payloaders, Dozer tractors, Tract loaders, Graders, Lowbed, Compactors, vacuum trucks and pumps, diesel pumps, high pressure spray pumps etc.



#### PREVIOUS WORK EXECUTED BY GBEREOGONI OIL & GAS LIMITED

#### HYPREP Remediation Services Executed By Gbereogoni Oil & Gas Limited

Gbereogoni Oil & Gas Ltd has successfully executed the remediation of four (4) impacted sites under the Hydrocarbon Pollution Remediation Project (HYPREP). These include:

- 1. Consultancy services for the Remediation of Hydrocarbon impacted site; HYPREP LOT 08 Alode, Eleme LGA, Rivers State
- Consultancy Services and Supply of PRP nutrient amendment for the Remediation of Hydrocarbon impacted site; HYPREP LOT 03 Alode, Eleme LGA, Rivers State
- 3. Remediation of Hydrocarbon Impacted Site: SPDC Well 04 (LOT 42), Korokoro, Tai LGA, Rivers State.
- 4. Remediation of Hydrocarbon Impacted Site: SPDC New Elelenwo Manifold (LOT 56), Akpajo, Eleme LGA, Rivers State.
- 5. Remediation of Hydrocarbon Impacted Site: SPDC Pipeline B-Dere/Gio (LOT 025), Gokana/Tai LGAs, Rivers State.
- Remediation of Hydrocarbon Impacted Site: SPDC 24"/28" Bomu-Bonny TNP (LOT 011), Debon-Bodo/Mogho Gokana LGA, Rivers State.

# Remediation of Hydrocarbon Impacted Site: SPDC Well 04 (LOT 42), Korokoro, Tai LGA, Rivers State.

#### Summary

Gbereogoni Oil & Gas Limited is an indigenous company specializing in environmental restoration as part of it broader scope and was engaged by the Federal Ministry of Environment of Nigeria through the Hydrocarbon Pollution Remediation Project (HYPREP) to undertake the Environmental remediation of impacted site at Korokoro Well 004, (HYPREP LOT 042) in Tai Local Government Area in Rivers State. The site was procured through a tender bidding process in line with the public procurement Act of 2007, after which the Lot was awarded for remediation process. Lot 042 is part of the clusters of impacted area assessed by the United Nations Environment Programme (UNEP) in 2007 with identification number 008-009, and was further delineated by HYPREP with Geo-reference coordinates – Easting: 312339; Northing: 523976 (WGS 84, Zone 32N, UTM.

The delineated area of impact as assessed remediation by HYPREP covers a total of 1,199.00m<sup>2</sup> with a volume of 8,700m<sup>3</sup> of soil earmarked for excavation. After obtaining the "Freedom To Operated" (FTO) and all compensation fully paid, a total of twenty six community workers (20 labour support, 4 local security guards, site nurse and a community Representative) was submitted to the company and were duly trained before commencement of work.

This report covers all activities from site acquisition to landscaping of remediated area including installation of remediation groundwater defensive monitoring boreholes. With an initial maximum soil TPH value from UNEP (4,030mg/kg), HYPREP (4,470mg/kg), a baseline study was conducted by Gbereogoni Oil & Gas Limited with a maximum value of 4,325/kg before the project execution. Bioremediation was carried out using ex-situ engineered Biocell, treatment and reduction in Total Petroleum Hydrocarbon (TPH) was achieved using National Oil Spill Detection and Response Agency (NOSDRA) approved Petroleum Remediation Product (PRP) in a 50x50x1.50m<sup>3</sup> engineered Biocell through continuous tilling, homogenization accompanied by windrows with a treatment cycle of seven (7) days. A leachate sump of 2x4x1.5m<sup>3</sup> was constructed and two (2) plastic Geepee tanks of 2000l each totalling 4,000litres were installed and connected to the lowest point of the Biocell to allow gravitational drainage of effluents from the Biocell into the sump was constructed, and excavation to a maximum depth of impacted soil of 6.50mbgs was attained. A space of 50x50 (m<sup>2</sup>) was also earmarked as storage area for treated soil.

Activities on site commenced with induction of community workers on 2<sup>rd</sup> December 2020, and a total of 26,700 man hours were recorded throughout the project duration. A total of 150kg solid wastes was generated, properly sorted, stored and disposed through an accredited waste management facility. A total of 3,000L of liquid waste (emulsified crude oil) was also recovered from the excavated pits, transferred and properly stored in 3nos of high density plastic tanks before evacuation a certified waste treatment facility.

