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Infringement On Planning Standards By Petrol Filling Stations Owners In Akure, Nigeria

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Abstract
Nigerian cities and towns are getting congested with every nook and cranny filled with petrol filling stations (PFSs). PFSs are built on little available spaces, in-between residential buildings, raising real fears of environmental hazards. This research aimed at scrutinizing the infringement of petrol filling stations owners on planning standards**.** 415 of the total buildings within 150 metres radius to PFSs were randomly selected for field survey. A total survey was carried-out on the 87 functional PFSs, while oral interview was conducted on the Directors of physical planning at the Ondo State Development and Property Corporation and Ondo State Ministry of Housing and Urban Development. All data collected were analyzed using univariate analysis. The study revealed that about 85% of the PFSs in Akure were not in compliance with the planning standard of 1800m^2 recommended land area for the siting of PFSs, 64.3% of the total PFSs fall less than 100 metres to residential buildings, the recommended distance between PFSs were no strongly adhere to, weak enforcement of planning standards due to government/political interference and lack of modern planning equipment's also contributed to the infringement of planning standards in Akure. It is suggested that there should be a synergy between the approving bodies for effective enforcement of planning standards, also government should assist in procuring modern planning equipment's for effective development control activities,Policy framework that gives the professionals in the ministry, local and state governments the capacity to fulfill their constitutional obligation is required in order to ameliorate political interference.

Keywords: Infringement, Location Pattern, Petrol Filling Station, Planning Standard, Sustainable Development

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INTRODUCTION

The technological initiative of man towards the development of automobile and the discovery of petroleum triggered the building of petrol filling stations (PFSs) at strategic locations to meet the demand of vehicle owners (Abdul, Suriatini and Remy, 2009, as cited in Blamah, Vivan, Tagwi and Ezemokwe, 2012). Omole (2001) positsthat a petrol filling station by definition is a commercial facility where fuel and lubricants for automobiles among other goods are sold. Fuels sold at petrol filling stations include Petrol (Premium Motor Spirit [PMS], Liquefied Natural Gas [LNG], diesel (Automated Gas Oil [AGO]) and Kerosene (Dual Purpose Kerosene [DPK]). In recent times, there has been a sustained increase in the number of PFSs established in different part of the country. The reasons for such unprecedented increase are the rapid growth in urbanization which has produced greater demand of vehicles, resulting in more fuel consumption and the attractive price of petrol both at control price and black market prices which made more people to go into the petrol retailing business (Smart, 2002). In view of this development, many oil marketers take advantage of this need and build PFSs haphazardly without giving consideration to the possible effects of its locations. It has now generally been recognized that economic development can be a major contributing factor to growing environmental problems particularly when such development is not sustainable. Keeble (1968) opines that PFSs should be located not only where they can be easily accessible but where the dangers that are attached to it can be minimized. Nigerian cities and towns are getting congested with every nook and cranny filled with PFSs. Even in residential areas, PFSs are built on little available spaces, in-between residential buildings, raising real fears of environmental hazards and fire outbreaks.Consequently, some insidious effects of the indiscriminate location of PFSs at certain points in some cities including Akure have been over-looked. Therefore, the defiance of standards in the location and distribution of PFSs has been the order of the day (Omole, 2001; Alabi, 2004).On papers, DPR has stringent guidelines for building of PFSs, paying very serious attention to safety and environment, but in reality and by the way PFSs are located in street corners, near residential houses, the guidelines are observed more in breach.

