EPA's Work to Address Puerto Rico Landfills

September 2016

Improving solid waste management and addressing landfill problems in Puerto Rico is important. There are approximately 29 operating landfills in Puerto Rico, the majority of which are beyond capacity. EPA began its direct involvement to address these landfills in 2002, and continues to work closely with the Puerto Rico Environmental Quality Board (EQB).

In Puerto Rico, EPA has focused on four things: 1) closure of open dumps (*i.e.,* long-term, non-complying landfills) to protect human health and the environment; 2) implementing recycling; 3) greenhouse gas reductions via landfill gas collection, control, and energy recovery; and, 4) improving operations in existing landfills.

To date, the EPA has legal agreements to close 12 landfills, and the EPA is continuing to assess landfills and develop legal agreements where appropriate.

Not for Public Distribution

Puerto Rico Landfill Consent Orders and Consent Decree - Closure Status

Landfill	Closure Status	Recycling & Composting Program Required	New Cell Construction
Aguadilla	Closed April 2010	No	No
Arecibo (Consent Decree)	After reaching final capacity (circa 2020)	Yes	No
Arroyo	Permanent waste receipt cessation required June 2019	Yes	No
Cayey	Permanent waste receipt cessation required January 2018	Yes	Under consideration
Florida	Overdue - permanent waste receipt cessation required June 2016	Yes	No
Isabela	June 2020 (only limited waste now being received)	Yes	Planned
Juncos	Permanent waste receipt cessation required December 2014 – Extended	Yes	Under construction
Lajas	December 2017	Yes	Planned
Moca	After reaching final capacity (circa 2019)	Yes	Planned
Santa Isabel	Interim closure completed September 2014	Yes	No
Toa Baja	Permanent waste receipt cessation September 2014 (achieved September 2015) and closure thereafter per closure plan schedule (pending)	Yes	Operational
Vega Baja	Permanent waste receipt cessation July 2013 (achieved July 2015) and closure thereafter per closure plan schedule (pending)	Yes	Operational

The EQB received federal approval from EPA in 1994, indicating that its solid waste compliance and enforcement program adequately reflected federal landfill criteria. Accordingly, EQB has primary responsibility for regulating solid waste landfills in the Commonwealth, and federal landfill criteria governing solid waste are not directly enforceable by EPA in Puerto Rico. Only EQB has permitting and solid waste enforcement authority over the landfills. EPA utilizes its enforcement authority under the Resource Conservation and Recovery Act (RCRA), as well as other federal statutes, to require that substantive actions be taken to address serious environmental and health risks. EPA used its RCRA Section 7003 Imminent and Substantial Endangerment Authority in the Puerto Rico open dump Consent Orders.

Not for Public Distribution

EPA has also worked extensively with EQB on the revision of its solid waste management regulations, in order to restore consistency with the minimum federal requirements. For example, EQB recently adopted a resolution with management standards for coal combustion residuals and approved a new biomedical waste regulation. In addition, EQB is in the process of developing amendments to its non-hazardous solid waste management regulations and an expanded regulatory composting program.

It is not practical to immediately close most landfills in Puerto Rico. The EPA and EQB approach has been to first close those that pose the greatest threat to the environment and to people's health. Regarding EPA's enforcement agreements, EPA has ordered landfills that have reached capacity to stop receiving waste and properly close. Other landfills that have not yet reached capacity are allowed to continue to accept waste, as long as they are in compliance with environmental regulations. EPA's Orders provide that certain landfills may build new, compliant waste disposal cells to ensure that there is adequate space for municipal solid waste to be disposed of on the island. There are now 10 landfills operating compliant disposal cells. Under all of EPA's Consent Orders and a Consent Decree, the open dumps are required to stop receiving waste and properly close as quickly as technically and economically feasible.

The EPA's Consent Orders and the Consent Decree go above and beyond requiring proper closure. Comprehensive recycling and composting provisions are included in 10 of the 11 EPA Consent Orders and in the Consent Decree. Other required environmental and engineering controls include groundwater monitoring, leachate (seepage) and stormwater (runoff) controls, and landfill gas monitoring and control.

The EPA has taken action to encourage and cultivate higher recycling rates in municipalities across the Commonwealth. In 2010, EPA helped establish the Puerto Rico Recycling Partnership (PRRP) to promote reuse, recycling, and clean composting throughout the Commonwealth. EPA has also worked with businesses and not for profit institutions to reduce the amount of waste generated and increase recycling through other EPA programs such as WasteWise and the Food Recovery Challenge, and has worked with EQB and the Puerto Rico Solid Waste Management Authority (SWMA) on materials management and planning.

The EPA has worked to get mosquito control plans in place for all Puerto Rico landfills. EPA sent letters to the landfills under EPA order, beginning in April 2016, requiring them to submit and immediately implement mosquito control plans, and made the plans a requirement for future orders. This is especially important to help prevent Zika transmission on the island. To date, seven landfills have already put such plans in place. More recently, letters requesting that plans be developed and submitted to EQB have been sent to all the operating landfills not under EPA order.

Not for Public Distribution

The budget crisis in Puerto Rico makes it more difficult for municipalities to properly address landfills. The central government of Puerto Rico faces a budget crisis which extends to the municipalities, which have always had limited funds to implement the environmental and engineering controls required to improve, and ultimately close, the landfills. This problem is further compounded by EQB having previously exempted municipalities from the requirement to set aside funds for closure, and the dwindling resources made available to EQB by the central government to carry out their solid waste compliance and enforcement programs.

The EPA will continue to work to address issues at landfills in Puerto Rico. EPA continues to actively assess the status of the remaining open dumps, and intends to issue further orders on a priority basis. Moreover, EPA will continue to work with EQB to both coordinate on solid waste enforcement and to oversee implementation and rebuilding of their approved solid waste program. EPA will continue to: 1) encourage the Puerto Rico government to provide ongoing funding to help the municipalities perform environmentally safe landfill operations and closure; 2) encourage the Puerto Rico government to work with the Puerto Rico legislature to develop programs for closure funding to municipalities; 3) encourage EQB and SWMA to implement a new island-wide revised solid waste program; and, 4) encourage SWMA to work with municipalities to implement recycling and composting programs.

For More Information

EPA Contacts:

Leonard Grossman and
Carl Plössl
Division of Enforcement
& Compliance
Assistance
EPA Region 2
Grossman.Lenny@epa.gov;
Plossl.Carl@epa.gov
(212) 637-4039/4088

John Martin
Public Affairs Division
EPA Region 2
Martin.JohnJ@epa.gov
(212) 637-3662

Puerto Rico EQB:
Nilda del Mar Sánchez
Santiago
Director, Land Pollution
Control
NildaSanchez@jca.pr.gov (787) 767-8056

**Puerto Rico Solid
Waste Management
Authority (ADS):**
Ms. Maritere Padilla
Rodríguez, Esq.
Acting Director for
Planning, Operations
and Engineering
mpadilla@ads.pr.gov
(787) 765-7575 ext.
4670/4671/4613

Not for Public Distribution