

AIDSTAR-One ISSUE BRIEF

Public-Private Partnerships for a Centralized Waste Disposal Treatment Plant in Eastern Uganda

Background

In Uganda, health facilities are generating ever increasing volumes of hazardous waste, however, very few facilities have acceptable methods of health care waste disposal and open burning is widely practiced. Some larger facilities have incinerators to reduce the volume of waste but the majority do not achieve recommended temperature and smoke emission requirements. As a result, unsafe disposal continues to pose serious potential health and environmental risks to health workers, patients, waste handlers, and communities.

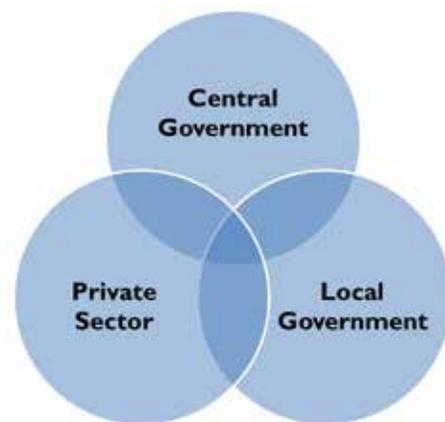
In view of the continued challenge of unsafe health care waste disposal, a centralized waste disposal plant is being established at Bulwooza village in Iganga district in Eastern Uganda. Once complete, the plant will have a sanitary landfill, lagoons, a large scale autoclave, a shredder, and an incinerator. The plant will use cost-effective and environmentally-friendly methods for handling, treating, and disposing of health care waste generated from all of the health facilities in the six initial districts of Kapchorwa, Mbale, Kamuli, Jinja, Bugiri, and Iganga. The plant could subsequently expand to reach a total of 26 districts in the eastern region.

The establishment of a centralized health care waste disposal plant will be achieved through a public-private partnership between Green Label Services Limited (GLSL; a private waste handling service provider)

and the Ugandan Ministry of Health at the national and district levels through District Health Teams and AIDSTAR-One. The AIDSTAR-One/Uganda project is funded by the U.S. President's Emergency Plan for AIDS Relief through the U.S. Agency for International Development and is focused on establishing an environment where health workers, patients, communities, and the environment are better protected against hazards posed by unsafe handling of health care waste.

What are public-private partnerships?

Public-private partnerships are collaborative endeavors that combine resources from both the public and private sectors to achieve targeted goals. These partner-



Total commitment from each partner maximizes efforts

ships enable governments and private sector entities to maximize their efforts through joint objectives, program design, and implementation, as they share resources, risks, and results.

Implementing the public-private partnership model in eastern Uganda

Eastern Uganda is facing a serious medical waste disposal problem. The region has geologic and hydrologic features—such as high water tables, rocky ground, significant soil erosion, and landslides—that prevent the use of traditional medical waste pits. The region also has a high number of people who use outpatient health services which results in a lot of health care waste. In addition the scaling-up of services such as HIV testing, tuberculosis directly observed treatment short-course, rapid diagnostic testing for malaria, and prevention of mother-to-child transmission of HIV generate large volumes of health care waste. Unfortunately, health facilities are failing to cope with the situation. Many facilities have no more space to bury waste. Methods used in disposing of waste are polluting neighboring developments and continue to pose risks to the environment.

Experience elsewhere in the developing world and in countries like Malaysia, Singapore, and South Africa shows that centralized waste treatment and disposal systems operated under public-private partnerships present the most efficient and sustainable approach to solving health care waste management challenges in the short and long run.

Benefits of the public-private partnership model

The public-private partnership model provides a number of benefits for health workers, patients, community, and the country at large. While the public sector (government) will provide overall leadership in the management of health care waste disposal, the private sector will contribute to timely collection, transportation, and disposal at the centralized disposal plant in Iganga. Ad-

ditional benefits resulting from the partnership include the following:

- Accelerated private investment in health care waste disposal in the country
- Availability of an acceptable and affordable, immediate and long-term solution to health care waste disposal
- Increased access for health facilities to quality disposal methods that allows health managers to attend to more important chores
- Protection for health workers, communities, and the environment. The centralized system will improve health care waste disposal practices thereby reducing the risk of exposure of health workers, patients, communities, and the environment to hazardous waste
- Timely removal of expired medicines from the health system, which reduces the risk of improper use
- Reduced burden on the Ministry of Health to provide health care waste management services directly allows the Ministry to concentrate on other important areas such as improving access to health services
- Wide-scale improved quality of health care.

Implementation

GLSL will use its own resources to set up and operate the centralized waste treatment and disposal facility. AIDSTAR-One will procure a high-temperature incinerator capable of destroying 1,000 kilograms of waste per hour. GLSL will also procure trucks and other waste management commodities that will be used for collecting waste and transporting it to the centralized facility for safe disposal. A geographical information system will be utilized to map routes that will be used

when picking up the waste from health facilities to help identify the most efficient routes.

It is a best practice that all waste is segregated at the source where it is generated before being handed over to the waste handling service provider. Each type of waste is treated and disposed of differently, therefore waste segregation enables the waste handling service provider to use the most cost-effective method available but without posing harm to people and the environment. AIDSTAR-One and U.S. Government implementing partners operating in the six benefiting districts will provide financial and technical support for training and mentoring of health facility staff on appropriate health care waste segregation procedures.

Health facility managers will enforce waste segregation practices and provide technical oversight in treating and weighing waste before it is handed over to GLSL (GLSL charges health facilities based on the weight of waste transported). To avoid exposures and possible subsequent transmission of infections, the waste will be double bagged and transported in closed rigid containers.

The U.S. Agency for International Development will initially pay for transportation and destruction of the waste collected from government and private not-for-profit facilities. Waste generated by private health service providers will be paid for by the owners of the facilities at cost recovery rates. To sustain these efforts, the central Ministry of Health plans to incorporate

waste management into its annual planning processes and budgets. Similarly, all health implementing partners working in the eastern region of Uganda will be encouraged to use the centralized waste treatment and disposal facility and to include waste management in their plans and budgets.

Who will use the disposal facility?

The following is a summary of targeted users of the centralized waste treatment and disposal facility:

- Public health facilities
- Private health providers
- Private-not-for-profit organizations
- Government ministries and departments
- Government regulatory authorities such as the National Environmental Management Authority, the Uganda Revenue Authority, and the National Drug Authority
- Multilateral agencies.

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