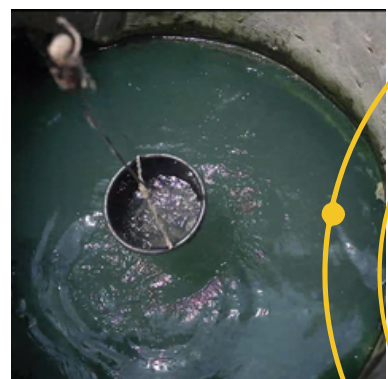


FROM EXTRACTION TO ERRUPTION

Oil, Gas, and the Unfolding Environmental and Health Crisis in Bille Kingdom



FROM

EXTRACTION TO ERRUPTION

Oil, Gas, and the Unfolding Environmental
and Health Crisis in Bille Kingdom



Copyright © 2026 Social Development Integrated Centre (Social Action)

All rights reserved

ISBN:

PUBLISHED BY:

Social Development Integrated Centre (Social Action)

Head Office:

33, Oromineke Layout, D-Line,

P.M.B. 5053

Port Harcourt, Nigeria

National Advocacy Centre:

20, Yalinga Street, House 1,

OAU Quarters,

Wuse II, Abuja, Nigeria

www.saction.org

Photographs: Social Action, Godwin Frank, Dappa Dakoru Daniel

Design and layout: RewardIQ Ltd

TABLE OF CONTENT

| | |
|--|-----|
| Abbreviation | III |
| Acknowledgement | IV |
| Executive Summary | 01 |
| Gas & Hydrocarbon Eruptions in Rivers and Lands | 04 |
| “Boiling” Wells, Contaminated Boreholes, & a Ghost Water Pump | 06 |
| Environmental Impact | 11 |
| Structural Risk: IOCs Escape, Aging Infrastructure and Governance Breakdown in OML18 | 17 |
| Response Status, Regulatory Engagement, & Governance Concerns | 22 |
| Urgent Recommendations | 26 |
| References | 27 |

ABBREVIATION

AGIP – Nigerian Agip Oil Company
BSOEC – Bayelsa State Oil and Environmental Commission
CO₂ – Carbon Dioxide
CPS – Crown Prosecution Service (United Kingdom)
EPA – United States Environmental Protection Agency
H₂S – Hydrogen Sulfide
IDLH – Immediately Dangerous to Life or Health
IOC – International Oil Company
JOA – Joint Operating Agreement
LEL – Lower Explosive Limit
NAOC – Nigerian Agip Oil Company
NEITI – Nigerian Extractive Industries Transparency Initiative
NESREA – National Environmental Standards and Regulations Enforcement Agency
NIOSH – National Institute for Occupational Safety and Health (USA)
NDDC – Niger Delta Development Commission
NNPC Ltd. – Nigerian National Petroleum Company Limited
NOSDRA – National Oil Spill Detection and Response Agency
NUPRC – Nigerian Upstream Petroleum Regulatory Commission
OML – Oil Mining Lease
OSHA – Occupational Safety and Health Administration (USA)
PEL – Permissible Exposure Limit
PM_{2.5} – Particulate Matter (≤ 2.5 micrometres)
PM₁₀ – Particulate Matter (≤ 10 micrometres)
REL – Recommended Exposure Limit
SPDC – Shell Petroleum Development Company
UNEP – United Nations Environment Programme
VOC – Volatile Organic Compounds
WHO – World Health Organization

ACKNOWLEDGEMENT

This report was prepared by Peter Mazzi and Prince Edegbuo.

The Social Development Integrated Centre (Social Action) gratefully acknowledges the support of the Polluter Pays Project for its Community Advocacy Centres and for advancing efforts to promote accountability in resource extraction in Nigeria.

What happens when
international oil
companies sell off badly
managed, dilapidated
and toxic assets in the
Niger Delta?



EXECUTIVE SUMMARY

A subterranean gas eruption is turning a riverine community into an escalating environmental and public health emergency

Bille, a riverine community in the Degema Local Government Area of Rivers State, has been a decades-long focal point of oil and gas pollution. The community is experiencing a dangerous, escalating environmental and public health emergency driven by a widespread subterranean gas eruption. This crisis reflects the deepening environmental breakdown in the Niger Delta oilfields, particularly following the sale of aging and poorly maintained assets by international oil companies.

The current crisis began in November 2025, when residents observed intense bubbling in the surrounding rivers, accompanied by the release of pungent, hydrocarbon-like gases throughout the community. Multiple sites began emitting foul-smelling gases, while water wells bubbled and boreholes discharged water under pressure from underground.

The air quickly became saturated with toxic fumes, raising concerns about inhalation risks, water contamination, and the potential for fire or explosion.

The incident is occurring within Oil Mining Lease 18 (OML 18), an oilfield with decades-old infrastructure originally developed by Shell Petroleum Development Company and now

operated by NNPC Eighteen Operating Limited, a subsidiary of the Nigerian National Petroleum Company Limited. Much of this infrastructure—pipelines, wells, and gas systems installed in the 1960s and 1970s—is aging, degraded, and not decommissioned. Field evidence suggests these systems may have failed, allowing hydrocarbons to migrate through subsurface pathways and surface unpredictably across the community. Hydrocarbons continue to escape through rivers, wells, boreholes, and surrounding land, contaminating water sources and creating volatile conditions in a densely populated area.

All local water sources—wells, boreholes, and rivers—are now contaminated. Residents report respiratory symptoms, skin irritation, nausea, and headaches. With no safe water sources available, exposure occurs through both inhalation and contact. The evacuation of the local primary school underscores the impact on children. The environmental impacts are severe. Mangrove ecosystems are collapsing, resulting in significant biodiversity loss and declines in fishery resources. Biological indicators, including periwinkle samples, show evidence of heavy metal and hydrocarbon contamination, suggesting that these contaminants have entered the aquatic food chain

In March and April 2026, Social Action conducted field visits and engaged with community leaders, civil society actors, and officials of the National Oil Spill Detection and Response Agency (NOSDRA), amid growing concern about the scale and persistence of the crisis.

