



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NEW YORK 10007-186

SEP 24 2014

OVERNIGHT DELIVERY

Mr. Marcos A. Irizarry Pagán
Mayor
Municipality of Lajas
P.O. Box 910
Lajas, Puerto Rico 00667

Re: Final Administrative Order on Consent
Lajas Municipal Landfill, Santa Isabel, Puerto Rico
Docket No. RCRA-02-2013-7304

Dear Mayor Irrizarry:

Enclosed please find a fully executed copy of the above-referenced Order. The Order, as you know, is effective 15 days after signature by the EPA Regional Administrator. Among other requirements, Respondents must initiate compliance with certain Interim Measures within 24 hours of the Order's effective date.

Thank you for your cooperation in this matter. If I can be of further assistance, do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy R. Chester".

Amy R. Chester
Assistant Regional Counsel

Enc.

Cc w/ enc via US Mail and email:

Carlos Lopez Robles
Director of Planning - Lajas Municipal Landfill
PO Box 910
Lajas, Puerto Rico 00667
planificacionlajas@gmail.com

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2**

In the Matter of:

Lajas Municipal Solid Waste Landfill
Lajas, Puerto Rico.

Municipality of Lajas, Puerto Rico,
Respondent.

Proceeding Under Section 7003 of the Solid
Waste Disposal Act, as amended.

**ADMINISTRATIVE ORDER
ON CONSENT**

Docket No.:
RCRA-02-2014-7301

I. JURISDICTION

1. This Administrative Order ("Order") is issued on consent to the Municipality of Lajas, Puerto Rico ("Municipality" or "Respondent").
2. The Lajas Municipal Solid Waste Landfill ("Landfill" or "Facility") is located in the Municipality of Lajas in the Commonwealth of Puerto Rico.
3. Respondent is and has been the owner and operator of the Landfill.
4. The Order is issued by the United States Environmental Protection Agency ("EPA" or "the Agency") pursuant to the authorities vested in the Administrator of EPA by Section 7003 of the Solid Waste Disposal Act, as amended by various laws including the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6901 et seq. (collectively hereinafter referred to as "RCRA" or "the Act"), which authority has been duly delegated to the Regional Administrator of EPA, Region 2.
5. Notice of this Order has been provided to the Government of Puerto Rico, pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973.

6. Respondent agrees to undertake all actions required by the terms and conditions of this Order, consents to and will not contest EPA's jurisdiction to issue or, if necessary, enforce this Order, and will not contest the terms of this Order.

II. PARTIES BOUND

7. This Order shall apply to and be binding upon the Respondent and each and every agent of the Respondent. Respondent shall supply any person or entity under the direct or indirect control of the Respondent (including but not limited to any contractor or independent agent retained to perform work related to this Order) with a complete copy of the Order. Respondent shall nonetheless be responsible for ensuring that its contractor(s), subcontractor(s) and/or agent(s) comply with the requirements of this Order and perform work in accordance with this Order.

8. The obligations of Respondent under this Order shall be binding on any successor, whether such successor is created by merger, expansion or otherwise pursuant to the laws of the Commonwealth of Puerto Rico. Respondent shall give any successor official notice of this Order.

III. EPA'S FINDINGS OF FACT AND CONCLUSIONS OF LAW

Statutory and Regulatory Background

9. Section 7003(a) of RCRA, 42 U.S.C. § 6973(a) states in pertinent part that "...upon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may ... issu[e] such orders as may be necessary to protect public health and the environment.

10. Section 4004 (a) of RCRA, 42 U.S.C. § 6944 states, in pertinent part, that the "...Administrator shall promulgate regulations containing criteria for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps...."

11. Section 1004 of RCRA, 42 U.S.C. § 6904 defines the term "open dump" to mean any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 and which is not a facility for disposal of hazardous waste.

