SANEDI AND DOD PARTNER FOR WATER TREATMENT WORKS PROJECT IN HOEDSPRUIT

Brings clean, safe water to fight the spread of COVID-19

SANEDI (South African National Energy and Development Institute) is partnering with the Department of Defence (DoD) for a Water Treatment Works project at the SANDF Air Force Base in Hoedspruit in the Maruleng Municipality, Limpopo in light of COVID-19.

The provision of safe water, sanitation and hygienic conditions is essential for protecting human health during all infectious disease outbreaks including COVID-19. This is according to the World Health Organisation’s (WHO) recent report: Water, Sanitation, Hygiene, and Waste Management for the COVID-19 Virus.

“Ensuring evidenced-based and consistently applied WASH (water, sanitation and health) and waste management practices in communities, homes, schools, marketplaces, and health-care facilities will help prevent human-to-human transmission of, the virus that causes COVID-19,” adds the report.

This Water Treatment Works project, which commenced on 28 April 2020, with a preliminary scoping, will focus on the provision of reliable clean water and energy efficiency that will have a direct impact on supporting and promoting good hygiene, to in turn curb the spread of infectious diseases such as COVID-19.

The project

Reliable and sufficient energy form the backbone in the effective delivery of clean water and waste treatment systems. Hoedspruit is situated in a severely water stressed climatic zone compounded by a municipality that faces many electricity and water supply challenges.
The Maruleng Municipality must deliver services hampered by an aging, often defunct and energy inefficient infrastructure of sewage and water treatment works which is based on the SANDF’s Air Force Base. The SANDF is able to facilitate a direct intervention by SANEDI to assess and ultimately implement energy solutions in order to assist with the situation, allowing for clean water distribution within Hoedspruit and surrounds. The collaboration between SANEDI and SANDF is a mutually beneficial one and is expected to expedite this five-year project towards completion.

The Water Treatment Works project will initially assess the current infrastructure on the air force base, looking specifically at energy consumption as well as the current state of repair and operations of the water treatment plant as well as the sewage works. SANEDI will also investigate the opportunities for clean energy (energy efficient and renewable energy sources) interventions across this water treatment infrastructure.

Based on the above assessments and available data, SANEDI will recommend the relevant energy and water system interventions. This is expected to lead to project initiation within 2020 (COVID-19 restrictions allowing).

Dr. Karen Surridge, Manager: Renewable Energy Centre of Research & Development, Clean Energy at SANEDI explains: “The Water Treatment Works project at Hoedspruit Air Force Base will focus primarily on process energy efficiency, possible renewable energy interventions and system support towards efficient, reliable and clean water provision.

“The project is expected also to include skills development and transfer, long-term maintenance and development of an established inter-institutional support team comprising SANEDI, the SANDF and the Maruleng Municipality.”

General Joseph Ledwaba of the DOD Defence Works Formation, sorting under Chief of Logistics SANDF, adds “We are excited to be a part of this energy intervention and look forward to a fruitful collaboration that leads to a reliable and health-promoting water treatment and supply to the Hoedspruit community”

**The role players**

Apart from facilitating the all-important collaboration with the municipality, the SANDF will provide system maintenance and structural implementation support. Also, any hardware installation will be protected by the SANDF – access control will therefore be stringent, preventing potential theft and vandalism.

SANEDI features an entrenched experience in the execution of clean energy applications in water treatment projects. To date, SANEDI has successfully completed municipal water
treatment works projects through its REEEP (Renewable Energy and Energy Efficiency Partnership), projects at the !Kheis Local Municipality in the Northern Cape and Nelson Mandela Bay Metropolitan Municipality in the Eastern Cape.

“Clean water is paramount to good hygiene, especially under the dire threat of the COVID-19 pandemic where one of the most effective measures of prevention of the infection, and its spread, is hand and face washing. With the Water Treatment Works project at Hoedspruit we’re hoping to establish an infrastructure that will provide clean, safe water for the military base, residents in the town and the surrounding communities,” concludes Surridge.

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About SANEDI
The South African National Energy Development Institute (SANEDI), is a Schedule 3A, State Owned Company, Established by the Government to direct, monitor and conduct applied energy research to develop innovative, integrated solutions to catalyse growth and prosperity in the green economy. It drives scientific evidence-driven ventures that contribute to youth empowerment, gender equity, environmental sustainability, and the 4th Industrial Revolution, within the National Development Plan (NDP), through consultative, sustainable energy projects. For more information, go to www.sanedi.org.za.