

PRESENTATION ON THE AIR QUALITY STANDARDS AND REGULATIONS FOR UGANDA

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- Status of Air Quality in Kampala Uganda
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- Legal framework
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Status of Air Quality in Uganda

• Air pollution is a big challenge in most developing countries and Kampala city in Uganda is not different. A study carried out within Kampala in 2022 showed that , PM_{2.5} varies between 55 to 60μg/m³, which is about 12 times the WHO air quality guideline of 5 μg/m³.

Air Pollution Sources

• In Kampala City, air pollution is on the rise due to fumes from vehicles and motor bikes, burning of waste, industrial emissions, and dust from marram roads. All these sources, negatively affect the air quality and poses serious health risks to City dwellers.

Summary of daily AQI frequency for the period of March 2020-March 2021(Data Source; KCCA - Airqo Monitoring stations)

Monitoring Location		Annual AQI distribution (days within each AQI Category for the year March 2020-March 2022)					
Division	Parish	Moderate	Unhealthy For Sensitive Groups	Unhealthy	Very Unhealthy		
Kawempe	Wandegeya	11	112	238	0		
	Kyebando	0	77	282	0		
	Bwaise	0	29	321	10		
Rubaga	Namirembe	0	4	265	0		
	Kawala	0	72	287	0		
	Mutundwe	0	94	262	0		
Nakawa	Nakawa	14	129	218	0		
	Luzira	26	146	189	0		
	Kyanja	0	66	290	0		
Makindye	Kisugu	10	116	234	0		
	Ggaba	33	147	181	0.		
	Kibuye	0	106	252	0		
	Civic Centre	7	131	223	0.		
	Nakasero	5	105	251	0		
Central	Kamwokya II	0	72	284	0		

Legal framework

The Constitution of the Republic of Uganda

The National Environment Management Authority of Uganda (NEMA), Mandate

Objectives of the establishment of the Air Quality Regulations

- To control emissions to air and protect public health
- To regulate industrial, vehicular and other source emissions
- To protect workers from occupational exposure
- To regulate and provide information on national air quality.

Air Quality Standards

The process of developing the air quality standards was undertaken together with other stakeholders and development partners such as;

Stakeholders

- National Bureau of Standards (UNBS),
- Ministry of Gender and Social Development,
- Ministry of Water and Environment,
- Ministry of Energy and the Petroleum Authority of Uganda
- Ministry of Works and Transport

Air Quality Standards-Stakeholders

- Kampala Capital City Authority (KCCA)
- Makerere University- (Computer Sciences- Chemistry Depts),
- NGOs Clean Air Initiatives,
- Development partners such as the US Embassy and oil for development project- Nowegians

Air Quality Regulation

- The draft Regulation is divided into 10 Parts;
- General Prohibitions;

Air Quality Regulations - addresses

- Ambient air quality,
- Emissions from different sources including,
- emissions from stationary,
- mobile, and
- fugitive emissions.

Air Quality Regulations

- Other aspects provided for include;
- · Control of emissions from burning of materials,
- Emissions from odour,
- Inspection of mobile emission sources and
- Trans boundary air pollution among others.
- This part further provides for mobile source emission reduction technologies and advocates for use of cleaner technologies among others.

Air Quality Regulations- Covers;

Occupational air quality emission limits for the protection of workers from workplace exposure and the requirements to ensure that the work environment is free of pollutants.

Air Quality Regulations-

• Indoor Air Quality limits and Protection of occupants of premises

Air Quality Regulations-Monitoring and management by the Authority and Lead Agencies

- Provides for the Authority to develop a national Air quality management plan with measures to reduce and address the impacts of air pollution in residential, industrial and other sensitive environments among others.
- The lead agencies are required to submit annual air quality management report to the Authority.

Air Quality Regulations- monitoring by the Authority and facility

- Provides for air quality monitoring and management by the operator of a facility.
- Requirements for facility operators to submit an annual emissions compliance report to the Authority

Air Quality Regulations-

• on Pollution Control license - acquisition process of licenses for point source emissions and; occasioning of emissions of any pollutants in excess of the Air quality standards.

Air Quality Regulations-

- Administrative provisions for the licensing process.
- Requires the authority to review Air Quality Standards, within five years.
- Provides for the Authority to maintain a database of License's issued under these Regulations,

Air Quality Regulations- PART X

• Provides for offences and penalties.

Air Quality Regulations-SCHEDULES

- Ambient air quality
- Source emissions
- Vehicle emission standards
- Occupational health and safety standards
- Indoor air quality standards

Comparison of the NEMA standards with WHO interim targets and the ambient air quality situation in Kampala City

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Pollutant	Averaging	WHO Interim Targets				AQG	UG Std
	time	1	2	3	4		
PM2.5	Annual	35	25	15	10	5	25
	24 hrs	75	50	37.5	25	15	35
PM10	annual	70	50	30	20	15	40
	24 hrs	150	100	75	50	45	60
O3	Peak	100	70		-	60	
	8 hr	160	120		-	100	120
No2	Annual	40	30	20	-	10	10
	24 hrs	120	50	-	-	25	50
SO2	24 hrs	125	50	-	-	40	20
CO	24 hrs	7	-	-	-	4	7

Way forward

- Engaging all relevant stakeholders
- Creating awareness at community level
- Connection of all facilities to the National Air Quality Portal Realtime data transfer

Way forward

- Monitoring of other areas—Kampala city already covered
- Establish more reference monitors- Quality assurance
- Use of satellite data to obtain information on other parameters Tropomi and others

Thank you for listening