At the end of the Bioremediation process (24<sup>th</sup> of June 2021), the final soil TPH values were within the range of 23.62mg/kg – 130.73mg/kg. Having achieved this milestone, NOSDRA being the statutory regulatory body in oil spill and remediation matters was invited for close-out and certification. The outcome of their quality checks complied with the set standard and satisfactory for successful close out and certification of the site. Hence, we demobilized.



Site Clearing



Site Delineation and pegging



Medical examination and fitness test for community workers



Subsurface scanning foe metal detection



Baseline Sampling



Engineered Biocell Construction



Constructed Engineered Biocell



Excavation of Impacted area



**Dilution of PRP Nutrient amendment** 



Treatment and homogenization of impacted soil



Sampling and test of treated sample



Free phase recovery of crude oil



Transfer and storage of recovered crude oil



Backfilling of Excavated area



Landscaping of the Excavated area

Remediation of Hydrocarbon Impacted Site: SPDC New Elelenwo Manifold (LOT 56), Akpajo, Eleme LGA, Rivers State.

# Remediation of Hydrocarbon Impacted Site: SPDC Pipeline B-Dere/Gio (LOT 025), Gokana/Tai LGAs, Rivers State.

#### Summary

Gbereogoni Oil & Gas Ltd, an indigenous company specializing in environmental services as part of it broader scope and was engaged by the Federal Ministry of Environment of Nigeria through the Hydrocarbon Pollution Remediation Project (HYPREP) to undertake the Environmental remediation of impacted site along SPDC pipeline (28" Rumuekpe to Bonu Trunkline), (HYPREP LOT 025) in B-Dere/Gio, Gokana Local Government Area in Rivers State. The site was procured through a tender bidding process in line with the public procurement Act of 2007, after which the Lot was awarded for remediation process. The site form part of the clusters of impacted area assessed by the United Nations Environment Programme (UNEP) in 2007 with identification number 010-004, and was further delineated by HYPREP with Geo-reference coordinates – Easting: 305822; Northing: 519474 (WGS 84, Zone 32N, UTM.

The delineated area of impact as assessed remediation by HYPREP covers a total of 4,199.00m<sup>2</sup> with a volume of 17,400m<sup>3</sup> of soil earmarked for excavation. After obtaining the "Freedom To Operated" (FTO) and all compensation fully paid, a total of twenty six community workers (20 labour support, 5 local security guards, site nurse and a community Representative) was submitted to the company and were duly trained on basic work processes, Remediation and HSE before commencement of work.

This report covers all activities from site acquisition to landscaping of remediated area. With an initial maximum soil TPH value for the various sections A=6,300mg/kg, B=6,078mg/kg and C=6,506mg/kg from HYPREP, a baseline study was conducted by Gbereogoni Oil & Gas Limited with a maximum value of 17,834mg/kg for Section C. Bioremediation of impacted of soil was executed using ex-*situ* engineered Biocell (50mx50mx1.5m dimension), treatment and reduction in Total Petroleum Hydrocarbon (TPH) was achieved using National Oil Spill Detection and Response Agency (NOSDRA) approved Petroleum Remediation Product (PRP) from our Partner in a mixture ratio of 1:20, continuous tilling, Biostimulation and homogenization of impacted soil accompanied by windrows for further aeration during a treatment cycle of seven (7) days. A leachate sump of 2.5x2.5x3m<sup>3</sup> was constructed and a 4000L capacity Geepee tanks installed and connected to the lowest point of the Biocell to allow gravitational drainage of effluents from the Biocell into the sump.

Activities on site commenced after mobilization on the 27<sup>th</sup> day of February 2021, all community support labours and local security guards were duly certified as medically fit for the process. The job was executed within a 217 days period and a total of 64,640 man-hours were recorded, a total of 23,000m<sup>3</sup> Of impacted soil was remediated, 1tons of Carbonized waste was recovered and managed, 200kg of solid waste generated and properly managed and 500L of free-phase crude was recovered and managed (see attached waste consignment note), and disposed through an accredited waste management facility.

At the end of the Bioremediation process (17<sup>th</sup> of June 2022), the final soil TPH values were within the range of 48.37mg/kg – 325mg/kg. Having achieved this milestone, NOSDRA being the statutory regulatory body in oil spill and remediation matters was invited for close-out and certification. The outcome of their quality

checks complied with the set standard and satisfactory for successful close out and certification of the site. Hence, we demobilized.



