

## **SITUATING AND ADDRESSING THE EMERGENCE OF SOOT (Black Carbon) IN RIVERS STATE THROUGH SUITES OF LEGAL FRAMEWORKS.**

By

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### **Abstract**

*This paper seeks to examine the origin of soot, causes, impacts and pragmatic solutions for addressing the problem posed by soot beyond our past reactionary and knell jerk approaches. The presence of soot in the atmosphere pollute the air beyond acceptable limits. The World Health Organization (WHO), has restated that air pollution constitutes the largest among all of the environmental risks. Research has shown that about 4.2 million deaths in 2016 that resulted from stroke, chronic respiratory diseases, lung cancer and heart disease annually were associated with outdoor air pollution exposure WHO further stated that 2.6 billion of the world's population who cook and heat their homes with biomass, kerosene fuels and coal are exposed to indoor air pollution. About 91% of world population live in places where air quality levels exceed WHO's limits including Nigeria and Rivers State. Poor ambient air quality has more negative impacts in middle income and developing countries such as Nigeria and this is due to poor coping mechanism. Studies have equally shown that the ambient air quality around Port Harcourt, Rivers State capital due to soot is below WHO's tolerable levels and this is a precursor to deaths associated with respiratory and pulmonary diseases in Rivers State.<sup>4</sup> There are also abundant findings to the effect that ambient air quality around Port Harcourt is 11times higher than the WHO tolerable levels. This is not only genocidal but posed significant reasons why conversation around this the subject -matter, should more pragmatic, poignant shifting away from the business as usual approach to more pragmatic solutions. So many factors and persons have been pointed as causative factors responsible for this brazen despoliation of human and his environment, yet bringing such persons to book and to account has remained elusive and mere rhetoric. This paper, through a historical broad- spectrum, socio-political and doctrinal legal methodology, examines evaluate the causes, impacts and solutions to this problem. The paper found that the challenge is hydra headed, and requires many prongs legal dynamic, stating that a suite of legal frameworks combined, promises an*

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<sup>4</sup> Okhumode H Yakubu, 'Particles Soot Pollution in PH, Rivers State Nigeria\_ Double Air Pollution Burden? Understanding and Tackling Potential Environmental Public health impacts. (2018)5, MDPI *Environment* .2

*optimal result than one single approach. The paper made recommendations and concluded on the need to reinforce government-citizens' social contract, liberalized ownership of petroleum resources and drawing from some best-established jurisdictions through class.*

**Keywords:** *Soot, Rhetoric, Action, Rivers State, Ambient Air, WHO and Petroleum*

## 1.0. Introduction

Soot has become one of the most topical and existential issues of our time in Rivers State over the past five years that almost everyone is conversant with the subject -matter. The World Health Organization (WHO)<sup>5</sup>, has restated that air pollution constitutes the largest among all of the environmental risks. Research has shown that about 4.2 million deaths in 2016 that resulted from stroke, chronic respiratory diseases, lung cancer and heart disease annually were associated with outdoor air pollution exposure.<sup>6</sup> WHO further stated that 2.6 billion of the world's population who cook and heat their homes with biomass, kerosene fuels and coal are exposed to indoor air pollution. About 91% of world population live in places where air quality levels exceed WHO's limits including Nigeria and Rivers State. The World Health Organization (WHO)<sup>7</sup>, had restated that the presence of soot in the atmosphere portend both serious health and grave environmental challenge. There are abundant studies that revealed the inverse relationship between the emergence of soot, quality of life and average life existence in Rivers State, as the prevailing soot is below WHO's tolerable levels, contributing to untimely deaths associated with respiratory and pulmonary diseases.<sup>8</sup>

For some of us that are not aware of the scientific, technical and legal meaning of soot, the fact remains that soot as black carbon is right there intrinsically with us, in our body cavities, in our living and sitting rooms, cooking utensils, floors, cars and indeed, can either be touched, felt or sensed. It is for this reason, that I will caution myself in this paper not to dwell much time in dealing with conceptual frameworks, but rather will focus on the main remit -which is to develop some legal mechanism for effective action geared towards addressing this challenge that seemed intractable. This caveat is important due to want of precious time to deal with the remit of this paper. This Paper is structured as follows: Part 1 is the introduction. Part 2 deals with the meaning of soot. Part 3 considers the impacts, while Part 4 deals with suites of measures to reduce or mitigate the impact of soot. Part 5 makes recommendations while part 6 concludes the paper.

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<sup>5</sup> WHO, 'Ambient Out door Air', < <https://www.who.int> > 22nd Sept, 2021..

<sup>6</sup> Ibid.

<sup>7</sup> WHO, 'Ambient Out door Air', < <https://www.who.int> > 22nd Sept, 2021..

<sup>8</sup> Okhumode H Yakubu, 'Particles Soot Pollution in PH, Rivers State Nigeria\_ Double Air Pollution Burden? Understanding and Tackling Potential Environmental Public health impacts. (2018)5, MDPI *Environment* .2

## 2.0. Prologue

(Excerpts from a paper I delivered in Dec, 2021 for NBA PH Branch on soot)

It was Frantz **Fanon** who opined that as homo sapiens, indeed enlightened human beings:

*'We are but nothing in this world if we are not in the first place the slave of a cause, the cause of the people and the cause of justice and liberty.*

*How can we pride ourselves as learned men and champions of the cause of the oppressed in our societies; yet we are putting up with soot without embarking on any radical legal action to curb its menace.? One Nigerian jurist had also stated that law must not sit and watch society moving; it should equally move along. Although, like it or not, law is said to be an important instrument of social engineering; many, especially those in authority, large utility companies, manufacturing companies, oil and gas industries, Federal and State Agencies and regulatory bodies, shrewd businesses) had evinced dislike for the rule of law in modern societies. But will this deter you from cherishing your learned and noble profession? Instead, it should rather spur us to take the lead in finding solution to myriad society's problems. The much-awaited awakening cannot no longer be postponed but now. Must we watch our own very life, the life of our future unborn generations to be endangered by shrewd and irresponsible corporations, business men and women of our time? I dare say that if we, as legal practitioners, do not take action today in finding solution to this ravaging soot in Rivers State, its health and environmental impacts, the consequences of our indifference or inaction might be irreversible not only in this century but another century to come. This is why the topic of this paper is apt as it portrays a push to rejig further conversation on the menace posed by soot with a view to uncovering the solution beyond business- as- usual- rather than chanting the problem which are already with us. As I deliver this paper today with the recommendations I would make, I would like to be remembered for contributing in finding some pragmatic solutions for dealing with soot in RS which impact can be compared with COVID 19 pandemic. What about you? I strongly believe that together we can build a resilient society for ourselves and our children, if we can change this present narrative, by factoring- on-board some of the recommendations made here today.*