However, the government response has been fragmented and inadequate. Petroleum regulation and oilfield oversight fall under federal jurisdiction, exercised through agencies such as the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) and National Oil Spill Detection and Response Agency (NOSDRA).

NOSDRA conducted preliminary investigations in December 2026, but key findings—particularly on water and soil contamination—remain undisclosed. While NOSDRA claims that air quality is “within permissible limits,” its data made available to community members show otherwise, raising concerns about risk assessment and public safety.

Air quality data confirms the presence of methane, volatile organic compounds, and hydrogen sulfide. Methane concentrations exceeding 36% of the Lower Explosive Limit indicate significant gas accumulation, posing both toxicity risks and an immediate danger of fire or explosion.

Following community outcry, NUPRC announced in March 2026 that it would begin investigations.

In April 2026, the Rivers State Government announced an emergency relief package of ₦100 million (approximately \$70,000–\$75,000 USD) to support affected residents. While this reflects recognition of the crisis, the intervention has been limited and delayed relative to its severity. Also, the Rivers State Government’s donation, made as an act of charity, underscores the absence of a coordinated, responsible and adequately resourced response at both the federal and state levels, highlighting a broader governance failure in which fragmented authority and weak accountability have left communities exposed.

This crisis is not an isolated incident. It reflects deeper structural failures, including asset divestment, the transfer of high-risk infrastructure to under-capacitated operators, weak regulatory enforcement, and opaque ownership arrangements.

Immediate action is required, including an independent scientific investigation, urgent provision of safe water and healthcare, clear public safety measures, and a coordinated response framework. In the longer term, accountability, environmental remediation, and enforceable standards for decommissioning and asset transfer are essential.

Without decisive intervention, the situation in Bille is already a full-scale environmental and humanitarian disaster with long-term impacts.



Abandoned primary school borehole, contaminated by gas leakage from the soil



GAS AND HYDROCARBON ERRUPTION IN RIVERS AND LAND

Bille, a riverine community in the Degema Local Government Area of Rivers State, is heavily dependent on its natural environment for water, livelihoods, and transportation. Already dealing with decades of crude oil and gas pollution^[1], the community now faces a high-risk, volatile environmental condition. Across surrounding waterways, there are dozens of active bubbling points, where gas rises continuously to the surface. The “boiling water” points are very visible during high tide, a period when such activity would ordinarily be less pronounced due to increased water volume and pressure.

At low tide, the bubbling becomes far more intense. Fishers have abandoned traditional fishing routes out of fear of both contamination and fire explosions.

The situation within the community itself is even more alarming. Hand-dug wells and boreholes—central to daily life—have become active points of gas release, with water visibly “boiling” as pressurized gas forces its way to the surface. Residents described the sudden transformation of these water sources, which had functioned normally for decades, into unstable and frightening features of the landscape.

[1] Bille is among numerous communities in the Niger delta that have experienced long-term environmental degradation linked to oil and gas operations, particularly those historically associated with the Shell Petroleum Development Company (United Nations Environment Programme [UNEP], 2011). As the government of Nigeria fails to protect its citizens, these conditions have generated disputes between victim communities and oil operators, centred on negligence, delayed spill response, and inadequate compensation.

Community litigation by the Bille community is gaining global attention: a transnational litigation brought by residents of Bille and the neighbouring Ogale community against Shell in the United Kingdom. In 2015, approximately 42,500 residents of both communities filed claims alleging that oil spills had severely polluted their environment and drinking water. The case, *Okpabi v Royal Dutch Shell*, resulted in a landmark 2021 UK Supreme Court ruling that allowed the claims to proceed, holding that a parent company may owe a duty of care for environmental harm caused by its subsidiary (UK Supreme Court, 2021). This decision has become a cornerstone in transnational corporate accountability litigation.

Beyond water systems, the ground itself is no longer stable. In multiple parts of the community, there is active gas venting directly from the soil, with persistent emissions occurring in open spaces, footpaths, and residential compounds. Residents report hearing faint hissing sounds in some locations, while others describe areas where the earth appears to “breathe.”

Taken together, these observations point to an extensive and uncontrolled subsurface gas migration system beneath both the waterways and the landmass of the community. The pattern and distribution of emissions suggest this is not a localized leak but rather a widespread underground phenomenon, with hydrocarbons escaping from locations that have not yet been identified as of this report's release.





Water boreholes in Bille are leaking under intense underground gas pressure

“Boiling” Wells, Contaminated Boreholes, & a Ghost Water Pump

Water systems in Bille have been severely compromised, leaving the community without a safe, reliable source for daily use.

Community members are helpless as their wells, water boreholes, and surrounding rivers have been transformed into unstable, hazardous sites for gas release.

In one particularly alarming account, residents reported that water from a borehole ignited when exposed to a flame, confirming the presence of flammable gas in the water supply and underscoring the extreme risks now faced by the people who are living in fear.

Perhaps the most striking and unsettling evidence of underground pressure is what residents now describe as a “ghost mono pump.” This dilapidated hand pump, which had never functioned since it was installed decades ago, has suddenly come to life. Without a handle and without any manual operation, it now continuously discharges water on its own, driven entirely by pressure from beneath the ground. The water that emerges is foul-smelling and visibly polluted.