The proliferation of PFSs in Akure is quite disturbing. Observation shows that numerous PFSs are developed along major/access roads which are narrow to accommodate such services. With the nature of the haphazard and unprecedented developments of PFSs, one wonders if the developers of the PFSs have really satisfied the requirements and have undergone the processes for approval and development in the study area. Many PFSs were noticed to be too close to each other having a distance of less than 1km on the same lane and less than 500m on adjourning lane also most of the pumps were located less than 100 metres to residential and public buildings as against the planning standard of its locations. Some even were developed side by side wherefore having a higher tendency of enormous and wider effects on the immediate environment. Hence, the research tends to extricate the infringement of PFSs to planning standards by PFSs owners in Akure, Nigeria.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Human being is not only dependent on the physical environment for livelihood, but also in a number of ways they are capable of controlling and influencing the physical environment. However, in the quest to improve their standard of living and to fulfill their ever-increasing diversified and sophisticated needs, human use of the physical environment is often excessive and uncontrolled. As such, in the process of economic and infrastructural development, environment has not been given its due respect and has often been sidelined which leads to further degradation of the environment (Jamaluddin, Kadaruddin, Kadir and Azahan, 2009).Omole (1994) opines that systematic linkages among activities on land are to ensure sustainability. The linkages are such that a wrongful placement could mar the physical setting and siting of these facilities and services. Furthermore, Ayeni, (1991) and Omole, (2001) stressed that the issue of standard is another major thing in the location of PFSs. Neufert (1980) further amplifies this in architect data in which the following are identified and considered necessary in the location and construction of PFSs in a city. These are: site size, set-back and road pattern, vehicle road speed, air and water supply, number of pumps, canopy, drainage, petrol store, safety devices, lighting etc.

Planning Criteria for Location of PFSs

DPR (2010) stated that PFSs should be located within a growth centre or an urban area except in circumstances where it can be shown through appropriate studies that the need exists or otherwise.

The criteria for the locations of PFSs by DPR among others include;

a. Stations should be located at a minimum of 100 m from any public institution such as schools, churches, public libraries, auditoriums, hospitals, public playgrounds, etc.
b. Distance between one petrol station and another should not be less than 1000m
c. Filling Stations will not be allowed in any area where the traffic situation is such that it will cause obstructions in entering or leaving a station or on tight curves where visibility is not adequate.
d. Buildings are to be located a minimum of 12m from road property boundaries to provide adequate area for maneuvering of vehicles in the service area.
e. Petrol pumps shall be located a minimum 100m from any residential building.
f. Where the site adjoins the side or rear boundary of a residential lot, a solid wall 3 m in height should be constructed and maintained along that lot boundary.
g. Signs should be in accordance with the Advertisement Regulations and should be located so as not to reflect the sun into the face of motorists and should be large enough so that they can be seen from a reasonable distance at a reasonable speed.
h. The Investor should approach the Infrastructure Advertisement Department for both the regulations and approval of the location of the signage.
i. Stations are to be equipped with fire-fighting and fire protection equipment installed in accordance with the National Police (NP), Federal Environmental Protection Agency and the Ministry in charge of disaster management.
j. All volatile flammable liquid storage tanks shall be installed below ground in compliance with the requirements of the Ministry of Trade and Industry.
k. Proper facilities for storage and disposal of used and waste oil and gas must be provided.
l. Waste water from the washing of motor vehicles and sewage disposal should be to the satisfaction of the FEPA.
m. Notice of intent to construct and operate a Petrol Filling Station should be posted on the site to enable adjacent owners within a specified radius to object if they so desire.
n. Fuel should be stored in double-walled containers/tanks to minimize leakage and prevent contamination of ground water.
o. A minimum distance of 10 m should be maintained between UST and dispensing pumps.
p. UST should be installed at a minimum distance of 10 m from front plot boundaries.
q. Normally no access to or from a filling station shall be closer than 45m to any road

intersection or 75 m from the intersection of two main roads.

r. A minimum distance of 30 m should be maintained between UST and water source.

Concept of Physical Planning

The concept of planning can be traced down to creation as some reaffirmed that God Himself was the first planner and the progenitor of zoning concept (Ajibola, *et al* 2011 as cited in Eke, 2014). Keeble (1969) defines physical planning as the art and science of ordering the use of land and the character and sitting of buildings and communication routes so as to secure maximum practicable degree of economy, convenience and beauty. Similarly, Olujimi (2009) sees Land use planning as the spatial reflection of human activity on land; and whose efficient arrangement and harmonious coordination are basic to physical planning. While the Nigeria Institute of Town Planners conceives physical or land use planning as requiring 'participatory and integrated processes of allocating land for promoting sustainable development' (Falade, 2012). From the above definitions, Physical Planning is a conscious but comprehensive approach to orderly and healthy use and management of the natural environment of human settlements (Bakare, 2012). Location pattern of PFSs in the study area may be difficult to attain without the role of physical planning and how its understanding could facilitate a balanced and sustainable national development (NPC, 2009). As noticed in the study area that many of the PFSs were located within residential areas and also too close to residential buildings as against physical planning specification. It is obvious that regulating and controlling the establishment and location pattern of PFSs part of the activities of physical planning