## 3.0. What is soot?

According to World Health organization (WHO), soot is a particulate matter arising from exposure to sulfate, nitrate, ammonia, sodium chloride, black carbon, mineral dust and water. Its presence is a common indicator of air pollution. There are specific components of soot such as  $PM_{2.5}$  and  $PM_{10}$ <sup>9</sup>. Soot, sometimes called lampblack or carbon black, is a fine black or brown powder that can be slightly sticky and is a product of incomplete combustion.<sup>10</sup> In pollution terms, soot is the common term for a type of particles known as  $PM_{2.5}$ , which is less than 2.5 micrometers in diameter or smaller.<sup>11</sup> There is also  $PM_{10}$  or less than 10 Micron. Soot

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<sup>9</sup> WHO, Ambient Out Door Air pollution .<<https://www.who.int> 22sept 2021> accessed 4 /12/2021.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

is composed of a variety of chemicals and its exact composition depends strongly on what is being burned. People are exposed to soot from various sources namely exhaust fumes from petrol and diesel generators or cars, smoke from burning firewood in poorly ventilated area, smoke from smelting companies and smoke from incomplete combustion of fossil fuels<sup>12</sup>. Ambient air quality is measured by the level of exposure to PM<sub>2.5</sub> and PM<sub>10</sub> in the atmosphere. There is no threshold of exposure to particulate matter that is harmless or less injurious.<sup>13</sup> Black Carbon particles are broadly classified as coarse and fine.<sup>14</sup> Fine particles can remain air-borne for months, during which they can travel hundreds of kilometers. Coarse particles do not remain air-borne and are too heavy to be transported across urban areas.<sup>15</sup> Even the largest of the particulates are about one-tenth the diameter of a small grain of sand. Other classifications of soot are: Fuel oil soot, dry soot and protein residue<sup>16</sup> Soot is transboundary, hazardous and injurious to both health and the environment.

### 3.1. What are the Predisposing factors that Contribute to the Emergence of Soot in Rivers State.?

Many studies have identified various causes of soot in Rivers State.<sup>17</sup> The main cause of black carbon / soot in Rivers State can be classified as historical, continuing and emerging factors. Historical factors are sources from gas flare sites' emissions that have accumulated overtime in the air around Rivers States and parts of the Niger Delta. Until recently, there were not less than 123 flaring sites in the region, making Nigeria one of the highest emitters of greenhouse gases in Africa. Gas flaring produces greenhouse gases and particulate matter.<sup>18</sup> The situation has now drastically reduced due to effective monitoring by Government and voluntary actions taken by the operators. Here all the oil and gas Industries in Rivers state and Niger delta that flared gas at one point or the other are culprit to historical emission and accumulation of soot in the atmosphere. Further, Refining and Petrochemical Complex activities also emit particulate matter and are equally a precursor to the continuing emission of soot as well as large volume vehicular movements of old second hand cars that are imported from Europe into Port Harcourt, without the installation of catalytic injector. The quality of air in Nigeria's largest oil refinery (PHRC) and Petrochemical complex (EPCL) was assessed based on key priority pollutants in a study carried out.<sup>19</sup> It was indicated that the average particulate matter (solid mixed with liquids) in the air (PM<sub>10</sub>) levels at PHRC were higher than that recorded at Eleme Petrochemical

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<sup>12</sup> Geraldine Akutu, 'Health Issues to know about soot, Protective Measures' *Guardian* 27, May 2018.

<sup>13</sup> WHO (n1)

<sup>14</sup> Peter Collin, *Dictionary of Ecology and Environment* 4<sup>th</sup> Ed (Peter Collin Publishing 2005) 41 on the meaning of carbon

<sup>15</sup> *Ibid*

<sup>16</sup> Peter Fruhstorfer & Reinhard Niessner, 'identification and classification of airborne soot particles using an automated SEM/EDX' (1994) *Microchimica Acta* 113,239-250 see also <<https://www.servproalachuacountywest.com/blog/post/72151/fire-smoke-damage-restoration/did-you-know-that-there-are-different-kinds-of-soot-associated-with-fires--servpro-can-handle-them-all>> Assessed on the 3 Dec 2021.

<sup>17</sup> Peter Idabor, Director General of national Oil spill Detection and Response Agency on the causes of soot in Rivers state 208.

<sup>18</sup> TEXAS A and M the Problem with natural gas <<http://today.tamu.edu> 2020 > accessed 4 Dec2021

<sup>19</sup> G. R. Ana and Others. 'Environmental Risk Factors and Health Outcomes in Selected Communities of the Niger Delta Area'. (2009) *Nigeria Perspect. Public Heal.*, 129(4);183-191

Company.<sup>20</sup> At the Nigeria's petrochemical complex, the highest Pb and Ni levels of 0.16mg/m<sup>3</sup> and 0.05mg/m<sup>3</sup>, respectively was recorded at EPCL.<sup>21</sup> Over all, the average heavy metals concentrations were higher at PHRC.

Another source of soot is long- time crude agricultural practices of bush burning with escape of greenhouse gasses in the atmosphere.<sup>22</sup> The current and most dangerous recognizable precursors are a) Illegal artisanal refining (kpo-fire); large scale confiscating pattern by authorities of illegally refined products, b) vehicular traffic caused by second hand cars with no injectors d) Burning of tires and rubber -based materials and products. Emission from indoor activities such as cooking and heating. Bush burning produces volatile organic compounds and oxides of carbon (CO<sub>2</sub>), Sulphur (SO<sub>2</sub>) and Nitrogen (NO<sub>2</sub>) depending on the fuel composition and intensity of the flame. Particulate matter usually within the PM<sub>10</sub> size range is also produced in the course of the combustion process.<sup>23</sup> Similarly, emissions from domestic cooking stoves produces carbon monoxide CO, Carbon dioxide CO<sub>2</sub>, Sulphur dioxide SO<sub>2</sub>, nitrogen dioxide NO<sub>2</sub>, volatile organic compounds VOCs and particulate matter PM.<sup>24</sup> Soot in the form of dust mixes with liquids in the air to form particulate matter some of which can be seen other require magnifying instruments to visualize hence are very dangerous to the lungs and bio-chemistry of human and animals around Port Harcourt.

### 3.2. Impacts of Soot:

Soot has both public health concerns and environmental impacts.