An octogenarian community resident, Mrs. Alapudiokari Horsefall, provides historical context that underscores the abnormality of the situation:

“

EVEN WHEN THEY TRIED PUMPING IT, WATER DID NOT COME OUT. IT IS ONLY RECENTLY THAT THE MONO PUMP STARTED PRODUCING WATER—BUT THE WATER IS SMELLY AND NOT DRINKABLE. WE DON'T UNDERSTAND HOW IT STARTED. ”

- MRS. ALAPUDIOKARI HORSEFALL

Even the community's main water facility, constructed by the Niger Delta Development Commission (NDDC) to provide a protected source of potable water, has been affected. Water drawn from the facility's borehole turns black within seconds of collection, indicating severe contamination and the likely infiltration of hydrocarbons into the groundwater system



The NDDC water supply plant



- Mrs. Alapudiokari Horsefall

In response, households have been forced to depend on purchased sachet or bottled water for drinking, placing an additional financial burden on already vulnerable families. However, this solution is limited to consumption alone. For bathing, washing, and other domestic uses, residents have no viable alternative and continue to rely on contaminated water sources, despite clear evidence of pollution and associated health risks

“ OIL IS INSIDE. THIS WATER BOREHOLE IS CONTAMINATED. THE WATER IS USELESS NOW— PEOPLE CANNOT USE IT.”
“THIS WATER IS NOT USED FOR BATHING OR COOKING. WHEN PEOPLE TRIED, THEY HAD REACTIONS ON THEIR BODIES. IT IS ONLY USED FOR WASHING.”
“THIS ERUPTION HAS AFFECTED ALL POTABLE WATER SOURCES IN AND AROUND BILLE TOWN. ALL THE WATER PEOPLE CONSUME IS NOW POLLUTED. THERE IS NO SAFE SOURCE OF WATER ANYMORE.”

— BARRISTER OWANEMI PEINBO



Bottle of water sourced from a borehole in the community turning from colourless to black in a matter of seconds



Contaminated water from abandoned borehole behind NDDC water supply plant



BEYOND SKIN RASHES

The use of contaminated water for bathing and washing has resulted in widespread complaints of skin rashes among Bille residents who also report burning sensations following contact with water from wells, boreholes, and other local sources.

In the absence of any formal medical intervention or public health response, community members have turned to local coping mechanisms. One practice involves adding herbal substances to contaminated water to reduce skin irritation. While this reflects local ingenuity and resilience, it also underscores the depth of neglect and the lack of institutional support, leaving residents to experiment with improvised remedies in the face of an ongoing environmental hazard

The collapse of safe water access in Bille is not only an environmental issue but a direct and ongoing threat to public health, dignity, and basic living conditions, underscoring the urgency of immediate intervention.

Beyond visible skin conditions, residents have reported a range of additional health symptoms, including nausea, headaches, and general discomfort. These symptoms are consistent with exposure to hydrocarbon pollutants and toxic gases identified in the environment.



Alapudiokari Horsefall standing beside the “ghost” mono pump



Pollution shuts down learning—Bille pupils displaced as their school lies empty

Environmental Impact

The environmental consequences of the gas eruption in Bille are both immediate and deeply structural, unfolding across water systems, air quality, and fragile ecosystems that have already endured decades of degradation from oil and gas operations in the Niger Delta (United Nations Environment Programme [UNEP], 2011; Bayelsa State Oil and Environmental Commission [BSOEC], 2023).

The environmental contamination is not confined to water alone.

The entire community is permeated by the persistent smell of hydrocarbons, a constant and inescapable presence that hangs in the air, seeps into homes, and defines everyday life.

The intensity of the fumes has led to the evacuation of the local primary school, as the

surrounding environment—including the school’s water source—became unsafe for children. This disruption highlights how environmental degradation is directly reshaping social and educational life in the community.



A well that has been a source of life to the community for 83 years is now a potential source of sicknesses and death

✓ IMPACT ON EDUCATION

Elvis Dabere, Head Teacher of State School 1 in Bile—an institution established in 1939—describes a deeply troubling development that has directly disrupted education and placed children at risk.



According to him, after the crisis started late in 2025, the situation quickly escalated, prompting the school and community to alert authorities.

“We experienced gas emission within the school premises. We contacted the authorities, and when they came with community leaders and other personnel, they carried out checks and confirmed that it was gas.”

Following assessments, officials reportedly concluded that the environment was unsafe—particularly for children:

“They found that the gas is not conducive for us to remain in that environment because it is harmful to our system. Being there with children is not good for them.”

As a result, the school was forced to suspend operations at its original site. Students and staff were relocated to an alternative facility, though the conditions remain far from ideal

“THEY ASKED US TO LEAVE THE PLACE FOR NOW AND MOVE TO ANOTHER LOCATION. THERE IS A SCHOOL—IT IS NOT REALLY CONDUCTIVE, BUT IT IS MANAGEABLE.”
—ELVIS DABERE



Evidence of burnt grasses in the school compound ignited by the gas under scorching heat condition

This displacement highlights the broader human cost of the environmental crisis: the disruption of education, the exposure of children to health risks, and the absence of timely, effective intervention.

Despite the gravity of the situation, the response remains temporary and uncertain. The school community continues to wait for a lasting solution:

“We are hoping that in time, either the government or scientific bodies will come to our aid.”



DESTROYED MANGROVES

At the ecological level, the damage is both visible and accelerating. Large swathes of mangrove vegetation have been destroyed, their roots exposed to toxic conditions and their role as natural buffers against coastal erosion and biodiversity loss severely weakened. These mangroves are not only ecological assets but also critical to local livelihoods, supporting fishing and protecting shorelines.



“ THIS PLACE WAS FILLED UP WITH MANGROVE. BEFORE NOW IF YOU COME TO THIS PLACE YOU SEE A LOT OF OYSTERS, CRABS, A LOT OF AQUATIC ACTIVITIES DO TAKE PLACE HERE BUT TODAY'S AS WE SPEAK NOW THE PLACE IS ALMOST STERILE BECAUSE OF THE ENVIRONMENTAL POLLUTION.”

