

BAHRAIN: A CASE STUDY ON COMMITMENTS-RELATED BEST PRACTICE OR LESSONS LEARNED IN SANITATION

Healthcare Waste Treatment Facilities: The Kingdom of Bahrain generates around 3 tons/day of healthcare wastes (HCW), such as sharps, infectious anatomical, pharmaceutical, chemical and other wastes, that are produced by numerous hospitals, clinics, health centers and allied facilities. As they impose severe risks on occupational and public health, Bahrain has undertaken several measures to ensure the environmentally appropriate treatment and sanitarily disposal of healthcare wastes in line with the national and international standards.

Through its facilities distributed around the country, Ministry of Health (MOH) generates about 2.3 – 2.4 tons/day of HCW which had been treated in the past by two incinerators. These incinerators were situated in Salmaniya Medical Complex and they were so outdated that they were not complying with the national standards of air emission.

Continuous coordination among relevant organizations; namely Environmental Affairs (EA), MOH and Ministry of Finance; was taken place to find a suitable solution for HCW problem taking into consideration the national economic and environmental priorities. Eventually, Bahrain Waste Management Company was tendered on Build-Own-Operate basis to construct, operate and maintain the state-of-the-art incineration system for the treatment of healthcare wastes in accordance to Ministerial Order (1) 2001.

One hectare space was leased to the contractor for constructing the plant and its associated facilities, such as bins storage, washing, weighing, fire fighting ...etc. The contractor installed two incinerators with a capacity of 250 kg/day that will hopefully cater the whole quantities of HCW generated during the next ten years. It was requested these incinerators adopt a modern technology which will comply with the national standards regarding air emissions.

Currently, three dedicated and secured vehicles daily collect HCW and safely store, handle and transfer these wastes to the treatment plant which will treat them within the same day. Moreover, air emission is periodically monitored by independent qualified laboratory and special reports are directed to Environmental Affairs.

The success of this project is one of the major milestone in environmental protection, which depict the serious commitment and dedication of the government of Bahrain in the protection of public health by proper management of waste disposal and efficient involvement of stakeholders.