Concept of Sustainable Development

Sustainable development can be defined as development that caters for the needs of people without compromising the needs of future generations (Barrow, 2006). To achieve sustainable development, a set of "tools," of which Environmental Impact Assessment (EIA) is one, are needed. EIA needs to include social, participatory, and economic issues alongside environmental issues. If these elements are included, the key links between EIA and sustainable development would be addressed the need for the development of filling stations must always be balanced with the need to protect the environment. As with other infrastructure developments, the development of filling stations forms part of a growing economy. An increase in development also results in increased employment opportunities, which leads to a greater proportion of the population owning cars and utilising public transportation systems. The three basic components—economic, social, and environmental—need to work together for the concept of sustainable development to function. If the economic aspect is not present to support the environment, there will be malfunctioning; likewise, if the social framework is lacking there will be significant abnormalities. In turn, filling stations need to be developed to cater for the needs of the larger number of cars on the road networks and not to the detriment of the environment (Govender, 2009).

THE STUDY AREA AND RESEARCH METHODOLOGY

The Study Area

Akure South LGA is located in Ondo State in the South-Western geopolitical zone of Nigeria. It occupies a land area of 37,134 hectares (35 Sq.km). It lies between latitude 6^0 95' and 7^0 15' North on the Equator and longitude 5^0 15'and 5^0 40' East of the Greenwich Meridian (Macmillan, 2006). The study area is bounded by Owo Local Government Area in the East, Akure North and Ifedore Local Government Areas to the North, Ile-Oluji/Okeigbo Local Government Area in the West and Idanre Local Government in the South. Also the study area has some notable roads, which include; Akure/Owo express way, Ilesa road, Oyemekun road, Oja-Oba road, Arakale road, Ondo road, Alagbaka road and Ijoka road among others (figures. 2 and 3). The population growth in Akure agrees with the increase in vehicular ownership which gives rise to the number of PFSs in Akure. However, this increase of PFSs and their location pattern is of great concern to urban planners.

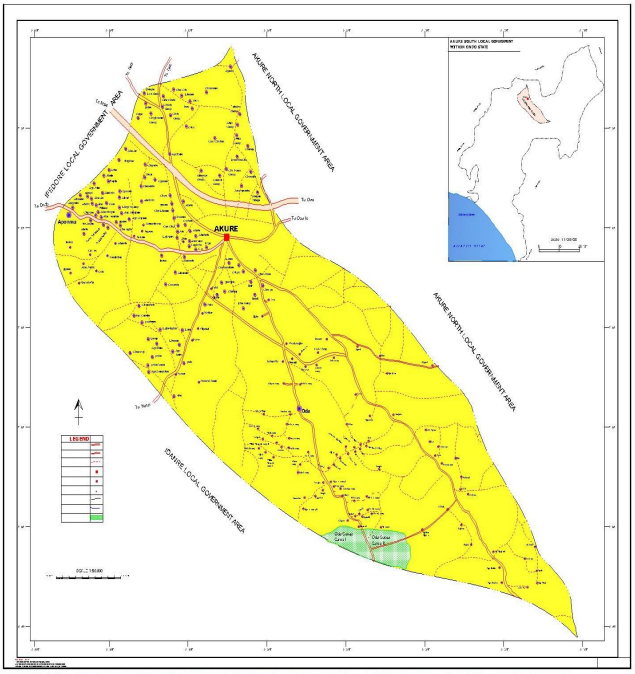

Figure 2: Akure South Local Govt. Area Map
Source: Ondo State Ministry of Housing and Urban Development, 2013. Digitized by the Author, 2018