- COMMUNITY MEMBER



hydrocarbon eruption has devastated mangroves

Periwinkles, which dwell in the bottom of the mangroves, are a source of nutrition and income for community members, and also serve as bioindicators. Now, periwinkles harvested by community members show signs of severe corrosion. Their condition reflects the toxicity of their environment. The deformities and changes observed strongly suggest:

- Heavy metal contamination
- Hydrocarbon pollution
- Widespread ecological toxicity affecting the food chain

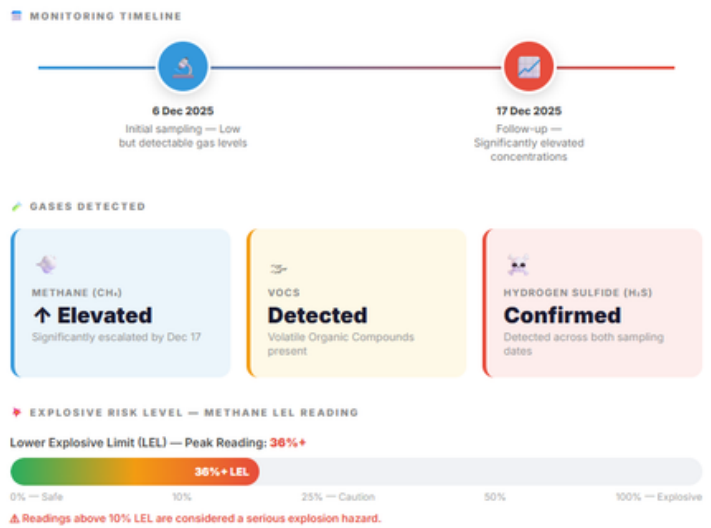
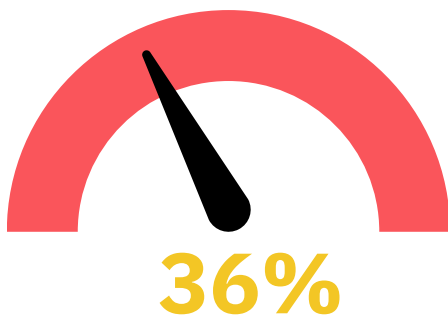
✓ AIR QUALITY AND EXPOSURE

Air quality in Bille has deteriorated to a level that poses serious, ongoing risks to human health. Available air quality data from NOSDRA in December 2025 provides critical insight into the nature and severity of this exposure. NOSDRA's laboratory results confirm the presence of methane, volatile organic compounds (VOCs), and hydrogen sulfide (H₂S) in the ambient air. Notably, NOSDRA's follow-up measurements recorded methane concentrations



Periwinkle shells not affected by the contaminated water vs those affected

concentrations exceeding 36% of the Lower Explosive Limit (LEL)^[2]—a level that indicates significant gas accumulation and immediate risks of fire and explosion, in addition to health concerns.



NATIONAL OIL SPILL DETECTION AND RESPONSE AGENCY (NOSDRA)

REFERENCE LABORATORY

AIR QUALITY RESULT SHEET

Date: 06/12/2025

Location: Bille, Bille Kingdom

| Label | Time | CO ₂ (ppm) | NO ₂ (ppm) | SO ₂ (ppm) | CO (ppm) | CH ₄ (%LEL) | VOC (ppm) | H ₂ S* (ppm) | Relative Humidity (%) | Temperature (°C) | PM _{2.5} (µg/m ³) | PM ₁₀ ** (µg/m ³) | SPM (µg/m ³) |
|-------|-------|-----------------------|-----------------------|-----------------------|----------|------------------------|-----------|-------------------------|-----------------------|------------------|--|--|--------------------------|
| GS1 | 12:49 | 337 | 0.01 | 0 | 0 | 0 | 0 | 0 | 73.6 | 31.9 | 17.6 | 38.2 | 55.8 |
| GS2 | 12:36 | 380 | 0.01 | 0 | 0 | 0 | 0 | 0.2 | 71.5 | 33.6 | 9.8 | 20.7 | 31.5 |
| GS3 | 11:50 | 344 | 0.01 | 0 | 0 | 0 | 0 | 0 | 70.7 | 33.5 | 11.9 | 23.1 | 35 |
| GS4 | 13:10 | 340 | 0.02 | 0 | 0.1 | 0 | 0 | 0.1 | 75 | 31.2 | 10.2 | 20 | 30.2 |
| GS5 | 12:06 | 335 | 0.01 | 0 | 0 | 0 | 0 | 0 | 69 | 34.3 | 10.3 | 20.2 | 30.5 |
| GS6 | 12:26 | 410 | 0.03 | 0 | 0.1 | 0.1 | 0.2 | 0.8 | 67.4 | 35 | 13.1 | 24.7 | 37.8 |
| GS7 | 12:11 | 420 | 0.03 | 0 | 0.2 | 0.1 | 0.2 | 1 | 70.2 | 33.9 | 14.5 | 25 | 39.5 |
| GS8 | 12:58 | 452 | 0.03 | 0 | 0.2 | 0.1 | 0 | 0.2 | 74.7 | 31.5 | 8.9 | 14.9 | 23.8 |
| GS9 | 13:38 | 480 | 0.04 | 0 | 0.3 | 0.3 | 0.4 | 2 | 67.7 | 34.9 | 18.5 | 39.1 | 57.6 |

[2] The Lower Explosive Limit (LEL) refers to the minimum concentration of a gas in air capable of propagating a flame. For methane, the LEL is approximately 5% by volume (50,000 ppm). Occupational and industrial safety standards treat concentrations above 10% of the LEL as hazardous, with many safety protocols requiring evacuation at or before this threshold. Readings exceeding 36% of the LEL, as recorded in Bille, indicate a highly dangerous accumulation of flammable gas with an immediate risk of explosion (U.S. Occupational Safety and Health Administration [OSHA], 2023; National Institute for Occupational Safety and Health [NIOSH], 2022).

