Inter-related Activities will Support Russeifah Rehabilitation

The rehabilitation of Russeifah is an important national project for Jordan, requiring cooperation across GoJ ministries and agencies. Each area in Russeifah has a different set of stakeholders, but all should be remediated in synergy with each other so the resultant development is organized according to a common plan and vision. MoMA's implementation committee is to coordinate and assign responsibility for the following needed actions.

Institutional

- Resolve current issues such as ownership of the piled phosphate ore
- After remediation, hand over areas that can be developed to appropriate entities
- Even after site remediation is over, retain continuous involvement of Jordan Nuclear Regulatory Commission in areas with high naturally occurring radioactivity

Planning

- Identify roles and responsibilities for remediating all disturbed and contaminated areas
- Develop official land use plans for disturbed areas
- Create a fund or organization to allocate funds for prompt remediation of Russeifah and similar sites in Jordan

Regulatory

- Enforce high penalties for illegal disposal of any other waste within or around the site, particularly construction and demolition waste
- Implement manifest system for construction waste hauling trucks, to reduce illegal disposal
- Develop and implement regulations to provide financial assurance for proper site remediation and closure at similar mining and MSW disposal sites in the future

Project Management

- Engage an engineering firm to support the tendering process and supervise the construction phase of the remediation and closure

Reaching 40 meters high and containing 4.5 million m³ of ore, the phosphate pile must be stabilized to protect public health and safety.

USAID | JORDAN
FROM THE AMERICAN PEOPLE

Water Reuse and Environmental Conservation Project

Cleaning Up Jordan's Environment—Russeifah

USAID Water Reuse and Environmental Conservation Project team tests geotechnical slope stability at the Russeifah phosphate pile area.

The WRECP design will improve Farah Park safety and aesthetics for the area's residents, including those at the adjacent Hittin Camp.

Site History

Phosphate ore was discovered in Russeifah during the construction of the Hijaz Railway in 1908. Commercial extraction of phosphate ore began in 1935, when individuals and small companies hand-excavated the ore by tunneling along exposed phosphate seams. In 1949 Jordan Phosphate Mining Company (JPMC) was established. JPMC's open-pit mining of approximately 13.5 km² at the site dramatically changed the topography; altered the natural watershed flow by creating deep pits; created overburden/reject piles; and left behind a large pile of low-grade phosphate ore. In 1986, the Greater Amman Municipality (GAM) began using the open mining pits for municipal solid waste disposal; this disposal area later was called the Russeifah Landfill.

Challenge

Many entities have stakes in cleaning up the Russeifah site, but no single entity had assumed responsibility until now. The Ministry of Environment (MoEnv) has agreed to take leadership, and the USAID-funded Water Reuse and Environmental Conservation Project (WRECP) has made comprehensive recommendations for cleaning and restoring these lands. To date, the MoEnv and the WRECP team have led site investigations and has determined how each area should be remediated. Next, the MoEnv is to guide clean-up and development efforts by other agencies, particularly the Ministry of Municipal Affairs (MoMA), Greater Amman Municipality (GAM), and Russeifah Municipality (RM).

GoJ Investigation of Issues

At the request of the Government of Jordan, a technical committee was formed on 12 August 2013 to study the site issues. The committee included representatives from RM, MoEnv, GAM, JPMC, Department of Land and Surveying, Ministry of Planning and International Cooperation (MoPIC), and WRECP. They reviewed previous reports, studied proposals, and submitted a broad set of recommendations to the office of the Prime Minster, including the WRECP project recommendations.

Next Steps

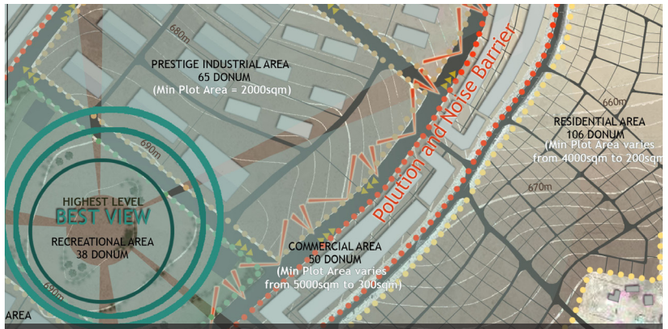
The prime minister's office approved the technical committee's report and designated MoMA in charge of implementing the recommendations. The site clean-up and development are remarkably complex and will call for cross-sectoral, multi-disciplinary, public-private cooperation. The MoMA implementation committee is focusing first on essential enabling works and efforts necessary for all the recommendations. For example, the site's official land use designation must be changed, to forestall potentially inappropriate development. The committee is also to assign responsibilities and allocate funds for the various projects.

