

## WRECP Activities at Ekeker

The USAID Water Reuse and Environmental Conservation Project is working closely with the Government of Jordan to implement the project's recommendations for rehabilitating the complex Ekeker waste site, so it can continue to serve municipalities and industries in North Jordan.

### Site master plan (completed)

Rehabilitating this complex site will require a wide variety of technical projects, led by diverse entities over several phases. Contaminated lagoons will be cleaned, proper closure will be achieved at the old municipal solid waste (MSW) site, new liquid waste facilities will be developed, and new MSW cells will be built. WRECP has prepared a master plan to coordinate planning and financial management among all these entities.

### Design and tender documents for new lined Zibar lagoon (completed)

Zibar (olive oil waste) will continue to be disposed of Ekeker. A floating layer of solids and grease has accumulated on the surface of the site's unlined lagoons; this layer prevents the Zibar from evaporating. In the long term, the unlined lagoons are to be replaced by lined ones, equipped with facilities to remove solids and grease. In the near term, a new lined lagoon must be built, to relieve the pressure on the current lagoons and to allow their cleanup, remediation and replacement. The design and tender documents have been prepared and submitted to the MoEnv.

### Design and tender documents for 5-year landfill cell, for MSW expansion (underway)

Little landfill airspace remains at the facility. The recent tremendous increase in the volume of MSW disposal from refugees is one cause; another is the inefficient use of available airspace, since the site does not use effective compaction practices. If Ekeker is to continue receiving MSW from the local community and from Syrian refugees, a new landfill cell must be developed. The comprehensive plan approved by the Prime Minister calls for expanding the site's disposal capacity both horizontally and vertically, on recently acquired land; it also includes training on proper compaction requirements, to optimize use of airspace. The design and tender documents for the new MSW cell are to be prepared by the WRECP after the approval of the site master plan.

### Request for Proposals for Materials Recovery Facility and Refuse Derived Fuel Facility (underway)

Current recycling at Ekeker consists of manual scavenging from the working phase of the landfill area. Basically, people pick through the garbage after it is dumped at the landfill and before it is covered. Building and operating an integrated Materials Recovery Facility and Refuse Derived Fuel (MRF/RDF) facility at Ekeker will allow the safe, effective recovery of recyclables from the waste stream; removing recyclables from the waste stream will also extend the life of the sanitary landfill. Removing glass, metals, and inert wastes has the added benefit of leaving behind mainly combustible materials, thus improving the efficiency of RDF generation. A draft request for proposals for this facility is to be prepared after approval of the site master plan.



Site master plan will integrate multiple efforts



Grease and solids on Zibar pond surface prevent evaporation



Mixed waste lagoons require clean-up



Leachate seeps through solid waste landfill cell