The detection of hydrogen sulfide (H₂S) is particularly concerning, given its well-documented toxicity even at relatively low concentrations.^[3] Prolonged exposure to such gases can lead to respiratory irritation, headaches, dizziness, nausea, and, in severe cases, neurological and systemic health effects. Combined with elevated levels of other hydrocarbons, the data suggest that residents are living in an environment characterized by multiple toxic exposures, where inhalation risks are compounded by

simultaneous contact with contaminated water and surfaces.^[4]

Despite these findings, official communication has characterized air quality conditions as being “within permissible limits,”^[5] a position that appears inconsistent with the presence of flammable gas concentrations approaching explosive thresholds. This discrepancy raises serious concerns about the adequacy of risk assessment and the effectiveness of public safety advisories provided to the community.



**NATIONAL OIL SPILL DETECTION AND RESPONSE
AGENCY (NOSDRA)**
REFERENCE LABORATORY
AIR QUALITY RESULT SHEET

Date: 17/12/2025

Location: Bille, Bille Kingdom

| Label | Time | CO ₂ (ppm) | NO _x (ppm) | SO ₂ (ppm) | CO (ppm) | *CH ₄ (%LEL) | VOC (ppm) | H ₂ S* (ppm) |
|-------|-------|-----------------------|-----------------------|-----------------------|----------|-------------------------|-----------|-------------------------|
| S-7 | 12:17 | 454 | - | - | 0.09 | - | - | - |
| S-8 | 12:28 | 419 | - | - | 0.96 | - | - | - |
| S-9 | 12:36 | 401 | - | - | 0.28 | - | - | - |
| S-4 | 12:43 | 512 | - | - | 0.19 | > 36 | - | 1.23 |
| S-12 | 12:57 | 428 | - | - | 0.26 | 4.00 | - | - |
| S-16 | 13:21 | 403 | - | - | 0.19 | 15.0 | - | - |
| S-17 | 13:35 | 411 | - | - | 0.35 | 2.0 | - | - |
| S-13 | 13:51 | 396 | - | 0.06 | 0.38 | 4.0 | - | 0.06 |
| S-2 | 14:01 | 402 | - | 0.02 | 0.28 | 4.0 | - | 0.15 |
| S-13 | 14:09 | 484 | - | 0.03 | 0.28 | 4.0 | - | 0.08 |
| S-3 | 14:17 | 406 | - | 0.04 | 0.20 | 3.0 | - | 0.08 |
| S-14 | 14:25 | 385 | - | 0.07 | 0.28 | 4.0 | - | 0.12 |
| S-11 | 14:36 | 407 | - | - | 0.09 | - | - | - |
| S-10 | 15:03 | 407 | - | - | 0.15 | - | - | - |
| S-1 | 15:09 | 389 | - | 0.03 | 0.19 | 3.0 | - | 0.06 |
| S-5 | 15:14 | 401 | - | - | 0.09 | 3.0 | - | - |
| S-6 | 15:22 | 387 | 0.03 | 0.07 | 0.12 | 17.0 | - | 0.17 |

Note: LEL: Lower Explosive Limit

[3] Hydrogen sulfide is a highly toxic gas with both acute and chronic health impacts. International exposure limits include:

- WHO guideline: adverse health effects reported at concentrations as low as 0.005–0.01 ppm for odour nuisance and irritation (WHO, 2000)
- U.S. EPA reference concentration (chronic): 0.002 ppm (EPA, 2003)
- OSHA permissible exposure limit (PEL): 20 ppm (ceiling), with 50 ppm allowable for 10 minutes (OSHA, 2023)
- NIOSH recommended exposure limit (REL): 10 ppm (10-minute ceiling), with 100 ppm considered immediately dangerous to life or health (IDLH) (NIOSH, 2022)

In Nigeria, the National Environmental (Air Quality Control) Regulations (2014), issued by NESREA, adopt general ambient air quality protections aligned with WHO principles, although specific enforceable thresholds for H₂S are less clearly operationalized in practice.

[4] The presence of VOCs and hydrocarbon gases in ambient air is associated with both short-term and long-term health risks. WHO Air Quality Guidelines (2021) emphasize that there is no safe level of many air pollutants, particularly those associated with combustion and hydrocarbons. Nigerian regulations under NESREA (2014) establish limits for key pollutants (e.g., PM_{2.5}, PM₁₀, SO₂, NO₂), broadly aligned with international standards, though enforcement remains inconsistent. The NOSDRA data from Bille show particulate concentrations (PM_{2.5} and PM₁₀) that, at several sampling points, exceed WHO guideline levels, reinforcing evidence of degraded air quality and elevated health risk in the community.

[5] NOSDRA officials speaking during a meeting with Social Action and community representatives



Non-decommissioned well head. A common sight in many oil bearing communities in the Niger Delta

STRUCTURAL RISK: IOC ESCAPE, AGING INFRASTRUCTURE, AND GOVERNANCE BREAKDOWN IN OML 18

The unfolding crisis in Bille is not an isolated environmental incident but the outcome of a deeper structural problem rooted in the divestment of onshore oil assets by international oil companies (IOCs), the transfer of complex and aging infrastructure to new, ill-equipped operators, and the absence of clear, enforceable accountability frameworks.

The trajectory of Oil Mining Lease 18 (OML 18) reflects this pattern. In 2015, Shell sold its interest in OML 18 to Eroton Exploration and Production Company, marking a transition from multinational to indigenous operatorship (Shell, 2015; Nigerian Extractive Industries Transparency Initiative [NEITI], 2021).