Site Clearing and grading



**Baseline Sampling** 



Stabilizing the floor after grading and sloping prior to the installation of HDPE Liner



Leveling the Biocell with 0.2m sharp sand layer for leachate permeability



Deep excavation of impacted soil



Dilution of PRP nutrient and application pump



Treatment of impacted soil



Recovery of Free phase crude oil from excavated trench


Backfilling of Section A and B with treated soil



Landscaping of Backfilled area



Decommissioning of the Biocell

# Remediation of Hydrocarbon Impacted Site: SPDC 24"/28" Bomu-Bonny TNP (LOT 011), Debon-Bodo/Mogho Gokana LGA, Rivers State.

### Summary

Gbereogoni Oil & Gas Limited is an indigenous company specializing in environmental restoration as part of it broader scope and was engaged by the Federal Ministry of Environment of Nigeria through the Hydrocarbon Pollution Remediation Project (HYPREP) to undertake the Environmental remediation of impacted site at Debon – Bodo/Mogho, (HYPREP LOT 011) in Gokana Local Government Area in Rivers State. The site was procured through a tender bidding process in line with the public procurement Act of 2007, after which the Lot was awarded for remediation process. Lot 011 is part of the clusters of impacted area assessed by the United Nations Environment Programme (UNEP) in 2007 with identification number 019-020, and was further delineated by HYPREP with Georeference coordinates – Easting: 309025; Northing: 513006 (WGS 84, Zone 32N, UTM.

The delineated area of impact as assessed remediation by HYPREP covers a total of 5,116.00m<sup>2</sup> with a volume of 25,580.00m<sup>3</sup> of soil earmarked for excavation. After obtaining the "Freedom To Operated" (FTO) and all compensation fully paid, a total of twenty six community workers (20 labour support, 4 local security guards, site nurse and a community Representative) was submitted to the company and were duly trained before commencement of work.

This report covers all activities from site acquisition to landscaping of remediated area including installation of remediation groundwater defensive monitoring boreholes. With an initial maximum soil TPH value from UNEP (11,500.00mg/kg), HYPREP (2,568.00mg/kg), a baseline study was conducted by Gbereogoni Oil & Gas Limited with a maximum value of 4,325/kg before the project execution. Bioremediation was carried out using ex-*situ* engineered Biocell, treatment and reduction in Total Petroleum Hydrocarbon (TPH) was achieved using National Oil Spill Detection and Response Agency (NOSDRA) approved Petroleum Remediation Product (PRP) in a 50x50x1.50m<sup>3</sup> engineered Biocell through continuous tilling, homogenization accompanied by windrows with a treatment cycle of seven (7) days. A leachate sump of was constructed and plastic Geepee tank of 5000litres was installed and connected to the lowest point of the Biocell to allow gravitational drainage of effluents from the Biocell into the sump was constructed, and excavation to a maximum depth of impacted soil of 6.50mbgs was attained. A space of 50x50 (m<sup>2</sup>) was also earmarked as storage area for treated soil.

Activities on site commenced with induction of community workers in 2019, and a total of 26,700 man hours were recorded throughout the project duration. A total of 150kg solid wastes was generated, properly sorted, stored and disposed through an accredited waste management facility. A total of 3,000L of liquid waste

(emulsified crude oil) was also recovered from the excavated pits, transferred and properly stored in 3nos of high density plastic tanks before evacuation a certified waste treatment facility.

At the end of the Bioremediation process (15<sup>th</sup> of April 2022), the final soil TPH values were within the range of 23.62mg/kg – 130.73mg/kg. Having achieved this milestone, NOSDRA being the statutory regulatory body in oil spill and remediation matters was invited for close-out and certification. The outcome of their quality checks complied with the set standard and satisfactory for successful close out and certification of the site. Hence, we demobilized.