12. The federal regulations promulgated at 40 C.F.R. Part 258, entitled Criteria for Municipal Solid Waste Landfills, “establish [the] minimum national criteria ... for all municipal solid waste landfill units.” 40 C.F.R. § 258.1.
13. Pursuant to 40 C.F.R. § 258.1(h), municipal solid waste landfill units which fail to meet the criteria set forth in Part 258 constitute open dumps.
14. Section 4005(a) of RCRA, 42 U.S.C. § 6945(a) states, in pertinent part: “...any solid waste management practice or disposal of solid waste or hazardous waste which constitutes the open dumping of solid waste or hazardous waste is prohibited.”
15. The Landfill, located at kilometer 6.7 of State Road PR-303, Lajas, Puerto Rico, is a “municipal solid waste landfill unit,” as that term is defined at 40 C.F.R. § 258.2.
16. The Landfill has been receiving municipal solid waste since at least 1977 and constitutes an “existing landfill” as that term is defined in 40 C.F.R. § 258.2. The existing landfill consists of the two contiguous cells that are depicted on the topographic map in Appendix 1 and hereafter referred to as “Cell 1A” and “Cell 1B,” as well as any historical waste deposition identified by Respondent and approved by EPA pursuant to Paragraph 75 of this Order.
17. Existing municipal solid waste landfill units are subject to many of the requirements set forth in 40 C.F.R. Part 258.
18. Pursuant to 40 C.F.R. § 258.1, municipal solid waste landfills in operation as of 1994 that continue to accept solid waste for disposal, may not laterally expand unless the expansion cell or area meets certain design criteria as set forth in 40 C.F.R. § 258.40, including installation of an impermeable liner membrane and a leachate control system, which acting together, are designed to minimize uncontrolled leachate releases from the Landfill.
19. The Landfill is also subject to the Non-Hazardous Solid Waste Management Regulations of Puerto Rico, administered by the Puerto Rico Environmental Quality Board (“EQB”).
20. According to Respondent, it has been participating in several Commonwealth compliance programs regarding the permitting and operation of the Landfill, including the EQB and Puerto Rico Solid Waste Management Authority (“SWMA”) “Operacion Cumplimiento” Program.
21. The Landfill is not authorized by EPA to accept or dispose of “hazardous waste,” as that term is defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), and in 40 C.F.R. § 261.3.

Owner and Operator

22. Respondent has been the “owner” of the Landfill since at least 1977, as that term is defined in 40 C.F.R. § 258.2. Respondent has contributed and continues to contribute to the handling and disposal of solid waste at the Landfill in its capacity as owner.

23. Respondent is presently the “operator” of the Landfill as that term is defined in 40 C.F.R. § 258.2, and has been the operator since approximately January 2013. Respondent was also the operator of the Landfill from approximately 2006 to April 2012. Respondent has contributed and continues to contribute to the handling and disposal of solid waste at the Landfill in its capacity as operator.

24. Other entities have also operated the Landfill including Waste Environmental Services, which operated the Landfill from approximately April 2012 to December 2012, and Prime Recycling & Waste Disposal Corporation which operated the Landfill from approximately August 2003 to 2006.

Respondent is a Person

25. Respondent is a “person” as that term is defined in Section 1004(15) of the Act, 42 U.S.C. § 6903(15).

Geographic and Geological Background

26. The Municipality of Lajas is approximately 60 square miles in size and has a population of approximately 26,000 people. (U.S. Census, 2010).

27. The Landfill is approximately 34 acres, approximately half of which has been impacted by waste disposal.

28. The Facility borders include farmland, ranchland and State Road 303. The Laguna Cartagena National Wildlife Refuge is approximately one and half miles north of the Landfill. The nearest residential home is located approximately 200 meters west of the Landfill.

29. The Lajas area is mostly dry and dusty with short periods of torrential rain. It receives, on average, more than 45 inches a year. The average annual amount of rain within the United States is approximately 29 inches per year.

30. The Landfill is located over the Valle de Lajas Alluvial Aquifer System. The Valle de Lajas Alluvial Aquifer System, covering an area of approximately 35 square miles, is one of the major aquifers in Puerto Rico.

31. While the City of Lajas receives potable water from the Puerto Rico Aqueduct and Sewer Authority ("PRASA"), some homes in close proximity to the Landfill may use private water wells.