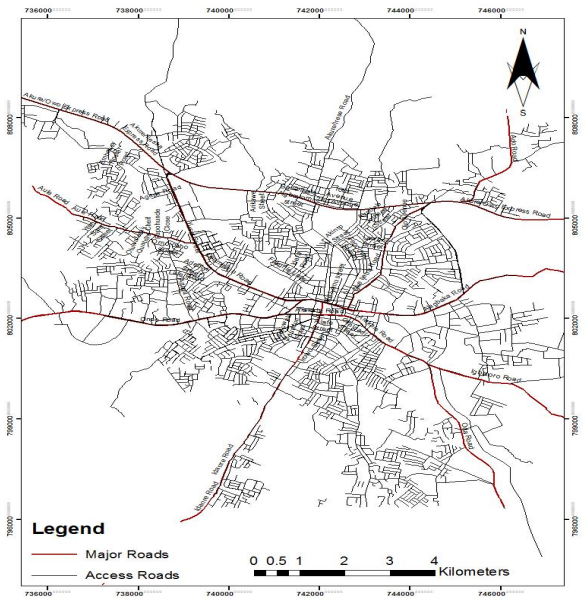

Figure 3: Road Network Map of Akure, Nigeria
Source: Ondo State Ministry of Housing and Urban Development, 2013. Digitized by the Author, 2018

RESEARCH METHODOLOGY

DPR (2010) reveals in the planning criteria for the location of PFSs, that the minimum distance of PFSs to public and residential buildings should be 100 metres. Marta, *et al* (2011) discovered that the distance at which the PFSs stop having an impact on the environment is about 100 metre, but the distance depend on the number of petrol pumps, the amount of fuel drawn from them, traffic intensity, the structure of the surroundings, and weather conditions. The same view was expressed by Blamah, *et al* (2012) in their study on Location Impact Assessment of PFSs, that residential, commercial and public/semipublic buildings within a distance of 150 metres stand the risk of hazards that emanate from PFSs. On these premise, the researchers maintained 150 metres radius around all functional PFSs after dividing Akure the study area into its eleven (11) wards. The researchers focused on the seven (7) wards identified during reconnaissance survey to be concentrated with PFSs. However, buildings within 150 metres radius form the basic sampling frame for the residents, while all the PFSs form another sampling frame (table 1, 2 and figure 4, 5). This was captured using the Global Positioning System (GPS) in picking the coordinates of the PFSs on site, while the Satellite Imagery of the study area was gotten and updated by the researchers in order to know the total number of buildings within the 150 metres radius. From Table 2.7% (415) of the total buildings within 150 metres radius to PFSs were randomly selected for field survey (on-site measurement). Oral interview with PFSs approving bodies was also employed for this research.The sample size of 7% (415) is reasonable considering the fact that in similar studies on Akure, a sample size of 2.3% (150) was used by Omole (2001), while Emmanuel (1998) used a sample size of 5% (330) and got reliable results. Total survey was carried-out on the 87 PFSs. The analyses were carried out using Univariates Analysis.

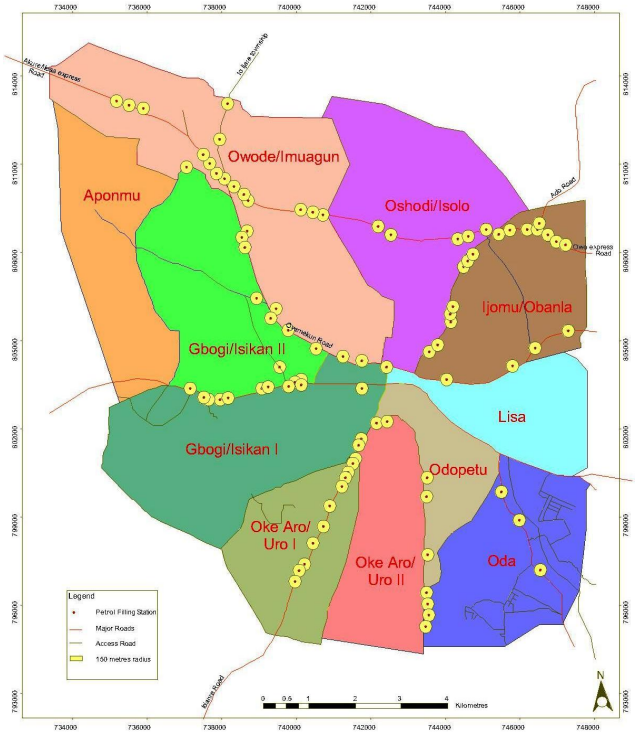

Figure 4: Location of PFSs in the Eleven Political Wards ofAkure
Source: Author's compilation, 2018

