Workshop: The fate of sanitizers and disinfectants following broad spraying in fight against COVID 19: An Aquatic Ecosystem perspective

Date: 18 February 2022

Time: 10:00-13:05

Background:

One of the notable unintended consequential outcomes of COVID–19 pandemic is the rapid and wide use of sanitizers and disinfectants to control the spread of SARS –CoV–2 virus. To date, the benefits of sanitizers and disinfectants to control the spread of COVID–19 are undeniable. However, concurrently there has been a dramatic increase on the release of highly variant classes of chemicals from these product categories into the aquatic environment, and exposure to humans of largely unknown risks. Scientific data show chemical pollutants are everywhere including the water we drink, the air we breathe, the food that we eat, the rivers and oceans we take leisure on, and they are taking a toll on human health, and ecological integrity. In 2015, pollution was estimated as cause of some 9 million deaths worldwide — three times more than those from AIDS, tuberculosis and malaria combined besides unquantified ecological damage.

This raises the question including how can the benefits of sanitizers and disinfectants to fight COVID–19 be optimized without compromising the ecological health? What needs to be done by when, by whom and where to protect ecosystems as a direct and indirect consequence of wide use of sanitizers and disinfectants? These and other concerns have been raised by governments, regulators, scientists, urgencies mandated to protect natural resources, and the general public across the globe.

To respond to these questions among others, at present the Water Research Commission (WRC) has embarked on building knowledge critical to understand the plausible ecosystem responses and the risks of introducing large amounts of constituent chemicals in sanitizers and disinfectants to aquatic ecosystems and biota. This is by funding a multi–institutional collaborative research, and in working partnership with the Universities of Johannesburg, South Africa, and Pretoria, and Umgeni Water.

To advance data and knowledge generation relevant to diverse stakeholders, the project team together with WRC seeks to host a one day virtual workshop. The purpose of the workshop is multifold. First, to provide a platform for a variety of stakeholders to interact including those in industrial production, supply chain, water and wastewater treatment sectors, government departments, regulators and researchers/scientists. Secondly, seek to develop a strategy that aids to achieve fine balance of safeguarding human lives, and proactive protection of life supporting resources (e.g., water, food, etc.) from adverse implications of chemical pollution. Thirdly, develop a platform for information sharing in order to enrich science–evidence based approach to chemicals management. And finally, an opportunity to have scientists/researchers working on the project to share data, and solicit inputs to address areas plausibly with knowledge deficits.

Audience:
Chemical regulators, Government Departments, such as, Tourism, Environment-Forestry and Fisheries, Science and Innovation, Economic Development, Human Settlements, Water and Sanitation, Agriculture and Rural Development, Education, Researchers, Municipalities, Academia, consultants, Private sector, Citizen Scientists, NGO's, etc.

Draft Programme

Programme	
10H00	Welcome – Mr Bonani Madikizela, Water Research Commission (WRC)
10H00 – 10H10	Opening Remarks – Prof Stanley Liphadzi, Group Executive, WRC
	Session Chairs: Dr Anele Mpupa (University of Johannesburg) and Mr Sanele Mazibuko (Umgeni Water)
10H10 – 10H30	**Presentation 1: Sanitizers and disinfectants in the South African commerce during COVID-19, and potential ecological risks** Prof Ndeke Musee – University of Pretoria, South Africa
10H30 – 10H40	Q & A
10H40 – 11H00	**Presentation 2: Occurrence of chemicals used in response for COVID-19 in the South African aquatic environments** Prof Philiswa Nosizo Nomngongo – University of Johannesburg, South Africa
11H00 – 11H10	Q & A
11H10 – 11H30	**Presentation 3: Role of environmental specimen bank in sound chemical management: a case in COVID-19 pandemic** Prof Khanyisile Mbatha – University of South Africa. South Africa
11H30 – 12H10	Q&A and Short discussion
12H10 – 12H20	Closure and way forward – Dr Shafick Adams, WRC