32. Puerto Rico is located in a seismic zone so the Landfill is sited in a seismic zone.

Landfill's Location Relative to Sensitive Ecosystems

33. The Landfill is located approximately one and half miles south and downstream of the Laguna Cartagena National Wildlife Refuge ("Wildlife Refuge") and adjacent to environmentally sensitive land containing federally endangered species. The Refuge harbors rich biodiversity in Puerto Rico. Its lagoon is one of the most important freshwater habitats for migrating waterfowl and aquatic birds in southwestern Puerto Rico, including the West Indian Whistling Duck, Masked Ducks and many other rare species of migratory and resident aquatic birds. The Wildlife Refuge includes the foothills of the Sierra Bermeja. These hills have native forest with many endemic and endangered plant species, some found nowhere else on earth.

34. The Landfill, which has a dry earthen channel running through it which may act as a stormwater channel, is located approximately two and one half miles upstream from the coastal wetlands of La Parguera Natural Reserve. ("Natural Reserve"). The Natural Reserve contains estuaries, coral formations and over 12,000 acres of mangrove swamps, making it one of the largest mangrove systems in Puerto Rico. Among other animals, it is home to manatees and over 66 species of birds, both local and migratory.

Recent Regulatory History

35. EQB issued Respondent a permit to operate a solid waste landfill ("solid waste permit") at the current location in July 1998.

36. Respondent's solid waste permit has expired; however, in September 2013 EQB issued Resolution (R-13-9-29) authorizing Lajas to "renew" its operating permit. Respondent submitted its permit renewal application to EQB in February 2014.

37. According to Respondent, it has never received an order or a complaint from a local, Commonwealth or federal agency pertaining to the impact of the Landfill on either the Wildlife Refuge or the Natural Reserve.

38. The Landfill has been receiving municipal solid waste since at least 1977. The majority of waste deposited in the Landfill is from the Municipality and includes commercial waste, household solid waste, construction and demolition debris and yard waste, as well as hazardous household wastes¹ such as solvents, paints and household chemicals.

39. The Landfill presently receives approximately 275 tons of waste a week (which equates to approximately 45 tons per operational day).

40. The Landfill was receiving approximately 1,080 tons/week in 2006, according to the SWMA Dynamic Itinerary for Infrastructure Projects Technical Report, May 2008.

41. Comparison of aerial photographs from 1993, 2004, 2006, 2009, and 2010 indicates a lateral expansion of the waste footprint of the landfill. The area of the landfill where solid waste was deposited almost doubled in size from 1993 to 2010.

42. Comparison of the Lajas Landfill 2003 Limit-of-Waste survey conducted as part of a 2003 Puerto Rico Solid Waste Study performed for SWMA with 2009 aerial photography also documents a lateral expansion of the waste footprint of the Landfill during this operational period.

43. Review of aerial photographs documents Respondent's solid waste disposal encroaching on the adjacent environmentally sensitive land referenced in Paragraph 33 above as early as 2006.

Landfill Inspections, Findings and Environmental Impact

44. Authorized representatives of EPA inspected the Landfill on or about March 23, 2006, August 29, 2012, January 25, 2013, and April 3, 2013 (the "Inspections"). During and subsequent to those Inspections, EPA obtained information concerning the Landfill and its waste disposal practices, including facts set forth herein.

45. The Landfill does not have an impermeable liner. Liners, which are required for "new municipal solid waste landfill units" and "lateral expansions" as those terms are defined in 40 C.F.R. § 258.2, minimize the possibility that liquids, including leachate, can percolate and seep through a landfill, infiltrate the subsurface, and potentially contaminate soil and groundwater.

¹ Hazardous household waste is solid waste composed of materials from households which would otherwise meet the definition of hazardous waste but is exempt from regulation as a "hazardous waste" under 40 C.F.R. 261.4(b)(1).

46. The Landfill does not have a leachate collection system, as required by 40 C.F.R. § 258.40 for “new MSLWF units” and “lateral expansions” as those terms are defined in 40 C.F.R. § 258.2.