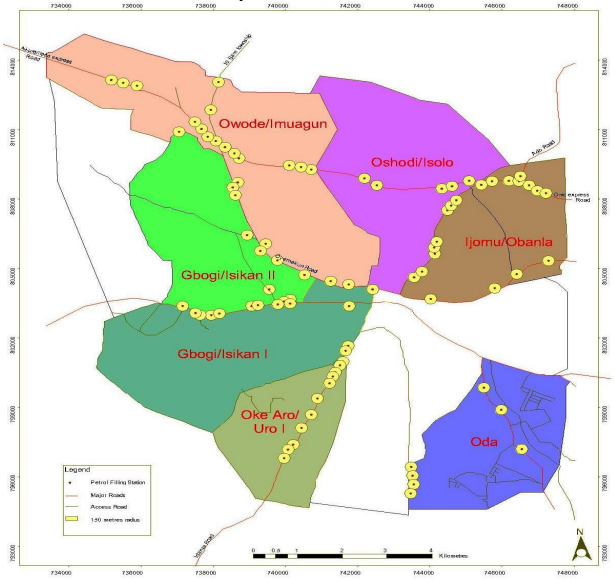

Figure 5: Location of PFSs in the Seven Political Wards Selected as Sampling Frame
Source: Author's compilation, 2018

Table 1: Number of PFSs in the Eleven Wards of Akure the Study Area

S/N	Ward	Total number of PFS
1	Gbogi/Isinkan I	10
2	Apomu	-
3	Gbogi/Isinkan II	14
4	Oda	07
5	Ijomu/Obanla	20
6	Oke-Aro/Uro II	02
7	Oke-Aro/Uro I	11
8	Oshodi/Isolo	05
9	Owode/Imuagun	20
10	Lisa	-
11	Odopetu	03
	TOTAL	**92**

Source: Author's compilation, 2018

Table 2: Number of buildings within 150 metres radius in the Seven (7) Wards selected for Sampling

S/N	Ward	Total number of PFS	Total number of buildings within 150metres radius around PFSs (Sampling frame)	7% of Buildings (Sample size)	
1	Gbogi/Isinkan I	10	764	53	
2	Gbogi/Isinkan II	14	1098	77	
3	Ijomu/Obanla	20	1526		107
4	Oke-Aro/Uro I	11	813	57	
5	Oda	07	470	33	
6	Oshodi/Isolo	05	181	13	
7	Owode/Imuagun	20	1072	75	
	TOTAL	87	5,924	415	

Source: Author's compilation, 2018

RESULTS AND DISCUSSION ON FINDINGS

Proximity of PFSs in the Study Area

Reconnaissance survey on the proximity analysis of PFSs as shown in Table 3indicates that PFSs above 2km on the same lane and adjourning lane, accounted for 10.4% and 4.6% respectively, 1.5km-2km recorded 9.2% and 12.6% while respondents on 1km-1.49km consented to 16.1% and 13.8%, also 29.8% and 22.9% of the respondents were of the opinion that the proximity of PFSs on the same lane and adjourning lane is between 0.5km-0.99km and the last proximity which is below 0.5km recorded 34.5% and 46.1%. The inferential from this analysis is that majority of the PFSs in the study area did not adhere to the planning standard of siting PFSs as recommended by the Department of Petroleum Resources (DPR).