This transfer included not only equity stakes but also extensive, decades-old infrastructure—pipelines, flow stations, and gas systems—spanning a large, environmentally sensitive area. However, this transition did not resolve the underlying condition of the assets. The Nigerian government allowed the transfer and responsibility for aging, degraded, and maintenance-intensive infrastructure without ensuring that the receiving operator had the long-term capacity—technical, financial, and institutional—to manage the embedded risks.

✓ CONSEQUENCES OF SYSTEMIC NEGLECT

Dr. Clinton Rogers provides technical interpretation of the unfolding environmental crisis, linking the observed phenomena to the long-term impacts of abandoned oil and gas infrastructure in OML 18

Drawing on field observations across the affected areas, he points to systemic neglect:

He traces the issue to the historical operation of the oil block—previously under Shell and the Nigerian National Petroleum Corporation (NNPC), now under NNPC control—arguing that poorly decommissioned or neglected infrastructure may be driving the crisis

“WHAT WE ARE SEEING... I FEEL THE MOST LIKELY CAUSE IS YEARS OF ABANDONMENT OF OML 18—WELLS AND GAS LINES LEFT WITHOUT PROPER MANAGEMENT.”
—DR ROGERS

✓ SUBSURFACE PRESSURE AND ESCAPE PATHWAYS

Dr. Rogers explains that oil and gas reservoirs, once drilled, fundamentally alter underground geological systems:

“When you drill a well—whether it is successful or not—you have already created a reservoir system. You have tampered with the subsurface.”

Over time, if such wells and pipelines are not properly sealed, monitored, or decommissioned, they can become pathways for uncontrolled migration of gas and fluids: At the same time, emerging evidence points to significant financial distress at Eroton, raising serious questions about the capacity of asset holders to manage such transitions.



✓ EVIDENCE OF CONTAMINATION

He points to visible environmental indicators that suggest serious contamination:

“Imagine where clean water is turning black—you understand that something is wrong.”

Such changes strongly indicate hydrocarbon intrusion or associated contamination, potentially affecting both surface water and groundwater sources.

“ WHAT WE ARE GOING THROUGH IS A RESULT OF ESCAPE ROUTES— HYDROCARBON FINDING PATHWAYS TO ESCAPE. ”

—DR ROGERS

In March 2023, NNPC and its partners announced the removal of Eroton as operator and the appointment of NNPC Eighteen Operating Limited as the replacement. However, this transition remains contested, with Eroton maintaining that due process was not followed and pursuing legal remedies (Africa Oil & Power, 2023; Premium Times, 2023). This has created a situation in which operatorship itself is disputed, further complicating accountability.

Operators managing high-risk oil infrastructure must have the capacity to maintain assets, respond to emergencies, and undertake remediation. Where companies are under financial strain, the likelihood of deferred maintenance, inadequate monitoring, and weak emergency response increases significantly. In the context of Bille, these structural weaknesses converge.

In particular, the Bille crisis demonstrates that divestment without safeguards does not reduce environmental risk—it redistributes and obscures it.

The smell of corruption in Shell’s asset sales The unfolding disaster in Bille exposes how opaque ownership structures, political exposure, and weak regulation combine to produce environmental harm. The divestment of OML 18 by Shell and its partners transferred not just assets but also decades-old, degraded infrastructure into a network of companies

In February 2026, the High Court of England and Wales ordered the appointment of receivers over oil revenues due to Eroton, following difficulties in enforcing a multimillion-dollar judgment debt.

The court found that it was “just and convenient” to take control of revenue streams, citing challenges in securing payment through ordinary means and incomplete compliance with financial disclosure requirements (High Court of England and Wales, 2026).

This development is not merely a financial matter but has direct implications for environmental governance.



Fire eruption from a community in the Niger Delta due to neglect of infrastructure

linked to politically exposed actors, including business interests associated with former Delta State governor James Ibori, who was convicted in the United Kingdom for money laundering (UK Crown Prosecution Service, 2012; BBC News, 2012).

At the center of this network is Onajite (Jite) Okoloko, a key figure in the acquisition and development of OML 18. Okoloko was the Chairman of Eroton Exploration & Production and was instrumental in leading the consortium that acquired the asset from Shell and its partners (Shell, 2015; Africa Oil & Power, 2020). He also has significant business interests across the sector, including leadership roles in Notore Chemical Industries and Midwestern Oil & Gas, which are themselves connected to the broader OML 18 structure.

Evidence from industry reporting links Okoloko and his companies, including Eroton, to Ibori, who controls the company (Africa Oil +Gas Report, 2025).

This combination of politically exposed ownership networks, contested operatorship, and financially strained operators has created a fragmented and opaque system in which responsibility for toxic infrastructure is unclear.

The Nigerian government and a powerful and corrupt segment of the Nigerian political elite are working to help international oil companies evade responsibility for historical pollution and the cost of decommissioning ageing infrastructure while posturing support for indigenous capital.

In 2024, President Tinubu, against the recommendations of the NUPRC and the National Assembly, ignored a national outcry from citizens to approve the sale of all of Shell's remaining interest in SPDC to Renaissance.^[6] The Nigerian government had earlier approved the sale of ENI's interests in Nigerian Agip Oil Company (NAOC) to Oando PLC, a company with substantial ownership by Tinubu's family members (Reuters, 2023; Premium Times, 2023; Africa Intelligence, 2023), and linked to Ibori.