47. Municipal solid waste may contain microorganisms that can cause disease in man and animals. These pathogenic microorganisms include enteric bacteria, fungi, viruses, and human and animal parasites. Pathogenic bacteria and viruses, originating with soiled diapers, animal waste, and other sources, may survive conditions within sanitary landfills. These pathogenic microorganisms may be leached to ground or surface water, especially in the absence of a leachate collection system.

48. Leachate is a “liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such waste.” 40 C.F.R. § 258. 2. Landfill leachate may contain hazardous constituents.

49. Increased volumes of leachate are generated by and released from landfill units that do not have requisite engineering controls in place such as surface water run-on controls, impermeable liners and leachate collection systems.

50. Leachate released from the Landfill has the potential to reach and impact stormwater, the aquifer and coastal wetlands.

51. On at least January 25, 2013, leachate flowed from the slopes of the portion of the Landfill located in Cell 1A. The leachate was in close proximity to stormwater accumulating in a drainage ditch, such that the leachate could potentially contaminate stormwater.

52. Between at least March 23, 2006 and April 3, 2013, the Landfill did not have adequate surface water run-off controls, as required by 40 C.F.R. § 258.26, despite having a dry earthen channel which may act as a stormwater channel, running through it.

53. Uncontrolled surface water run-off from a landfill, which may contain contaminants, may flow onto adjacent areas where it can leach/infiltrate into surface soils or flow into streams and impact groundwater and surface water quality. The amount of uncontrolled run-off and its potential impacts are significantly increased at landfills where there is significant rainfall, steep surface gradients and inadequate cover.

54. Run-off, which may contain contaminants from the Landfill, could potentially impact groundwater and/or flow overland or downstream in the Landfill’s earthen channel towards the Caribbean Sea. Additionally, the properties adjacent to the Landfill, which include farmland and ranches, may receive surface water run-off from the Landfill.

55. Between at least March 23, 2006 and April 3, 2013, the Landfill did not have adequate surface water run-on controls, as required by 40 C.F.R. § 258.26. Run-on, which may contain

contaminants, can leach/infiltrate subsurface soils or flow into the stream on the Landfill and impact groundwater and surface water quality.

56. During each of the EPA Inspections, one or more faces of the portion of the Landfill located in Cell 1A had steep slopes. Slopes, with a ratio of no more than 3:1, are the generally accepted engineering standard for landfills. Slopes which exceed, *i.e.* are steeper than, the 3:1 ratio are often unstable and lead to slope failure (*i.e.*, a landslide), which may breach waste containment.

57. During the January 2013 Inspection, the slope on at least one face of the portion of the Landfill located in Cell 1A reached an angle of 1.4:1, exceeding the 3:1 ratio. Slope failures or slides periodically occurred during the inspection.

58. During the April 2013 Inspection, the slope on at least one face of the portion of the Landfill located in Cell 1A reached an angle of 1.5:1, exceeding the 3:1 ratio.

59. Adequate groundwater monitoring systems are required for landfills by 40 C.F.R. §§ 258.50-51. On at least April 3, 2013, the Landfill had four groundwater wells along the southern border of the facility; however, these wells were not operational and the Municipality did not know when they had ceased operating.

60. An adequate and operational groundwater monitoring system is necessary to determine the extent of contamination at the Facility and whether contaminants are being released beyond the Facility boundaries. Groundwater contaminated by landfill operations could contain hazardous constituents. Because groundwater from the facility may flow to the adjacent farmlands and ranches via the existing aquifer, failure to have an operational groundwater monitoring system poses a threat to human health and the environment.

61. A methane monitoring system is required by 40 C.F.R. § 258.23. On at least April 3, 2013, the Landfill had fourteen monitoring wells along the northeastern portion of the Landfill; however, none of these wells were operational and the Municipality did not know when they had ceased operating. Failure to have an operational methane monitoring system poses a threat to human health and the environment.

62. Landfill gas is generated during the natural process of anaerobic decomposition of refuse contained in a landfill. Landfill gas is predominantly methane and carbon dioxide, and small amounts of non-methane organic compounds ("NMOCs") such as ethane, toluene and benzene. Methane gas is odorless and highly combustible. The accumulation of methane gas within a landfill can potentially cause fires and/or explosions.