- A) The heavy emission of black soot containing PM<sub>2.5</sub>, a fine particulate matter can penetrate deep into the respiratory system; into the alveoli, causing hazardous substances to enter the bloodstream. It is assumed that there is no threshold below which exposure has no effect. While there is disagreement about the direct toxicity of black carbon, this substance acts beyond doubt, as a carrier for various toxic substances; the most commonly cited being polycyclic aromatic hydrocarbons and heavy metals.
- B) It also contributes to Cardiovascular diseases and carcinogenic effects in human beings. There is disagreement about the mechanisms of cancer development. Studies have equally shown a link between exposure to fine particles and the risk of developing cancer. Among the PM<sub>2.5</sub> particles, soot from diesel engines has the worst carcinogenic

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<sup>20</sup> Bamidele Sunday Fakinle, Abiodun Paul Olalekan, Ebenezer Leke Odekanle & charity Aremu 2021 < <https://researchgate.net> > accessed 12 th, February 2022 Assessment of the Contribution of Hazardous Air Pollutants from Nigeria's Petro chemical Refineries to ambient Air Quality Part1 ; Ini Udosen Ubong, Ambient Air Quality Assessment of RSUST Campus Air basin Port Harcourt < <http://researchgate.net> > accessed 12 th feb., 2022;

<sup>21</sup> C.C. Tawari and J. F. N. Abowei 'Air Pollution in the Niger Delta Area of Nigeria', (2012) *International Journal of Fisheries and Aquatic Sciences* 1 (2):94-117, 2012. Submitted; April 18, 2012, Accessed; May 14, 2012, Published; October 20, 2012

<sup>22</sup> Inter-governmental Panel on Climate change IPCC 2007. Report on Climate Change. Agricultural land use and agricultural practices contributing to green house gases

<sup>23</sup> C. Tawari and J. Abowei. Air Pollution in the Niger Delta Area of Nigeria' (2012) *International Journal of Fisheries and Aquatic Sciences* 1 (2):94-117, 2012. Submitted; April 18, 2012, Accessed; May 14, 2012, Published; October 20, 2012

<sup>24</sup> WHO (n1).



effect as it contains a high concentration of black carbon particles which can absorb significant quantities of other compounds, such as polycyclic aromatic hydrocarbons.

C) Fine particle pollution negatively impacts the natural beauty by robbing us of color, distance, and ecstasy, and negatively harms the health of visitors and residents. Haze can also hurt tourism by discouraging visits, which causes economic damage.

D) It contributes to acid rain which in turn affect building roofs and their durations.<sup>25</sup>

E) Other health impacts include Chronic Obstructive Pulmonary Disease (COPD). It has also been established that PM exposure exacerbated asthma symptoms. Short term PM<sub>2.5</sub> exposure among children with asthma had a correlation with breathing symptoms, such as cough, gashing and tightness in chest<sup>26</sup> as well as increased medication use.<sup>27</sup> Epidemiological studies on the effect of PM on lung function demonstration that in response to PM<sub>2.5</sub> exposure, higher declines in pressured expiratory volume per second and forced vital capacity were recorded for patients with, than those without COPD.<sup>28</sup>,

F It increases high blood pressure.

G It Contributes to global warming with many irreversible changes on the atmospheric temperature, causing seasonal flooding and droughts, no wonder the seasonal rain pattern in and around Port Harcourt, are beyond prediction.

#### 4.0. Strategies and Suites of legal frameworks for dealing with the Menace of soot.

I will categories the basic strategies and mechanism for dealing with soot beyond rhetoric into two main headings namely: Short term and long -term measures. Some of these measures could be basic others are substantive measures that require careful planning and adequate legislative, technical and financial intervention measures. Below are some of the measures:

- I. Non-Governmental Organization's/Faith-based organization Advocacy (NGO) Advocacy - pushing the conversation forward. Apart from engaging in seminars, talk shops, where the cause, impacts and remedy for soot would be discussed; NGOs, whether environmental or human rights- bases, could deliberately engage some of the potential culprits- industries, government agencies to debate and possibly carry out protest to draw attention. This author found that similar protests were embarked upon in the year 2017, by some women but not sure of any positive result. However, the message had been clearly passed and signal sent that soot has a public health issue that affects everyone, including the companies and individuals that contribute to the menace.
- II. Pushing forward the idea of modular refineries, private ownership of refineries and optimizing existing skills in 'local refining business. A modular refinery can refine up to 1000, to 5000 barrel of crude per day and it is a simplified form of refinery with less investment of about \$100M to \$200M. I believe bank of Industry and Central bank of

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<sup>25</sup> WHO (n1).

<sup>26</sup> J. F. Gent and Others. 'Association of Low-level Ozone and Fine Particles with Respiratory Ssystems in Cchildren with Asthma'. (2003) *JAMA*, 290, 1859 – 1867.

<sup>27</sup> N. Rabinovitch; M. Strand and E. W. Gelfand, 'Particulate Levels are Associated with Early Asthma Worsening in Children with Persistent Disease'. (2006) *Am. J. Respir. Crit. Care Med.* 2006, 174, 1098 – 1105.

<sup>28</sup> S. Lagorio and Others Air Pollution and Lung Function aamong Ssusceptible Adult Subjects: A Panel Study'. (2006) *Environ. Health*, 5, 11

Nigeria could grant loans to any person who can show technical capacity but lack financial competence to establish modular refineries. There are abundant talents in this regard in Niger Delta and in Rivers State, waiting to be utilized. This effort would surely harness the existing potentials found in illegal refiners that contribute to the incomplete combustion of carbon. In the same way, private ownership of refineries is sure way to liberalizing the downstream petroleum sector and making the products available, affordable and accessible to Nigeria. This, when achieved, would make illegal refining schemes unattractive business. The Downstream petroleum Regulatory authority should as matter of urgency consider the need for the liberalization of ownership of refineries and funding and capacity development along this line

### III. Legislative advocacy (a) Expanding the existing legal regimes

National Environmental Standard Regulation and Enforcement Agency Act 2007 as amended in 2018, (NESRA 2018) has a clear mandate to monitor, enforce and regulate all forms of environmental pollution including air pollution and harmful waste generated by industries and business.<sup>29</sup> The punishment and penal provisions for failure to comply with air quality, public health, emission of hazardous substances acts affecting the zone and stratosphere are ably captured in NESREA Act 2018.<sup>30</sup> The Agency should rejig its enforcement apparatus to ensure that industries and facilities generating harmful and hazardous waste are not only sanctioned or but also have their licenses revoked. However the existing penal regime should be proactive and increased to serve as deterrent for polluters having capacity to pay and the exclusion of corporate bodies and inductors from serving term of imprisonment, should be reconsidered.<sup>31</sup> In the same way, Oil and Gas Content Development Act (Local Content Act 2010), through its Management Board, could monitor industries whether local and indigenous, by extracting Pollution Remediation Fund for Host communities (PRF) from them before any license could be issued to do business in Nigeria similarly same commitment for not tampering with Oil and gas facilities domiciled in communities, could be extracted from heads of various communities on behalf of their citizens as condition for accessing any benefits from the industry. This would help to reduce the emission of black carbon/soot and other greenhouse gas that contribute to public health and environmental challenges in the Port Harcourt as all stakeholders (Government, industries and communities) are committed to resolving the challenge.

### IV. PIA 2021, (b) promoting enforcements of laws and policies by relevant authorities.

The Petroleum Industry Act 2021, makes provision for the payment of decommissioning and Abandonment Fund.<sup>32</sup> The Act should also go further to make provision for prohibiting flaring of gas except in emergency bases while extracting

<sup>29</sup> NESREA ACT section 7 and 8 and all the regulations made thereunder

<sup>30</sup> Ibid Sections 920 -30 ).