Table 3: Proximity of PFSs in Akure

Proximity of PFSs	**Same lane Frequency**	**Percent**	**Adjourning lane Frequency**	**%**
Above 2km	9	10.4	4	4.6
1.5km-2km	8	9.2	11	12.6
1km-1.49km	14	16.1	12	13.8
0.5km-0.99km	26	29.8	20	22.9
Below 0.5km	30	34.5	40	46.1
Total	**87**	**100.0**	**87**	**100.0**

Source: Author's compilation, 2018

Plate 1: Honors Ventures PFS and Fola-Bola PFS directly opposite each other
Source: Author's compilation, 2018

There were misconceptions as revealed in plate 1 in the location of PFSs along Oke-Ijebu, Akure in the jurisdiction of OSDPC and OSMHUD, as the planning standards regulating siting of PFSs were not considered. It is against the planning regulation to have PFSs directly opposite each other, as this is evident between Joykay PFS and Latoyem PFS, also Honors PFS and Fola-Bola PFS. The implication is that it increases air and noise pollutions; it also leads to traffic congestion as a result of on street parking most especially during the period of fuel scarcity.

Land Area of PFSs in Akure

On site measurement carried-out by the researchers on PFSs land area as revealed onTable 4 shows that 4.6% of the total PFSs in Akure have land area that is above 2,592m^2 (above 4 plots), 10.3% accounted for PFSs having land area between 1,800m^2-2m592m^2 (3-4 plots) while PFSs with land area of 1,296m^2-1,799m^2 (2-3 plots) indicated 20.7% and PFSs whose land area falls between 648m^2-1,295m^2 (1-2 plots) revealed 64.4% of the total PFSs in Akure. The impression of the analysis on Table 4is that about 85% of the PFSs in the study area were not in compliance with the Planning standard of 1800m^2 recommended land area approved for the siting of PFSs.

Table 4: Land area of PFSs in the study area

Land area	**Frequency**	**Percent**
Above 2,592m^2	4	4.6
1,800m^2-2,592m^2	9	10.3
1,296m^2-1,799m^2	18	20.7
648m^2-1,295m^2	56	64.4
Total	**87**	**100.0**

Source: Author's compilation, 2018

Plate 2: Akinduko Oil Nig. Ltd. located on 972m² (1½) plot of land
Source: Author's compilation, 2018

It is obvious from Plate 2 and Table 4 and 5 that about 85% of the PFSs in Akurefalls below the recommended standard of 1,800m². This implies that all adequate setbacks to roads, boundary lines, dispensing pump, USTs, etc were not maintained. Most often, traffic congestion are always being experienced when Lorries bring fuel to these PFSs, as all on-coming vehicles will have to be stopped for such lorry to maneuver its way into the premises of the PFS and so disturbing the free traffic flow. Moreover, in some situations productive hours are wasted, while some vehicle owners will not want to be delayed in the long queue, in the process of maneuvering out this could result into an accident.

Table 5: Approximate Land Area of PFSs in Akure

S/No	Name of PFS	Recommended Standard (m²)	Existing Area (m²)	Disparity (m²)
	OWODE/IMUAGUN	**WARD**		
1	NNPC	1,800	4,249	2,449*
2	First Deep Water oil & Gas	1,800	1,307	493**
3	Divine Fruit	1,800	2,418	618*
4	Zion Filling Station	1,800	1,304	496**
5	Baduek	1,800	1,051	749**
6	Oando	1,800	1,274	526**
7	Akinola Oil and Gas	1,800	1,402	398**
8	Energy Filling Station	1,800	1,558	242**
9	Scab Petroleum	1,800	1,297	503**
10	Babatunde Petroleum	1,800	1,062	738**
11	J.J.K.	1,800	1,006	794**
12	Mobil	1,800	2,664	1,536*
13	NNPC	1,800	1,105	695**
14	Acorm	1,800	1,995	195*
15	Mania	1,800	1,932	132*
16	Shamrous	1,800	1,249	551**
17	Fagow Oil	1,800	859	941**
18	NNPC	1,800	927	873**
19	Mrs Oil	1,800	1,475	325**
20	Forte Oil	1,800	1,848	48*
IJOMU/OBANLA WARD				
21	Agbogbo Oil & Gas	1,800	1,298	502**
22	Solovic Petroleum	1,800	1,405	395**
23	Emmolay	1,800	1,008	792**
24	Total	1,800	2,017	217*
25	A.P	1,800	1,752	48**
26	3 Ages Divine Ventures Ltd	1,800	994	806**
27	Olrof	1,800	1,016	784**
28	NNPC	1,800	1,496	304**
29	Energy	1,800	1,668	132**
30	NNPC	1,800	1,289	511**
31	Fola Bola Oil & Gas Ltd	1,800	1,205	595**
32	Honors Ventures Ltd	1,800	993	807**
33	Latoyem Petroleum	1,800	1,006	794**
34	NNPC	1,800	1,073	727**
35	Koleman	1,800	1,281	519**
36	Total	1,800	1,802	2*
37	OandoAlagbaka	1,800	1,405	395**
38	NNPC	1,800	1,274	526**
39	Mobil Alagbaka	1,800	3,107	1,307*
40	John Olatunda Freeman Ltd	1,800	1,279	521**

