Nairobi is the capital and the largest administrative, commercial and industrial center of Kenya. In 2016 the City Council of Nairobi began working with the Climate and Clean Air Coalition (CCAC) Municipal Solid Waste (MSW) Initiative to address these challenges and improve solid waste management in general. Through this partnership, the city is implementing several activities that will generate a range of environmental, economic, and public health benefits, including reduced emissions of short-lived climate pollutants (SLCPs), primarily methane and black carbon. As part of these activities, a two-way exchange programme was designed whereby Nairobi and Dar es Salaam, Tanzania, had the opportunity to visit eThekwini (Durban), South Africa, to learn about their waste management practices, especially landfill management and operations.

**CHALLENGES AND OBJECTIVES**

At present, half of solid waste generated is left uncollected or illegally dumped inside the city and the remaining is carried to a final disposal site. The final disposal site, called Dandora, is an open dump thus creating detrimental hygienic and environmental effects on its surroundings and requires prompt resolution.

The construction of a new landfill to divert the waste stream from the Dandora dumpsite is planned in Murang’a County. However, due to insufficient funds from the Government of Kenya, a loan from a donor agency may be necessary. There is also a disagreement between the Nairobi and Murang’a County since a great part of the waste stream of Nairobi City will go to the site in Murang’a County. The landfill operators of the new facility will need to ensure that the landfill is managed adequately. The loan from the donor agency would require political agreement between the counties.

In the meantime, Nairobi City officials visited the City of Durban, via the CCAC City Exchange programme, to learn more about the best practices of landfill management and establish working relations for future collaborative work to clean up Nairobi. At a later date, city officials from Durban travelled to Nairobi to visit and assess the solid waste facilities and provide guidance and recommendations.
RESULTS OF THE CITY EXCHANGE

Based on the assessment during the 2nd leg of the City Exchange in Nairobi, and with the help of visiting experts from Durban Municipality, a clear set of recommendations for the City of Nairobi and Murang’a County were drafted. The set of recommendations included practical steps that can be implemented in the short-, medium-, and long-term for eventual closure of the Dandora dumpsite, described below, as well as a template to develop an operation plan for final disposal sites.

Short Term Recommendations:
*Plant Utilization:* The assessment showed that sufficient vehicles (dozers, excavators, trash compactors) are on site to deal with the present payload. However, servicing and maintenance require immediate attention.

*Uncontrolled Picking:* Nairobi City County needs to consider formalizing the relationship with informal waste workers to address health and safety aspects and allow for education and training. Most of the open fires, resulting black carbon emissions, initiate from waste pickers smoking at the dumpsite.

Short to Medium Recommendations:
*Cover Material:* A previous test cell at the dumpsite proved that cover material can be used. Source and transport for the cover material will need to be secured.

*Training and Support:* The site managers and operators require immediate training to be able to realize the operations plan.

*Weighbridge:* The weighbridge needs to be operational to establish incoming waste; this data will be necessary going forward to plan for future operations.

Long Term Preparation for Closure/Rehabilitation:
- Filling all low soil depression, trimming to recommended slope to improve safety of the dumpsite.
- Dealing with leachate runoff with adequate capping procedures as outlined in the technical requirements

The commitment of the City of Nairobi to participate in the City Exchange programme was duly expressed in a signed letter of intent in which the City acknowledged the political willingness to act going forward after the exchange. The International Solid Waste Association (ISWA) organized the City Exchange between these cities.

MORE INFORMATION
www.waste.ccacoalition.org
www.iswa.org