<sup>31</sup> NESREA Act 2018, sections (25-30)

<sup>32</sup> I karama m Sokari & S C Dike, X-raying Decommission and Human Rights Abuse in the Oil and Gas Producing Areas of Nigeria, (2021) 5 *International Journal of energy and Environment* pp 1-9

Pollution Tax ,together with a deposit of Pollution Remediation Fund by licensees and lessees of Petroleum Prospecting License and Petroleum Mining Leases under the Act . All these could be incorporated under the proposed further amendment required in the Act as they are loosely presented under the PIA 2021. All these measures, would serve as deterrent to would- be polluters in Rivers State <sup>33</sup>.

- V. Pushing for further amendment of the Petroleum Industry Act 2021 to Liberalize the ownership of Petroleum (Oil, Gas and Petroleum products) by recognizing States, Local Government and individual ownership in addition to Federal Government, while requiring adequate payment of taxes from these subnational agencies to the Federal Government.

In addition, the PIA should liberalize the ownership of crude oil by recognizing and incorporating the right of the State where crude oil is found, the right of communities and private citizen to own, explore and prospect for himself some prescribed quantities of crude oil not in commercial quantity.<sup>34</sup> This measure, will not only curb youth restiveness in the Niger Delta oil producing States but would help in reducing the emission of soot and other greenhouse gases ; while creating employment and empowerments for the states and individuals. This suggestion is similar to what exists in the Solid Mineral Sector, through the Mineral and Mining Act 2007, where small scale miners, are granted licenses and given incentives for mining and mineral activities. The current ownership structure and provision for petroleum in the Petroleum Industry Act 2021, which vests ownership of petroleum in the government of the Federation alone to the exclusion of the other arms of Government is not only anachronistic but will continue to engender youth restiveness, from the oil and gas producing region; creating more illegal activities within the petroleum sector.<sup>35</sup> This is accentuated by the lack of transparent management of the sector by the federal government and its agents. A situation where the nation's four refineries cannot be made to operate for months and years with yearly turn around maintenance declared which siphoned huge nations fund is unimaginable. This has contributed to the emergence of illegal refineries in some parts of the country and the importation of adulterated petroleum products by the federal government into Nigeria.

- VI. Making new laws to address emerging torts (public nuisance/public wrong) a kin to *Ryland VS Fletcher (1868) UKHL 1*.

As new tort would occasion a new liability regime there is the need for the emergency of new and progressive legal regime to address these new offences and torts. This is inconsonance with the development of law in other developed jurisdictions, as law must not be static but move with the times and tide. <sup>36</sup> Soot is a new form of nuisance but could also fall within both the law of trespass, which is actionable *per se*, without proof of damages, action for negligence and nuisance. This is so because the right to the enjoyment

<sup>33</sup> Petroleum industry Act 2021, Section 228 and 297 on offences and penalties

<sup>34</sup> This is the type of ownership model in United State- a federal State such as Nigeria and things have been working well for the US between the Federal states and

<sup>35</sup> PIA Act 2021 Sections 1& 2 .

<sup>36</sup> This is in line with the historical jurisprudence of the concept of law



of residents' properties within the Port Harcourt city, has been drastically reduced and impacted by soot. Thus, organized Landlords Association can maintain action against the potential defendants, citing reduction in the demands for housing in PH due to soot; while Association of Laundry and dry cleaners, could also maintain action against culprits, citing reduction in business due to low patronage caused by soot. However, in commencing these action the old legal regime may not fit with the claim to be made and the courts need to be properly enlightened about the properly remedy to grant these claimants.

V11 Energy efficient practices by households, in transport system, in energy use generally, electricity consumption among others, will reduce the emission of carbon and other green house gasses. Efficiency in the deployment of the pollution- prone sector, will translate into reduction in production of these environmental- related sector, thereby reducing the emissions associated with the sector. A propeller production and deployment of oil and gas products would reduce the drilling of new oil fields. Similarly, an energy efficient practices by households such as purchase of energy saving bulbs, energy cooking stoves, putting off electricity when not in use, would surely save energy at household levels, and reduce over production, which contribute to emissions seen at productive and operational levels.

VIII Environmental organization such as Association of Environmental Lawyers of Nigeria (AELN) and similar Human Rights- based Associations, could sue, citing potential infringement on their rights to clean air and in the enjoyment of their properties. The rule in *Ryland Vs Fletcher* and *Res Ipsa loquitor*, could respectively be called in aid to pin the culprits liable, where there are no cogent proof of nexus between causation and damages or where such proof would be technically difficult in the court or amendment sought to incorporate strict liability regime, in the existing legal regimes, to avert proofs that sometimes difficult to secure victory in court. In this respect, the Attorney and the claimants would be confronted with so many choices and technicalities and the question that may arise is : who is the appropriate plaintiff and the defendants together with the enabling laws and procedure to maintain class actions suits. This has become germane for consideration in this subsequent part of this paper.

#### 4.1. What is a class action?

a) A class action, is a type of lawsuit where one of the parties is a group of people who are represented collectively by a member or members of that group. Another name for class action is mass action, class -action law suits, class suits or representative action<sup>37</sup>. It is representative action because a group or classes of persons represent members of the same class or group whether named or unnamed. It is however different from our brand of representative actions which is provided in Order 13 of the High Court of Rivers State but in tandem with Order 9 ( Rule 4) of the Federal High Court Civil Procedure Rules 2019; in the sense that both named and unnamed plaintiffs are bound under the class action suit unless the person opts out of the proceeding through an order of court or by notice given to the existing parties that they are opting out. It is also

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<sup>37</sup> 'Class action' <<https://www.law.cornel.edu/wex/classaction>) Wexlegal Dictionary>accessed 4 /12/21

different from the typical representative action where all the named plaintiffs' parties must be present in court.

Thus, by our Rules, class action suits can be maintained pursuant to Order 9 Rules 4 of the FHC (Civil Procedure) Rules 2019 (FHCPR). The only snag is that it is limited to trademarks, copy rights claims, patents and designs and not open to redress claim on breach of breach of human rights and environmental rights to healthy environments, caused by black carbon or soot ( see Order 9 Rule 4 (1)( FHCPR). In a class action, whether named or unnamed parties are bound in the same way but common question of law or fact may not necessarily apply as there are classes with big claims and smaller claims and all joined together in one suit. There are also classes that may be happy with injunctive reliefs, while some may go for damages or compensation order within the same class.

#### **b) Class action and Representative actions**

- i.* The major difference between class action and suit brought in representative capacity is that while in a representative capacity, authorization to sue or defend on behalf of a community must emanate from the class members and cannot be imposed on the community by anybody, not even the court, the Plaintiff in a class action can institute the suit once he recovers certification by court and the members of the class who do not want to be bound by the outcome of the class action. ***In a class action, it is sufficient for members of the class to have common issues albeit in a representative action- persons to be represented must have the exact same interest.***
- ii.* A class action requires appointment by the judge whereas a representative action does not necessarily require leave of court.
- iii.* In a class action, the appointment is required and notice given to interested persons, whereas notice of representation is not required in a representative action.
- iv.* Class members may not be identifiable and ascertainable in a class action, but interested persons are ascertainable in a representative action.
- v.* In class suits, members are only to have interest, whereas in representative actions, members must have same interest.