While allegations of links between oil sector assets and politically exposed individuals—including networks associated with former Delta State governor James Ibori—have been documented in investigative reporting, such relationships are often indirect and embedded within opaque corporate structures, making definitive attribution of control difficult. These dynamics underscore broader concerns about governance, transparency, and accountability in Nigeria's oil asset divestment processes

[6] In January 2024, Shell announced an agreement to sell its onshore subsidiary, SPDC, to Renaissance Africa Energy Company, a consortium of Nigerian and international firms. The deal required approval from Nigerian authorities, including the Minister of Petroleum, following regulatory review. The proposed divestment generated widespread concern among civil society groups – led by Social Action, environmental advocates, and host communities, who argued that unresolved environmental liabilities and decommissioning obligations should be addressed prior to approval.

Reports indicate that Nigeria's upstream regulator, the Nigerian Upstream Petroleum Regulatory Commission, objected to Shell's request due to failure of Renaissance to demonstrate competence to acquire the assets. Also, the National Assembly called for a halt to all IOC asset sales and started an investigation into the implications of the sale. Despite these concerns, President Tinubu personally intervened and granted approval for the transaction later in 2024 (Reuters, 2024; Premium Times, 2024; The Guardian Nigeria, 2024).



A community person leading delegations from NOSDRA to conduct 'on the spot' assessment of the gas leak situation in Bille marshes

RESPONSE STATUS, REGULATORY ENGAGEMENT, AND GOVERNANCE CONCERNS

Barrister Owanemi Deinbo, a legal practitioner and indigene of Bille Kingdom, recalls documenting the environmental degradation as early as last year. According to him, despite repeated visits by industry actors and regulatory agencies such as NOSDRA to collect environmental samples, no meaningful action or feedback has followed.

Following months of sustained community outcry and growing public attention, the Federal Government in March 2026 confirmed that it is investigating the incident, with the probe led by t

the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) in collaboration with NOSDRA

Prior to this announcement, officials from NOSDRA and the Federal Ministry of Environment had visited Bille community and collected air, water and soil samples as part of preliminary investigations. However, despite several months having passed, only an air quality report has been made available, while findings on water and soil contamination remain undisclosed.

This lack of transparency has become a central concern in the response to the crisis. In an effort to press for accountability, Social Action led a coalition of civil society organisations and media practitioners to an advocacy meeting with NOSDRA officials in Port Harcourt at the end of March 2026. The delegation raised urgent questions about the continued withholding of critical environmental data, noting that delays in disclosure not only undermine response efforts but also prolong community exposure to potentially hazardous conditions.

“REGRETABLE TILL THIS MOMENT THAT WE ARE SPEAKING, NO FORM OF SUCCOR HAS COME TO THE Gbille Kingdom and I can beat my chest to say that the authorities in our great country, the Federal Republic of Nigeria and the concerned authorities have not taken any tangible steps. We have had to welcome series of EH industry players and relevant agencies like NOSDRA and the rest of them coming to take sample, and so on and so forth. What remains is that after all the sample taking, nothing has happened and we are wondering how long does it take for them to determine the cause of this disaster that is going on.”

During the engagement, NOSDRA officials confirmed that the agency had released an air quality report and described the readings as being “within permissible limits,” while acknowledging elevated carbon dioxide levels and prevailing atmospheric conditions. However, a closer review of NOSDRA’s own laboratory data presents a starkly different picture, as shown above.



The characterization of these conditions as “within permissible limits” is therefore deeply problematic. It reflects a troubling disconnect between empirical evidence and official risk communication, raising serious questions about how environmental hazards are being interpreted, communicated, and managed.

At the same time, NOSDRA officials indicated that they were unable to comment on the status or findings of the water and soil analyses, which remain unavailable to both the

community and the public. This continued lack of disclosure has deepened distrust and limited the ability of affected residents and independent actors to fully assess the risks they face.

Representatives of the affected community and civil society have emphasized that the situation is no longer amenable to routine regulatory processes. Calls have therefore been made for the immediate declaration of a state of emergency in Bille, to enable a coordinated and adequately resourced response. Such a declaration would allow for the rapid provision of safe water, medical services, and, where necessary, temporary relocation of affected populations.

In response, NOSDRA acknowledged the urgency of the situation but indicated that consultations among relevant agencies are ongoing, and encouraged civil society organisations to support affected communities with interim relief measures. The agency also pointed to the involvement of other regulatory bodies, including NUPRC and the Federal Ministry of Environment, noting that responsibility for addressing the crisis is shared.

However, this diffusion of responsibility further highlights a systemic challenge: the absence of a clear, coordinated, and accountable response framework. Despite the presence of multiple institutions, there is no visible incident command structure, no publicly communicated emergency plan, and no immediate protective measures in place for residents.

Rivers State Government

In April 2026, the Governor of Rivers State, Siminalayi Fubara, announced an emergency relief package of ₦100 million for the Bille Kingdom following a visit to the affected community. The intervention is intended to support immediate needs, including access to potable water and basic healthcare services.

While this response reflects an acknowledgment of the situation, it is important to situate it within Nigeria's governance framework. Petroleum regulation, oilfield operations, and oversight of industry actors fall under federal jurisdiction, exercised through agencies such as NUPRC and NOSDRA.

As such, the Rivers State Government does not have direct authority over oil operations, infrastructure management, or regulatory enforcement in OML 18.

However, this limitation does not diminish the responsibility of the state to act decisively in protecting public health and coordinating emergency response measures within its territory.

In this regard, the state's intervention has been both delayed and inadequate relative to the severity of the crisis. The scale of environmental contamination, the collapse of water systems, and the documented risks of toxic exposure and explosion require a far more urgent, structured, and sustained response.

To date, there is no evidence of:

- A coordinated emergency response framework led at the state level
- Clear public safety advisories or risk communication
- Large-scale provision of safe water beyond limited relief measures
- Medical outreach commensurate with the scale of exposure
- Escalation mechanisms to compel federal agencies and operators to act

The current approach remains reactive and palliative, rather than strategic and preventive. It highlights a broader governance gap, where jurisdictional fragmentation contributes to delayed action and weak accountability, leaving affected communities exposed.