OKE ARO/URO I WARD				
41	Samduck	1,800	1,502	298**
42	Energy	1,800	1,293	507**
43	Goodluck	1,800	1,409	391**
44	Salix	1,800	1,007	793**
45	NNPC	1,800	1,371	429**
46	Baji	1,800	1,068	732**
47	NIPCO	1,800	1,302	498**
48	Energy	1,800	1,553	247**
49	New Town	1,800	1,558	242**
50	DG Nig Ltd	1,800	994	806**
51	OmobamideleNig Ltd	1,800	1,507	293**
GBOGI/ISINKAN I WARD				
52	AONL	1,800	1,206	594**
53	Mania	1,800	1,658	142**
54	Conoil	1,800	1,559	241**
55	Damilak	1,800	1,806	6*
56	Energy	1,800	1,662	138**
57	A.P	1,800	1,482	318**
58	Mania	1,800	1,805	5*
59	NNPI	1,800	994	806**
60	Forte Oil	1,800	1,307	493**
61	Teslat	1,800	1,062	738**
GBOGI/ISINKAN II WARD				
62	GIP	1,800	1,051	749**
63	Oando	1,800	1,406	394**
64	Conoil	1,800	1,234	566**
65	Oando	1,800	1,942	142*
66	Adebowale	1,800	1,059	741**
67	Tunji&Tunji	1,800	1,384	416**
68	Stalon	1,800	897	903**
69	NNPC	1,800	1,118	682**
70	Freeman	1,800	1,002	798**
71	Baduek	1,800	1,497	303**
72	Oando	1,800	2,018	218*
73	LNPC	1,800	1,264	536**
74	Forte Oil	1,800	1,684	116**
75	First Deep Water	1,800	1,198	602**
ODA WARD				
76	Satabest	1,800	1,470	330**
77	Reliable Oil	1,800	1,142	658**
78	Sunfunk	1,800	1,380	420**
79	MOVON	1,800	1,248	552**
80	AONL	1,800	1,206	594**
81	Steph Sunny	1,800	1,312	488**
82	Akinduko	1,800	972	828**
OSHODI/ISOLO WARD				
83	Fagov Oil	1,800	1,105	695**
84	NNPC	1,800	1,302	498**
85	MRS Petroluem	1,800	1,029	771**
86	Shamarock	1,800	1,385	415**
87	Emmolay	1,800	1,228	572**

** PFSs with Land Area within and above Recommended Standard*
***PFSs with Land Area below Recommended Standard*
Source: Author's compilation, 2018

Proximity of PFSs to Residential/Public buildings

On site measurement of the proximity of PFSs to Residential buildings is revealed on Table 6. 64.3% of the total buildings in the study area fall less than 100 metres to the PFSs in Akure, while 33.3% of the buildings are also within the range of 100 metres-200 metres and between 210 metres-300 metres has 2.4%. It could be deduced from the analysis that adequate setbacks were not considered when PFSs were constructed in the study area, and this hinders the adaptation of planning standard. Consequently, all the buildings located within 150 metres radius to PFSs in Akure stand the risk of hazards. This was in agreement with European Commission (2008), DPR (2010), Afolabi (2011), Marta, *et al* (2011), and Blamah, *et al* (2012 that petrol is a volatile liquid which gives off vapour, this vapour contains benzene and other organic compound that are harmful to human and the environment.