#### **c) Origin of Class Action in United States (procedure)**

A major revision of the Federal Rules of Civil Procedure in 1966 in US, radically transformed Rule 23, made to enable the opt –out class action as the standard option, and gave birth to the modern class action. Just as medieval group litigation bound all members of the group regardless of whether they all actually appeared in court, the modern class action binds all members of the class, except for those who choose to opt-out.

In two major 21<sup>st</sup> Century cases, the supreme Court of US ruled 5-4, against certification of class actions due to differences in each individual members circumstance first in **Wal-Mart v Dukes (2011)** and later in **Comcast Corp. v**

**Behrend (2013)** companies in the United States of America are permitted to insert the phrase “may elect to resolve any claim by individual arbitration into their consumer and employment contracts to use arbitration and prevent class action lawsuits<sup>38</sup>.

In 2017, the U.S Supreme Court issued its opinion in *Bristol – Meyer Squibo Co. V Superior Court of California* 137S.Ct.1773 (2017), holding that over Five Hundred plaintiff from other states cannot bring a consolidated mass action against the pharmaceutical giant in the state of California. This opinion may arguably render nationwide mass action and class action impossible in any single state, besides the defendant’s home state.

Class action originated in US in dealing basically with antitrust and competition law cases and is largely in use for breach of mass wrongs or public interest wrongs <sup>39</sup>. Notably, in the USA, class action (Mass action) the plaintiff seeks court approval to litigate on behalf of a group of similarly situated persons. Not every plaintiff looks for or could obtain such approval. As a procedural alternative, plaintiff’s counsel may attempt to sign up every similarly situated person that counsel can find as a client and plaintiff’s counsel can then join the claims of all these persons in one complaint, a so- called “Mass actions,” hoping to have the same efficiencies and economic leverage as if a class had been certified. Because mass action operates outside the detailed procedure laid out for class actions, they can pose special difficulties for both plaintiff defendants, and the court for instance, settlement of class actions follows a predictable path of negotiation with class counsel and representatives. There may not be a way to uniformly settle all of the many claims brought RIA a mass action. Some states permit plaintiff counsel to settle for the entire mass action, according to a majority vote, for example. Others states, such as New Jersey, require each plaintiff to approve the settlement of <sup>40</sup> plaintiff’s own individual claims.

However, other jurisdictions such as UK, Australia, India, Italy and Netherlands have incorporated class actions suits with some modifications to suit their respective jurisdictions.<sup>41</sup> The rise of class action suits in US was influenced by the emergence of civil rights movements, environmentalism and consumerisms.<sup>42</sup> Instead of each person suffering damage to bring his or her own lawsuit, the class action allows the claims of all class members whether they know they have been damaged or not to be resolved in a single proceeding through the efforts of the representative plaintiff(s) and appointed class counsel.

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<sup>38</sup> silver-Greenberg, Jessica, Gebeloff, Robert (2015-10-31) “Arbitration Everywhere, Stacking the Deck of Justice <(https://www.nytimes.com/2015/11/10/business/arbitration-everywhere-stacking-the-deck-of-justice.htm the New York Times > accessed 5<sup>th</sup> Dec 2021.

<sup>39</sup> See Revised 1966 FRCP Rule 23 US.

<sup>40</sup> (2001) 2. 5.c.R.534,

<sup>41</sup> Ibid.

<sup>42</sup> Class action (n1)

## D) Class Action in United Kingdom.

The civil procedure rules of the courts of England and Wales came into force in 1999 and have provided for representative actions only in limited circumstances under **Part 19.6**. These have not been much used, with only two reported cases at the court of first instance in the first ten years after the civil procedure rules took effect<sup>43</sup>. However, a sectoral mechanism was adopted by the **Consumer Rights Act 2015**, taking effect on October 1, 2015

## E Class action in India

In India, decisions of the India Supreme Court in the 1980s, loosened strict locus standi requirements to permit the filing of suits on behalf of rights of deprived section of society by public-minded individuals or bodies. In India public interest litigation known as (Class action in American Sense) arose out of the wide powers of judicial review granted to the supreme court of India and the various High Courts under **Article 32 and Article 226 of the Constitution of India**. The sort of remedies sought from courts in public interest litigation go beyond mere award of damages to all affected groups, and have sometimes (controversially) gone on to include court monitoring of the implementation of legislation and even the framing of guidelines in the absence of parliamentary legislation.<sup>44</sup>

Public Interest litigation has now broadened in scope to cover larger and larger groups of Citizens who may be affected by government in action. Examples of this trend include the conversion of all public transport in the city of Delhi from diesel engines to (Combined Natural Gas CNG engines} orders of the Delhi High Courts and the Supreme Court to ensure that there is no unjustified loss of forest cover; and the directions mandating the disclosure of assets of electoral candidates for the houses of parliament and State Assembly.<sup>45</sup>

## 5.0. The current Position of Class Action in Nigeria

There few class suits in Nigeria which show that the legal regime is fast gaining inroads in Nigeria. Incidentally, these cases are from Lagos State, where the High Court Civil Procedure Rule Lagos State made provision for its application.

First, is the ATM FRAUD CASE, by users of ATM cards, against some banks proceeded by way of class action suits. Here, the Lagos High Court granted motion *ex parte* to file the ATM fraud case as class suit. This subject-matter of this suit touches a wide range of persons – ATM electronic users in Nigeria estimated to be 30 Million people.<sup>46</sup> This case is sub-judice and will not merit further discussion here until after judgment. Second, is another case against iPhone manufacturer in California, where user of the iPhones in Nigeria got an order from a Lagos State High Court for a class action suit against the industry. The Plaintiff, Olumide

<sup>43</sup> “Different class: UK representative actions suffer a setback” (<http://plc.practicallaw.com/7-504.0554>)

<sup>44</sup> PIL A BOON or A Bane” (<http://www.legal-service-india.com/articles/pill.htm>). legal services India. com. Retrieved 2013-10-14

<sup>45</sup> Supreme Court of India Judgment ON Civil Appeal NO 7178 of 2001.

<sup>46</sup> ATM Fraud and class action <<http://www.researchgate.net> 22> accessed 5 Dec2021

Babalola LLP, failed, at the court below but lost technically on appeal, due to non-compliance with Consumer Protection Council Act 2004. In this case, which was decided in Dec2019, the legal procedure under class action was recognized as separate and distinct from representative action. This shows that class action suit is gradually making inroads into Nigeria legal jurisprudence but needs more statutory interventions and legislative backing in some states.<sup>47</sup> It has been suggested that class action be employed in broad cases of humans rights abuses against corporations in Nigeria and for judges to exercise their wide discretion in civil cases to accommodate class suits.<sup>48</sup> There is also a communique on the roundtable on class action litigation in Nigeria in 2013, undertaken by the Nigerian Institute of Advance legal studies,<sup>49</sup> where the impetus was heightened on the need to get corporations providing goods and services to be accountable to the consumers through the judicious and judicial employment of class action suits. See also Ejama Ebubu Community Tai Eleme LGA suits against SPDC, filed and conducted by Lucius Nwosu SAN, which was instituted in 2001 and ended in 2010 as another class actions suit.