USAID | JORDAN
FROM THE AMERICAN PEOPLE

Water Reuse and Environmental Conservation Project

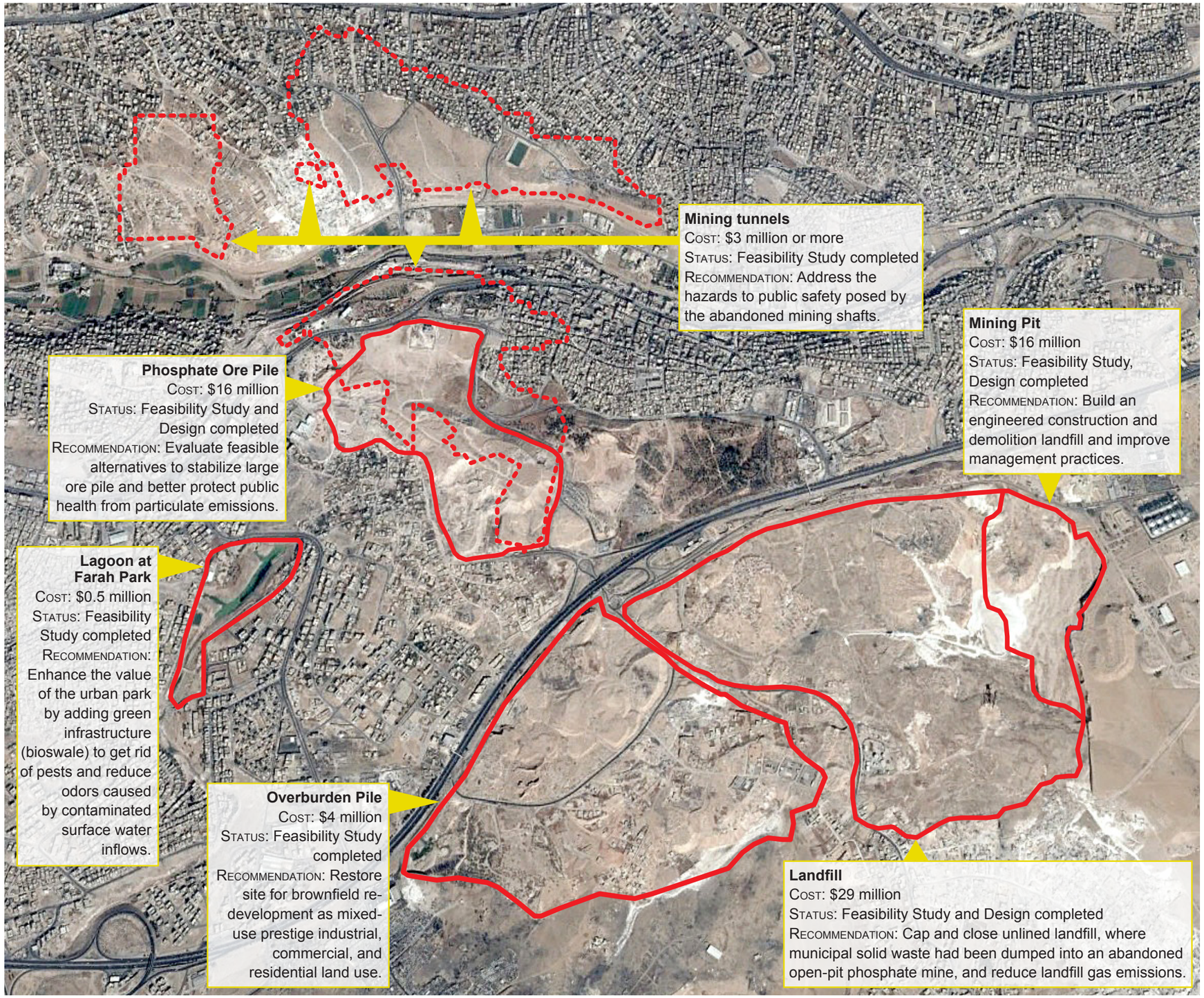
Proper landfill closure will enhance public safety and site aesthetics.

The engineered liner at the mining pit will protect the groundwater, and better management practices will extend the facility's useful life and end use.



Remediation of the overburden pile offers economic development opportunities for Russeifah.

Site investigations included radon measurements in the abandoned tunnels, so the feasibility study could address public safety issues.



USAID's integrated remediation plan for Russeifah will improve community living conditions, protect public health, protect water supply, and provide opportunities for economic growth.