URGENT RECOMMENDATIONS

Immediate response, transparent action, and protection for affected communities

The scale, persistence, and risks associated with the Bille hydrocarbon eruption demand an immediate, coordinated, and multi-level response that addresses both the emergency conditions on the ground and the structural factors driving the crisis.

Immediate emergency response measures must be initiated without delay. This includes the deployment of independent technical experts to assess the full extent of the gas eruption and to implement rapid containment measures across both land and water systems.

Regulatory agencies, particularly NUPRC and NOSDRA, must be compelled to conduct open, inclusive, and transparent investigations, including the immediate release of all outstanding environmental data. At the same time, there is a clear need to establish a coordinated incident command structure capable of managing response efforts across institutions and ensuring accountability.

Protecting the health and welfare of the affected population must be treated as a priority. Authorities and operators must ensure the immediate provision of safe water for all domestic uses, not limited to drinking, alongside urgent medical outreach services to address skin conditions, respiratory issues, and other exposure-related health concerns. This should be complemented by the delivery of relief materials and emergency support to affected households. Given the volatility of the environment, there should also be serious consideration of temporary relocation for residents in high-risk zones, particularly where exposure levels or explosion risks are elevated.

Finally, the response must be anchored in accountability and long-term remediation. A comprehensive investigation into operations and liabilities within OML 18 is essential to determine the source and responsibility for the gas eruption.

The polluter-pays principle must be enforced to ensure that responsible parties bear the costs of cleanup, restoration, and compensation.

REFERENCES

Africa Intelligence. (2023). Oando's acquisition of Agip raises governance questions.

<https://www.africaintelligence.com>

Africa Oil & Gas Report. (2025). Jite Okoloko out of Eroton: Unlikely to roll over.

<https://africaoilgasreport.com/2025/02/petroleum-people/jite-okoloko-out-of-eroton-unlikely-to-roll-over/>

Africa Oil & Power. (2020). Eroton and indigenous operators in Nigeria's upstream sector.

<https://africaoilandpower.com>

Africa Oil & Power. (2023). NNPC replaces Eroton as operator of OML 18.

<https://africaoilandpower.com>

BBC News. (2012). Nigeria ex-governor James Ibori jailed for 13 years.

<https://www.bbc.com/news/uk-17739385>

Bayelsa State Oil and Environmental Commission. (2023). An environmental genocide: Counting the human and environmental cost of oil in Bayelsa, Nigeria.

<https://www.bayelsacommission.org>

High Court of England and Wales. (2026). Judgment on appointment of receivers in enforcement proceedings involving Eroton Exploration & Production Company.

National Environmental Standards and Regulations Enforcement Agency (NESREA). (2014).

National Environmental (Air Quality Control) Regulations.

<https://nesrea.gov.ng>

National Institute for Occupational Safety and Health (NIOSH). (2022). NIOSH pocket guide to chemical hazards.

<https://www.cdc.gov/niosh/npg>

Nigerian Extractive Industries Transparency Initiative (NEITI). (2021). Oil and gas industry audit report.

<https://neiti.gov.ng>

NNPC Limited. (2023). NNPC announces new operator for OML 18.

<https://nnpcgroup.com>

Occupational Safety and Health Administration (OSHA). (2023). Hydrogen sulfide and flammable gas exposure standards.

<https://www.osha.gov>

Premium Times. (2023). Dispute over OML 18 operatorship between NNPC and Eroton.

<https://www.premiumtimesng.com>

Premium Times. (2024). Reactions trail Shell's divestment from Nigeria.

<https://www.premiumtimesng.com>

Reuters. (2023). Italy's Eni agrees to sell Nigerian onshore unit to Oando.

<https://www.reuters.com/world/africa/italys-eni-agrees-sell-nigerian-onshore-unit-oando-2023-09-04/>

Reuters. (2024). Shell agrees to sell Nigerian onshore oil business to Renaissance.

<https://www.reuters.com/business/energy/shell-sell-nigeria-onshore-oil-business-2024-01-16/>

Shell. (2015). Shell completes sale of interest in OML 18.

<https://www.shell.com/media/news-and-media-releases/2015/shell-completes-sale-of-interest-in-oml-18.html>

The Guardian (Nigeria). (2024). Concerns over Shell asset sale and environmental liabilities.

<https://guardian.ng>

UK Crown Prosecution Service. (2012). James Ibori prosecution case summary.

<https://www.cps.gov.uk/case/james-ibori>

UK Supreme Court. (2021). Okpabi and others v Royal Dutch Shell plc and another [2021] UKSC 3.

<https://www.supremecourt.uk/cases/docs/uksc-2018-0068-judgment.pdf>

United Nations Environment Programme (UNEP). (2011). Environmental assessment of Ogoniland.

<https://www.unep.org/resources/report/environmental-assessment-ogoniland-report>

United States Environmental Protection Agency (EPA). (2003). Integrated Risk Information System (IRIS): Hydrogen sulfide.

<https://iris.epa.gov>

World Health Organization (WHO). (2000). Air quality guidelines for Europe (2nd ed.).


<https://www.euro.who.int/en/publications/abstracts/air-quality-guidelines-for-europe>


World Health Organization (WHO). (2021). WHO global air quality guidelines.

<https://www.who.int/publications/i/item/9789240034228>



 www.saction.org

 admin@saction.org

 [SocialActionNigeria](https://www.facebook.com/SocialActionNigeria)

 [SocialActionNg](https://twitter.com/SocialActionNg)

 [Social.Action.SDIC](https://www.instagram.com/Social.Action.SDIC)