### 5.1. Situating Class Action in Rivers State.

Public interest litigation are carried out as representative actions in Rivers state and representative action is well entrenched and recognized by the Rivers State Civil Procedure Rules but this is not similar to class action. Order 13 High Court of Rivers State 2010 .Rules 1 ( persons claiming jointly) call apply to be represented by one or more persons with similar interest. Order Rule 4 provides that any person may be joined as defendant; Rule 7 Claimant may join person jointly and severally liable while Rules 8 - Claimant in doubt as to persons from whom redress is to be brought may join two or more defendant for court to determine appropriate defendants; Rule 11, Trustee may sue or be sued on behalf of beneficiaries of an estate without joining the beneficiaries., Rule 12 --Where more persons than one have the same interest in one suit, one or more persons may sue or be sued on behalf of for the benefits of all persons interested. These provisions provide for ordinary representative actions which bind only the named- plaintiffs not the unnamed plaintiffs. Further, all the claimant must be interested in the same way as regards the same issue and common question of law and fact must exist between them.

However, the FHC provides for class action in a limited scope that may not avail environmental rights practitioners. The Federal High Court ( Civil procedure ) Rules 2019 provides for Rule 1 that Plaintiffs may unite in same action or several causes of action but it appears that it cannot be conveniently tried or disposed of together, as a judge, may order separate trials of such causes of action or make such order as may be necessary or expedient for the separate disposal of it joinder of causes of action .A claim by the plaintiff jointly may

<sup>47</sup> Kalu Kingsley Anele 'A comparative analysis of the class Action Regime in Nigeria and Korea ( 2021) ICC 15 ( 1)

<sup>48</sup> Kalu Kingsley ' Human Rights Class Action against Corporations in Nigeria' ( 2019) 6 (3)European Journal of Comparative Law and Governance 273-327. There is also a communique on the roundtable on class action litigation in Nigeria in2013

<sup>49</sup> Nigerian Institute of Advance Legal Studies NIALS, ' Round Table' 2013 Class Action <http://www.nials.edu.ng> > 212 march 2013.



be joined with claims by them or any of them separately against the same defendant. Order 9 Rule 4 -persons claiming jointly and severally may be joined and a judge may order substitution or addition. Rule 4 provides for class action but relates to trade marks, copy rights of patent designs and further provides for opting in and opting out. In our case, the main concern is environmental problems caused by air pollution

Order 9 Rule Rules 7 provides that It shall not be necessary that every defendant shall be interested in all the relief prayed for., or as to every cause included in any proceeding against him.) (Rule 8 deals with Joinder of parties jointly and severally affected and liable on any contract, or bill of exchange. In a class action, whether named or unnamed parties are bound in the same way but common question of law or fact may not necessarily apply as there are classes with big claims and smaller claims and all joined together in one suit. There are classes that may be content with injunctive order while some may go for damages or compensation order within the same class.

### **5.2. Nature of interest that may be pursued by a class in a class -action lawsuits**

The plaintiff in a class action must have or enjoy common but legitimate interest.<sup>50</sup> The plaintiff must be numerous but could aggregate their claims into one single action against a defendant. Class action provides for situations where due to numerosity of the parties, it may not be convenient to join all the plaintiffs who are interested in one suit. Common question of law and fact predominate in a class action. The interest of the unnamed parties must equally be protected by named parties.

### **5.3. Who is the plaintiff in a class action?**

The Plaintiffs is a person, persons or group of persons who have been affected by public wrong or suffered some harm due to the action of a defendant or some defendants. In a class action, there are named plaintiffs and unnamed plaintiffs and this number can range from One to one million persons. The plaintiffs in class action can be subdivided further into those with higher claims and those with smaller claim. Other sub-division includes those that prefer injunctive relief from those who prefers compensation and settlement. To serve as a plaintiff, a potential claimant must satisfy two fundamental requirements. First, the putative plaintiff must be a member of the class that it seeks to represent second, the putative plaintiff must itself have "Locus standi" to assert its claims. It is to be noted that unnamed plaintiff is not obligated to be part of the class. They may choose to litigate their legal claims themselves, or not at all. Class members may not be identifiable and ascertainable in a class action, but interested persons are ascertainable in a representative action.

### **5.4. The Position of Defendants in a Class Action**

A defendant in a class action is a person whose activities had caused private or public harm to the plaintiff or group of plaintiffs. The plaintiffs sue a named defendant and other unnamed,

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<sup>50</sup> See Class Action Fairness Act 2005 US

absent defendants who the plaintiffs allege are similarly situated to the named defendant. If both plaintiffs and defendants are organized into classes, the action is a bilateral action

### 5.5. The Judgment of a Court in Class Action & Role of the Judge.

The Judgment of a court in a class action binds all the parties in a class action and it becomes *res judicata* and can be pleaded as estoppel by the defendant. No class action suit be filed without the leave of court. Again, notice of the existence of the class suit must be sent to all the prospective plaintiffs by the named plaintiffs before the action can bind them and opportunity guaranteed for opting in or opting out by any plaintiff. The court must ensure that the plaintiff named or unnamed are adequately represented by an experienced Attorney and their interest seen to be adequately protected in the class suit. The Court may make preliminary order for ensuring a service of notice or discovery of document before going to hear a class action suit. Due to the technical nature of class action suits, both the Judge and the Attorney, must be experienced and down to details.

While the judge must not stand on the way of the class to ventilate their claim through the class suit, the judge must ensure that the use of class suit must not be employed to embarrass the defendants or Government. Thus, the judge has a duty to ensure that the case can be managed by way of class action and that all interested parties are notified of the class suit.<sup>51</sup> The primary role of the court is ensuring the fairness, adequacy, and reasonableness of the class action settlement, including the reasonableness of awards of attorney's fees and cost, and that the procedural rules and principles of due process are adhered.

### 5.6. Duty of Class Counsel

A class Attorney must be a seasoned legal practitioner and experienced. He has a herculean task to convince the judge that the case can be maintained in a class action. All class counsel worth their salt want to achieve good results for their clients, they also have legitimate interests of their own in the class action settlement – namely, the approval and payment of attorney's fees and costs. The Attorney must ensure and satisfy that, there must be a **common question** of law and fact such that “determination of its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke. The **typicality** requirement ensures that the claims or defenses of the named plaintiff are typical of those of everyone else in the class. Finally, **adequacy requirement** states that the named plaintiff must fairly and adequately represent the interests of the absent class members.