Table 6: Proximity of PFSs to residence

Location of PFSs	Frequency	Percent
Less than 100m	267	64.3
100m-200m	138	33.3
201m-300m	10	2.4
Total	**415**	**100.0**

Source: Author's compilation, 2018

Plate 3: A residential building between Steph Sunny and Movon PFSs along Ijoka Road, Akure.
Source: Author's compilation, 2018

Reconnaissance survey uncovered two PFSs that were constructed directly beside a residential building, this shows that the building is not safe from air pollution and underground water contamination. However, in a situation of fire outbreak from any of these PFSs, the safety of lives and properties are not guaranteed. Another important effect of these PFSs on the building is that of noise pollution during fuel scarcity as well as noise and fume inhalation from the PFSs generators. All the aforementioned will definitely hinder the healthy living of the residence of the building.

Enforcement of Planning Standards on PFSs in Akure

The enforcement of planning standards on establishment of PFSs were not strongly enforced as discovered through field survey(Table 7). The oral interview on the approving bodies also revealed that Planning standards were slightly enforced in the study area on the physical planning parameter highlighted, this is so partially because the planning authorities in Ondo State Ministry of Housing and Urban Development (OSMHUD) and Ondo State Development and Property Corporation (OSDPC) do not have modern equipments to work with also have shortage of manpower that could effectively carry-out development control activities in the study area. Other banes to effective enforcement of planning standards include; corruption on the side of the institutions and political interference on approval and locations of PFSs in the study area. Oladoyinbo, (2013) reveals that about 747 filling stations were registered with the government, while only 342 of them had submitted their files with the commission. According to reports, the commission, upon its visit to the locations of the PFSs, discovered that many of them flouted the regulations and specifications given to them before sitting their Petrol Filling Stations.

Table 7: Enforcement of planning standards on PFSs in Akure

Enforcement	Setback to road		Air space of 100m to residence		Maximum percentage Developed		Distance between two PFSs on the same lane		Distance between two PFSs on adjourning lane	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Strongly enforced	10	11.5	0	0	7	8.0	0	0	0	0
Enforced	19	21.8	13	14.9	20	23.0	8	9.2	5	5.7
Slightly enforced	58	66.7	65	74.7	48	55.2	32	36.8	29	33.3
Not enforced	0	0	9	10.3	12	13.8	47	54.0	53	60.0
Total	**87**	**100**	**87**	**100**	**87**	**100**	**87**	**100**	**87**	**100**

Source: Author's compilation, 2018

CONCLUSION AND RECOMMENDATIONS

It is pertinentto note that many of the PFSs in the study area are not in compliance with the Planning standard on the land area approved for the location of PFSs; also some of these PFSs are located beside or opposite each other, at road junctions without adequate setbacks to the roads thereby hindering the visibility of vehicles, which may result into vehicular accident. Therefore, the environmental protection standard at PFSs should be enforced in order to prevent the numerous risks and threats of PFSs on the environment. The following are recommendations on means to achieve this:

(i) Modern planning equipments such as Handheld Multigas Analyzer, Handheld Hydro Analyzer, Handheld Traffic Counter, etc should be provided by the government which could be used to create an enabling environment for living. Also qualified personnel should be recruited for the development control activities.

(ii) Any officer caught in the act of compromising planning standards should be made to face the wrought of the law and completely dismissal also enforcement of workable planning standards policy should be implemented on the proximity of PFSs to residential/public buildings.

(iii) Policy framework that gives the professionals in the Ministry, local and state governments the capacity to fulfill their constitutional obligation is required in order to ameliorate political interference.

(iv) Synergy between OSMHUD and OSDPC on how to effectively implement the planning standards putting into cognizance distance between PFSs.

(v) It is proposed that the plot size of a PFS should be such that will accommodate all component of a PFS, as well as without causing any hindrances to the movement of vehicles of expected dimensions within a PFS and this should be strictly enforced.

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