Excavation of impacted area



Containment and recovery of free phase crude Plate 3.44: Excavated trench with free phase crude oil



Transfer and treatment of excavated soil



4.63906333333333333 Local 11:29:25 AM GMT 10:29:25 AM Longitude 7.277931666666666° Altitude 27.8 meters Sunday, 27-03-2022

Backfilling of treated soil



Landscaping of treated area



Sampling of treated soil



Installation of monitoring boreholes at the completion of remediation

### SPDC Remediation Services Executed By Gbereogoni Oil & Gas Limited

Gbereogoni Oil & Gas Limited has successfully executed several with the Shell Petroleum Development Company under the Ogoni Restoration Project (ORP), these includes:

- 1. Provision of remediation services along 28" Nkpoku-Bomu Pipeline at B-Dere in Gokana LGA, Rivers State.
- 2. Provision of remediation services along 24" Nkpoku-Bomu Pipeline at Kpite in Tai LGA, Rivers State.
- 3. Provision of remediation services along 24" Nkpoku-Bomu TL at Nonwa in Tai LGA, Rivers State.
- 4. Provision of remediation services along 28" Nkpoku-Bomu Pipeline at Eteo in Eleme LGA, Rivers State.

# Provision of remediation services along 28" Nkpoku-Bomu Pipeline at B-Dere in Gokana LGA, Rivers State

### Summary

On 30<sup>th</sup> of March 2019 along the 28" Nkpoku-Bomu Pipleline (PL) at B-Dere a spill with Fountain Incident Number 2019\_2310600 occurred due to a sabotage/crude theft incident releasing 0.8 barrel of crude oil over an area of 0.0025ha in B.Dere community, Gokana Local Government Area. The spill incident point is located at geographic coordinates N4.66809, E7.27756 (WGS 84 system).

Results from phase 1 geo-environmental assessment revealed exceedance of Nigeria Upstream Regulatory Commission/ Environmental Guidelines and Standards for Petroleum Industry in Nigeria (NURC/EGASPIN) intervention value for TPH in soil (5000mg/kg). Furthermore, visual evidence of hydrocarbon impact was observed on soil surface which prompted the need for remediation work at the site. GBEREOGONI OIL & GAS LIMITED was assigned to provide services for the remediation of the impacted area using bioremediation technique. Mobilization to site occurred on 13<sup>th</sup> of January 2022. The scope of work involved mechanical excavation, tilling, landfarming and treatment of excavated soil at sections "A" and "B" at depths of 1.5m and 4.0m respectively and backfilling of trenches with treated soil. In addition, 7kg of absorbent pads (used for mopping of oil sheen) were evacuated. A total volume of 317.5m<sup>3</sup> of impacted soil was treated over an area of 95m<sup>2</sup>. The project was completed on the 24<sup>th</sup> February 2022.



Induction Along 28" Nkpoku-Bomu Pipeline At B.Dere



Mechanical clearing of impacted area



Constructed of Windrows and treatment of impacted soil



Completion Back Filling OF Trenches

# Provision of remediation services along 24" Nkpoku-Bomu Pipeline at Kpite in Tai LGA, Rivers State

### Summary

On 13<sup>th</sup> November 2019 along 24" Nkpoku-Bomu Pipeline (PL) at Kpite with Fountain Incident Number 2019\_2505132, a spill of 13 barrels occurred due to crude oil theft covering an area of 0.04 Ha. Spill incident is located at geographic coordinates 4.71728N, 7.28097E (WGS 84 system).

Results from the Phase 1 investigation indicated TPH exceedances above Nigerian Upstream Petroleum Regulatory Commission/Environmental Guidelines and Standards for Petroleum Industry in Nigeria (NUPRC/EGASPIN) intervention value for TPH in soil (5000mg/kg). Visual hydrocarbon impact (oil-stained soil) was observed on the surface. Remedial action was recommended to address areas with exceedance and aesthetics concerns at site.

Gbereogoni Oil & Gas Limited was assigned to provide services for the remediation of the impacted area using bioremediation techniques. Mobilization occurred on 27<sup>th</sup> January 2022. The work scope included mechanical tilling/excavation of impacted soil at depths of 0.5m, 1.0m and 3.5m respectively, land farming of excavated soil and backfilling of open trenches with treated soil. A total volume of 4,915.5m<sup>3</sup> of impacted soil was treated over an area of 2,760.7m<sup>2</sup>. A total of 444kg of wastes made up of 234kg of pipeline coatings, 150kg of absorbent pads and booms and 60kg of garbage (APPENDIX C) were collected and taken to MOSAB MARINE AND ENGINEERING SERVICES LIMITED treatment facility for treatment. On 24<sup>th</sup> March 2022 the project was completed, and workers and tools were demobilized from site.