### 5.7. Use of Class Action in Environmental Claims Under US Law

i) In environmental field with respect to air pollution from stationary sources which causes varying degrees of injury to those in the immediate vicinity, class action can be employed by varying claimant with predominate question who can be aggregated in a class suit? In **Texas**

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<sup>51</sup> Most class action suits were denied because failure to ensure manageability of the case as a class suit and lack of notification of the parties of the class suit.

**Parks Vs Wildlife Commission**, the court disallowed a purported class defined as "all Texas citizens who are for the orderly development of Texas Parks and recreational facilities in accordance with the State Comprehensive Outdoor Recreation Plan (SCORP) 147 on the ground that the plaintiffs had failed to identify the group sufficiently.

ii) In **Diamond v. General Motors Corp.** 48 and **Chicago v. General Motors Corp.**,<sup>4</sup> similar state and federal cases, respectively, both resulted in dismissal of class suits for injunctive relief from automobile exhaust pollution. The intended class in Chicago consisted of all citizens of that city; in Diamond, of all Los Angeles residents. In failing to find the requisite cohesion, the court in Chicago referred to the proposed membership as "that gigantic and extraordinarily diverse class."

iii) See **Jenkins v. United Gas Corp.**, 400 F.2d 28 (5th Cir. 1968) (class action under Title VII of the 1964 Civil Rights Act). 183. Lamm. US Supreme Court recently stated in an antitrust suit, "[R]ule 23 . . . provides for class actions which may enhance the efficacy of private actions by permitting citizens to combine their limited resources to achieve a more powerful litigation posture."

Iv) **H Smith v. Board of Education of Morrilton School District 214** accorded standing to a teachers' association seeking, inter alia, an injunction requiring employment of high school teachers without regard to race. The opinion states: [T]o argue that [the Associated Teachers of America] ATA. . . is not a member of the class for which relief is sought, is, we think, but another way of arguing the question whether ATA is a real party in interest [under Rule 17] .... Having held that ATA is a proper party in this latter respect, we think it follows that it is not to be dismissed from the case because of Rule 23(a).<sup>215</sup>

v) **Biechele v. Norfolk & Western Railway Co.**<sup>125</sup> held that "the right of each member of the class to live in an environment free from excessive coal dust" exceeds \$10,000.<sup>1</sup> 26. Such an approach is only feasible, of course, when the rights involved are essentially intangible and the plaintiffs, by opting for injunctive relief, have foregone the need to prove money damages.

vi) For a securities fraud case finding predominance of common questions, see **Brennan v. Midwestern United Life Ins. Co.**, 259 F. Supp. 673 (N.D. Ind. 1966). *Contra*, **Berger v. Purolator Products, Inc.**, 41 F.R.D. 542 (S.D.N.Y. 1966). 109. Advisory Comm. Note, *supra* note 60, at 103. The Committee's analysis of mass accident cases might not hold true for such potential modern disasters as the crash of a Boeing 747, due to faulty equipment or negligent piloting, where the probability of personalized defenses like contributory negligence or assumption of risk is minimal. See Comment, Mass Accident Class Actions, 60 CALIF. L. REV. 1615 (1972). e.g.

## 5.8. Advantages of Class Action suits

Class action suits have been proven to be very beneficial to the legal jurisprudence in countries where it has been employed, and to both claimants, defendants and the society in many ways which can be seen below. According to the US Advisory Council on the Deployment of Class Action:

*class-action treatment is not as clearly called for .... but it may nevertheless be convenient and desirable depending upon the particular facts. Subdivision (b)(3) encompasses those cases in which a class action would achieve economies of time, effort, and expense, and promote uniformity of decision as to persons similarly situated, without sacrificing procedural fairness or bringing about other undesirable results.*<sup>52</sup>

Other advantages include:

- a. With class action, there exist aggregation of many individualized claims into one representational suit. Aggregation of claims into a class action may avoid the necessity of repeating “days of the same witness, exhibits and issues from trial to trial” **Jenkins v Ray Mark Indus. Inc., 782 F. 2 d 468, 473 (5<sup>th</sup> Cir. 1986)**
- b. The existence of aggregation can therefore increase the efficiency of the legal process, and lower the costs of ligation. in cases with common questions of law and fact.\
- c. A class action may overcome “the problem that small recoveries do not provide the incentive for any individual to bring a solo action prosecuting his or her rights. **Amchem Prods; Inc. v Windsor, 521 U.S. 591, 617 (1997)**
- a) In a Limited fund cases, a class action ensures that all plaintiffs receive relief and that early filing plaintiffs do not raid the fund (i.e., the defendant) of all its assets before other plaintiffs may be compensated **Ortiz v Fiberboard Corp. 527 U.S. 815 (1999)**
- b) Class action is the most effective engine to remedy mass wrong and works well for those who cannot afford high cost of litigation. Bulk of its advantages lie in aggregation claims.
- c) Class action is an instrument for ameliorating regulatory failure and promote helps to alter regulatory incentives that work in favor of corporate organizations
- d) The class action suit has effect of naming and shaming the irresponsible corporation.

### 5.9. Demerits/ Challenges of Class Action in Environmental Claims

- a) According to the Chicago decision, "the interests of the representative party must be coextensive with the interests of the other members of the class, and . . . there must be a lack of adverse interests .... The court correctly pointed out that the named plaintiff could not, in a suit seeking to enjoin automobile sales, fairly represent those members of the population who were automobile dealers, proprietors of gas stations, or persons who would otherwise have been adversely affected if the requested relief were granted. While a defined class, with or without subclasses, might eliminate the most flagrant conflicts of interest, broadly- based environmental class actions, will invariably pose disquieting questions of who really desires what type of remedy.”
- b) For instance, do most residents of Chicago truly want to solve the air pollution problem by halting the production of cars? Do many Americans wish to trade the perils of D.D.T for a possible plague of locusts? The heart of the problem is that citizens suffering from

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<sup>52</sup> See Class Action Fairness Act 2005.

generalized types of environmental degradation, seldom comprise a well-defined "interest group" in the same sense as defrauded security purchasers or victims of price-fixing schemes.

