Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury

**Millennium Development Goal:**
Goal 7 – Ensure Environmental Sustainability

**Targets:**
Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

**Relevant India Development Goal:**
As a signatory to the UN Framework Convention on Climate Change and the Kyoto Protocol, the Government of India supports international efforts for mitigating the impact of greenhouse gas (GHG) emissions. Facilitate achievement of international standards on biomedical waste management

**Background**
This is a global project with national components in eight countries: Argentina, India, Lebanon, Philippines, Senegal, Vietnam, Latvia and Tanzania. The focus of the project is to demonstrate best practices in healthcare waste management such as promoting the use of alternative waste treatment technologies, improved waste segregation practices, waste minimization and the use of appropriate alternatives to mercury-containing devices. Further, to ensure sustainability and replication of project achievements, training of different stakeholders in the healthcare sector and appropriate training programmes will be put in place.

**Objectives**
- Leverage existing infrastructure and expertise for the development and implementation of local, national and global coordination structures and mechanisms to implement project’s objectives
- Demonstrate best practices in healthcare waste management in model facilities, including installation and use of non-burn waste treatment technologies, waste segregation, etc with participatory training at the local and national levels. The focus will be on the replicability of these models to permit country operationalization of the Stockholm Convention
- Raise and enhance awareness in the healthcare sector and among other stakeholders on the connection between healthcare waste management and public health through easy-to-use educational and technical materials
- Increase the sector’s ability to manage its waste in a way that is environmentally responsible and protective of public health

**Project Information**

**Area:** Environment and Energy

**Budget:** US$ 800,000 (GEF)

**Duration:** 2009 – 2013

**Government Counterpart:** Ministry of Environment and Forests, Government of India

**Implementing Partner(s):** Ministry of Environment and Forests, Government of India

**Other Partner(s):** Global Project Team

**Location(s):**
New Delhi, Uttar Pradesh and Tamil Nadu
Objectives (cont...)

- Monitor and develop the technical efficacy and economic performance of alternatives to incineration and mercury devices
- Build capacity for the long-term use of best practices in healthcare waste management based on non-burn treatment technologies and the phase out of mercury devices, reducing dependency on technologies resulting in the unintentional release of dioxins and mercury to the environment and ensuring sustainability in the long term. This also has linkages with chemical management and enhanced health security

Results so far

- Infectious waste reduced by 80 percent at King George's Medical University in Lucknow, Uttar Pradesh as a result of proper segregation, transportation and treatment of bio-medical waste
- The hospital earns INR 18,00,000 (US$ 32,700) annually through recycling of the waste
- A National Steering Committee constituted by the Ministry of Environment and Forests, Government of India
- Waste management practices initiated and alternative treatment technologies demonstrated in Chhatrapati Shahi Maharaj Medical University, Lucknow, Uttar Pradesh
- More than 100 participants enrolled under the Indira Gandhi National Open University’s (IGNOU) distance learning programme on healthcare waste management
- Dioxin testing to measure the pollutants coming out of the disposal of medical waste for the Centralized Treatment Facility (CTF) in Chennai undertaken by the Central Pollution Control Board
- Devices to measure the temperature of the incineration which is appropriate for burning of the medical waste installed in CTF in Chennai

Looking to the Future

- Conduct a baseline assessment of a healthcare waste management plan in Uttar Pradesh
- Conduct hospital-wide training, document practices and specification and procurement of equipment
- Identify facilities in Uttar Pradesh and Tamil Nadu that will serve as mercury-free models
- Conduct training and awareness-raising campaigns, introduce mercury-free devices, develop and implement safe waste handling practices

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