Picture showing site before commencement of remediation activity



Plate 2: Site Induction /Recognizance



4: Site Clearing



Site Delineation



## Excavation of Extension Area



Treatment and Land farming



Construction of Windrows



Backfilling of excavated area



Landscaping of excavated site



Site after remediation

## Provision of remediation services along 24" Nkpoku-Bomu TL at Nonwa in Tai LGA, Rivers State

#### Summary

On the 19<sup>th</sup> February 2019 along the 24" Nkpoku-Bomu TL at Nonwa with Fountain Incident Number 2019\_2270440, a spill of 0.5 barrels occurred due to crude oil theft covering an area of 0.0027Ha. within the SPDC Right of Way (RoW). About 11 meters away another spill occurred on the 12<sup>th</sup> of November 2019 also along 24" Nkpoku-Bomu TNP RoW at Nonwa with Fountain Incident Number 2019\_2504722. 16 barrels of oil were spilt due to a sabotage incident, over an area of 0.074Ha. The spill points are found at the following coordinates 4.7658N, 7.21902E and 4.76584N, 7.21892E (WGS 84 system) respectively, the nearest communities are Nonwa and Barayira.

Result from the phase II intrusive investigation of both spills with Total Petroleum Hydrocarbon (TPH) value ranges from 7.84mg/kg to 15,955mg/kg and does not exceed the Risk Base Screening Level (RBSL) value of 28,600mg/kg, the potential risk was therefore classified as low. To address impacted vegetation as well as degraded soil quality, remedial action was recommended.

Gbereogoni Oil & Gas Limited was awarded the contract to provide services for the remediation of the impacted soil. Mobilization to site was on the 12<sup>th</sup> September 2022. The work scope include: site clearing, mechanical tilling/homogenization of impacted soil to a depth of 0.5m, construction and breaking of windrows. The site was sectioned into 'A' and 'B', and a total volume of 1,276.5m<sup>3</sup> of impacted soil was remediated over an area of 2553m<sup>2</sup>.

All generated waste (garbage waste) was stored using appropriate waste bags and properly managed by the SPDC.

The project was completed and demobilization was done on the 27<sup>th</sup> of September 2022

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HSE induction of project team and community support labour by Shell HSE Lead



Site delineation and clearing



Clearing of delineated impacted area for remediation



Tilling, homogenization and manual breaking of soil lumps in section A



Tilling and homogenization of impacted soil in section B



Construction of windrows in section B



Manual breaking of windrow



Site after remediation

# Provision of remediation services along 28" Nkpoku-Bomu Pipeline at Eteo in Eleme LGA, Rivers State

Gbereogoni Oil & Gas is currently executing a massive remediation of hydrocabon impacted site along 28" Nkpoku-Bomu Ppipeline at Eteo in Eleme LGA in Rivers State.



Site Induction



Deep Excavation



Deep Excavation at the depth of 5m



Containment of crude oil



**Recovery process** 



Nutrient application

# SUMMARY OF REMEDIATION WORKDONE BY GBEREOGONI OIL & GAS LIMITED WITH DATE

S/N	JOB TITLE	LOCATION	VOLUME	DURATION	REMARK
1	<ul> <li>7. Consultancy services for the Remediation of Hydrocarbon impacted site; HYPREP LOT 08</li> </ul>	Alode, Eleme LGA, Rivers State	_	12 Months	completed
2	Consultancy Services and Supply of PRP nutrient amendment for the Remediation of Hydrocarbon impacted site; HYPREP LOT 03	Alode, Eleme LGA, Rivers State	-	3 Months	Completed
3	RemediationofHydrocarbonImpactedSite:SPDCWell(HYPREP LOT 42),	Korokoro, Rivers State.	8,400 m <sup>3</sup>	6 Months	Completed
4	Remediation of Hydrocarbon Impacted Site: SPDC New Elelenwo Manifold ( HYPREP LOT 56),	Akpajo, Rivers State.	9,600m <sup>3</sup>	6 Months	Completed
5	Remediation of Hydrocarbon Impacted Site: SPDC Pipeline (HYPREP LOT 025),	B-Dere/Gio, Rivers State.	17,400m <sup>3</sup>	9 Months	Completed
6	Remediation of Hydrocarbon Impacted Site: SPDC 24"/28" Bomu-Bonny TNP	Debon- Bodo/Mog ho, Rivers	25,580m <sup>3</sup>	2 Months	Completed