- c) Similarly, can we stop Kpofire in the face of poverty and hunger in Nigeria? Should we trade availability and accessibility of petroleum because of its health and environmental impacts, by banning and condemning kpo-fire or illegal refiners in Rivers State as a result of the associated health risk? There must be tradeoff somewhere for society to live sustainably.
- d) Class members in the USA often receive little or no benefit from class actions. Because of large fees for the attorneys, while leaving class members with coupons or other awards of little or no value; unjustified awards are made to certain plaintiffs at the expense of other class members from being able to fully understand and effectively exercise their rights.
- e) Other problems specifically raised by the few litigated cases are those non-aggregation doctrines and from subdivision (b)(3)'s requirements of predominance of common questions and superiority of the class device.
- f) In addition to holding representation inadequate, the court in *Diamond* dismissed the class action because it could not find a predominance of common questions of law or fact: "[t]he right of each member to recover (as well as the amount of his recovery), will depend upon substantial issues which must be litigated as between individual plaintiffs and defendants." 3 The absence of predominance of an issue affected the case.
- g) Some common issues arose from several factors. For one thing, the plaintiffs were alleging a continuing public nuisance and would thus be required to show special damage to each member of the class. **Whether an individual has been specially injured in his person will depend largely upon proof relating to him-going to such matters as his general health, his occupation, place of residence and activities. Whether a parcel of real property has been damaged will depend upon its unique characteristics, such as its location, physical features and use.**
- h) In this regard, defendants might interpose as to individual members such defenses as assumption of risk in moving into the area or contributory negligence in not taking reasonable precautions. This particular problem could plague environmentalists in many types of actions seeking the award of damages.
- i) In determining that the action could proceed as a class suit in *In: Re Motor Vehicle Air Pollution Control Equipment*, the court stated that the manageability of the classes alleged herein may certainly tax the imagination and ingenuity of the litigants, counsel and the court. But until management is recognized as impossible or near impossible, the court will depend upon the ingenuity and aid of counsel to solve the complex problems that litigation will bring.' "If successful," the court concluded, "the economies of time, effort and expense will more than compensate the effort."
- j) Furthermore, the recent Supreme Court decision in ***Sierra Club v. Morton's*** casts a shadow of indeterminate length over future public environmental lawsuits. The Court dismissed the complaint for lack of standing because the Sierra Club "had failed to allege that it or its members would be affected in any of their activities or pastimes" "by the contested development of the Mineral King Valley in California by Walt Disney



Enterprises, Inc. In Sierra Club itself, the plaintiff clearly can satisfy the Court's criteria for standing merely by amending its complaint to allege harm to its members who use the valley.' Yet to the degree that the decision revives the controversial standing which restricted class suit, it is to be watched. In Nigeria, the 'locus standing' clog has been liberalized by judicial activism through many cases.

- k) In the USA, it was found that indiscriminate selection of this form of action may invites time-consuming objections by defendants eager to stall. More significantly, it also encourages adverse determinations by hostile judges, who are sometimes, only too glad to cloak substantive dismissal in the garb of procedural defect.

## 6.0. Notice and Settlement

Due process requires in most cases that notice describing the class action be sent, published or broadcast to class members. The Judge must satisfy himself that this notice has been brought to the attention of person who would be affected as claimants or beneficiaries to the claim before ordering for class representation. As part of this notice procedure, there may have to be several notices, first a notice allowing class members to appoint class representatives where applicable, Second, notice to opt in or opt out of the class, i.e., if individuals they are entitled to do so, only to the extent that they give timely notice to the class counsel or the court they are opting out. Third, if there is a settlement proposal, the court will usually direct the class counsel to send a settlement notice to all the members of the certified class, informing them of the details of the proposal settlement.

## 7.0. Recommendations

- 1) The recommendations here could be wide- range as the problem posed by soot is multifarious. For Energy Industries, clean technologies that reduce smokestack emission, improved management of urban and agricultural waste, including capture of methane gas and carbon from waste sites, are suggested through the enforcement of the regulations by NESREA and Downstream and Midstream Regulatory Authority under the Petroleum Industry Act PIA Act 2021.
- 2) For energy use whether at household levels or industrial level, there must be energy efficiency practices which are sustainable by ensuring access to affordable clean household energy solutions, for cooking, heating and lighting and industrial purposes.
- 3) For the transport sector, shifting to clean mode of urban mass transit system would reduce emissions from vehicular traffics; for those commuting to work, walking and cycling networks will improve energy uptake while reducing emissions.
- 4) Emissions from power generation, could be addressed by technological solutions through the improvement in urban planning, improving energy efficiency of building and making cities greener, more compact and thus energy efficient.

Further, in the use of low emission fuel and renewable energy combustion free power sources from solar, wind and hydro for municipal and agricultural waste, could reduce emissions. For biomass waste and waste form households, adopting five ( Rs) of reduce, reuse, refile, recycle and refill, could add up. As

open incineration of solid waste is unavoidable by the Rivers State Waste Management Agency (RIWAMA), then carbon capture and strict emission control must be put in place at incineration sites.

- 5) For NGOs Advocacy: More NGOs and faith -based organizations should go beyond seeking grants to mobilizing conscious youths to raise their voices on the impact of soot in Rivers state and Niger Delta generally.
- 6) For litigation lawyers, the Rivers State High Court Rules, needs to be further amended to incorporate the provision similar to O.9 R. 4 of the FHC (Civil Procedure Rules) 2019 and this should further incorporate environmental claims. This will pave way for the emergence of class action suits in Rivers State.
- 7) The enforcement Department in NESREA in the State and the recent regulatory agencies under the PIA 2021 should aggressively enforce emission reduction measures already in place in their various regulations <sup>53</sup>
- 8) Government should liberalize the ownership of petroleum to give every stakeholder a sense of belonging.
- 9) Modular refineries should be commercialized with support scheme to Niger Delta entrepreneur to establish Modular refineries as it is the practice in Mineral sector through Small Scale Minin lease holders under the nation's Mineral Mining Act 2007.
- 10) Legislative advocacy - Expanding the existing legal regimes (National Environmental Standards, Regulations and Enforcement Establishment Act as amended 2018, and its Emission Guidelines) Petroleum Industry Act 2021
- 11) promoting the enforcements of laws and policies by relevant authorities adopting suite of measures such as mixture of commend and control and market-based mechanism and together with voluntary compliance with polluters.
  - a) Making new laws to address emerging torts (such as climate change , soot as in public nuisance/public wrongs) akin to Ryland VS Fletcher (1868) UKHL1.
  - b) Making new laws, drawing from the Mineral and Mining Act 2007 to empower citizens participation and ownership of natural resources
  - c) Pushing for further amendment of the Petroleum Industry Act 2021 to Liberalize the ownership of Petroleum (Oil, Gas and Petroleum Products) and by recognizing States, Local Government and individual's ownership of petroleum, while requiring adequate payment of taxes from these groups to the Federal Government.
  - d) Public interest litigation (Class action / branded Representative Actions)

## 8.0. Conclusions

Law must not only mirror the society but move on with changes in the society. With the emergence of soot in our environmental space, a new legal jurisprudence that will address it

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<sup>53</sup> National environmental Standards Enforcement Regulations Agency Act 2007 as amended in 2018. See also regulations made under FEPA 1992 now NESREA 2018.

while ensuring equity in the use and allocation of resources must be stressed. Some of the measure outlined here are very germane but may require not only immediate action but long-term careful planning. So much is expected from lawyers who should champion the cause of the people, the cause of justice and liberty. I strongly believe that if we can put all of these measures in place or cause relevant authorities to do more than business as usual, knell jerk, reactionary approaches, to the present new -normal posed by soot in PH. The impact would not only be mitigated but may drastically reduce. However, if we fail to walk the talk, I am afraid, we might expect more irreversible harm to us and our future generations. May this never happen.

Thank You for listening.