	(HYPREP LOT 011),	State.			
7	Provision of remediation services along 28" Nkpoku-Bomu Pipeline	B-Dere, Rivers State.	317.5m <sup>3</sup>	5 Weeks	Completed
8	Provision of remediation services along 24" Nkpoku-Bomu Pipeline	Kpite, Rivers State.	6,198m <sup>3</sup>	2 Months	Completed
9	Provision of remediation services along 24" Nkpoku-Bomu TL	Nonwa, Rivers State.	1,276.5m <sup>3</sup>	3 Weeks	Completed
10	Provision of remediation services along 28" Nkpoku-Bomu Pipeline	Eteo, Rivers State.	4,800m <sup>3</sup>	Ongoing	Ongoing

#### PROCUREMENTS

Gbereogoni Oil & Gas Ltd offers a wealth of industry knowledge and technical advice during the procurement process. Footholds in multiple locations worldwide allow Gbereogoni to accommodate requests for any size project requirements, to any international location. Intense competition in the marketplace forces organizations to continually look at new and innovative ways to meet investor expectations. Our procurement services assist our clients in addressing these requirements. The identification of non-conforming procedures and equipment and real-time, onsite correction provides our customers with a means of achieving major reductions in overall operating costs. During the preparation and qualification of equipment, many variables contribute to quality issues including personnel training, tight deadlines, limited inventory and pressure on profitability. As a result, the client may assume risks which are essentially outside their control. Provides a first in class pipeline maintenance

Furthermore, to complement our Supply Chain Management service, we use the best and latest business management software within our procurement solution, so as to be able to offer all our clients full implementation and support, focusing on their purchasing needs and requirements.

As a result of this, the level of procurement services we provide our clients will afford them the following:

- i. Reduced cost
- ii. Reduced Risk
- iii. Increased operational efficiency and timely delivery.
- iv. Unparalleled customer service
- v. Value added services

Gbereogoni has a portfolio of diversified project experiences. We have also demonstrated world's best practice in oil, gas and environmental projects utilizing innovative technology and technical expertise unparalleled in the industry.

Services such as Procurement and Supply of the following:

- Mental Bearings and Seals
- Oil spill response equipment such as Absorbent booms, Absorbent pads, skimmers, sprayer and tanks
- Waste disposal equipment
- Valves
- Pressure Gauges
- Bolts and Nuts
- Wires, Steal Chains and Accessories

### **PIPELINE MAINTAINACE**

Gbereogoni Oil & Gas Ltd provides a first in class pipeline maintenance, using our well-trained personnel, expertise and tools. We bring to bear a progressive method to pre-inspection cleaning to reduce the risk of pigs becoming stuck in the pipeline or

been blocked by debris. Gbereogoni possessed a technical ability in the area of pipeline rehabilitation and leak detection and repairs.

The pipeline maintenance includes;

- Pipeline Cleaning
- Pipeline Descaling
- Hydro Testing and Commissioning
- Pipeline Sectional Replacement, Leak Detection and Repair

Other pipeline services include Painting/Coating of pipes, De-Oiling, Dewatering and Drying, Pipe gantry's and support system and Pipeline Inspection.



Clamping Of 24" at Biara Site in Ogoni



Sectional Replacement 24" at Sime, Tai

### SURVEILLANCE SERVICES

Gbereogoni Oil & Gas Ltd provides surveillance services at the various SPDC Facilities, monitoring of all activities at SPDC Right of Way to prevent intrusion/theft of company facilities.

Our Surveillance service includes:

- Pipeline Right of Way Surveillance
- Well Head facility Surveillance
- Information Gathering
- Sea watchers

## MARINE SERVICES.

Gbereogoni Oil & Gas Ltd in partnership with its partners offers both Onshore and Offshore Marine Services in Nigeria.

Our marine services include,

- Offshore support to vessels in distress and a dedicated crew transport service. With off port limits services, we can also assist in transferring personnel, ship spares and fresh water.
- Offshore salvage for vessels that may be in distress.
- Contract charter services for offshore transport, towing and diving support.
- Dedicated ship crew transportation services.
- Launch platforms for logistics supplies to offshore rigs and mining vessels.



Gbereogoni Personnel Carrier Boat

## ENVIROMENTAL RESTORATION PROJECT SUPPLY / CONSULTANCY TO BODO CREEK.

Gbereogoni Oil & Gas limited is providing technical consultancy,marine logistics, mangrove seedling, mangrove nursery, planting,maintenance, pest control and monitoring services to over 56 contractors on the clean up and restoration project in Bodo creek.

Bodo creek estuary ws impacted by hydrocarbon, destroying over 1000Ha of mangrove swamp.So far about 400,000 seedlings have been planted with GbereOgoni supplying over 100,000.