63. Subsurface migration is the underground movement of landfill gas from landfills to other areas within the landfill property or outside the landfill property. Most subsurface migration occurs at older, unlined landfills because there is minimal barrier for lateral migration

of landfill gas. It is possible for landfill gas to travel underground, accumulate in enclosed structures, and ignite.

64. Carbon dioxide and methane are greenhouse gases that can contribute to climate change, and NMOCs contribute to ozone formation. Methane is of particular concern because it is extremely effective in trapping heat in the atmosphere. Some NMOCs which can be produced and released at a landfill are known or suspected carcinogens and can also have non-cancerous adverse health effects.

65. On at least August 29, 2012, adequate daily cover was not placed on top of solid waste disposed of in the Landfill, as required by 40 C.F.R. § 258.21. The lack of cover left significant amounts of waste exposed including bagged and loose trash. Carrion birds were seen flying above, and landing within, the Landfill. Exposed waste may invite disease vectors such as rodents, birds, mosquitoes and flies, is odorous, easily windblown, and a potential fire risk. It also invites scavenging, generates leachate and, in the extensive dry season, results in dust storms.

Respondent's Recycling Program

66. The Municipality presently has a limited recycling program. According to Respondent, this program was developed with, and reviewed by, SWMA.

67. A comprehensive recycling program, implemented throughout the entire Municipality, would reduce the amount of waste that has to be disposed of at the Landfill.

Conclusion

68. Based on the extensive lateral expansions of the waste footprint of the Landfill since at least 1993 without meeting the requirements for liners, leachate control, groundwater monitoring, and other operational controls, the Landfill constitutes an open dump, as defined in 40 C.F.R. 258.1(h) and Section 1004 of RCRA, which is prohibited by Section 4005 of RCRA.

69. The handling and disposal of solid waste at the Landfill, which lacks proper operational controls including adequate run-on and run-off controls, an impermeable liner, a leachate collection system and operational groundwater or methane monitoring systems, may present an imminent and substantial endangerment to human health and the environment. This risk to human health and the environment may be increased by Landfill's steep and unstable slopes in Cell 1A, as well as the location of the Landfill near sensitive ecosystems.

IV. DETERMINATION

70. Based on the foregoing EPA's FINDINGS OF FACT AND CONCLUSIONS OF LAW and the full Administrative Record, the Regional Administrator of EPA Region 2, upon receipt of evidence and information that the past and present handling and disposal of solid wastes at the Landfill may present an imminent and substantial endangerment to human health and the environment, has determined that the issuance of this Order is necessary to protect public health and the environment.

V. ORDER AND WORK REQUIREMENTS

71. IT IS HEREBY ORDERED that Respondent shall perform the actions required by this Order and comply with its provisions. Respondent shall fully cooperate with EPA representatives in carrying out the provisions of this Order.

72. All submissions to EPA by Respondent pursuant to this Order shall be in English. (The recycling plan must be submitted in both English and Spanish.) This includes progress reports, notices, letters, plans and specifications, certifications and other such submissions required by the terms of this Order. Documents that are intended to direct and execute work and other operations at the Landfill shall be in both English and Spanish and must be submitted to EPA upon its request. Reports, letters and other documents may be submitted to EPA electronically in an accessible form that incorporates necessary signatures.

73. Immediate and Ongoing Operational Requirements

A. Within twenty-four (24) hours after the effective date of this Order, Respondent shall cover solid waste disposed of in the Landfill with daily cover. Daily cover shall consist of six inches of earthen material, and/or an alternative cover approved pursuant to 40 C.F.R § 258.21. Cover shall be applied at the end of each operating day, or at more frequent intervals if necessary to control pathogens, disease vectors such as flies, fires, odors, blowing litter, and scavenging. Daily cover must be maintained.

B. Starting no later than three (3) calendar days after the effective date of this Order, Respondent shall institute measures to control fugitive dust at the Landfill. Dust control measures may include: consistent light applications of sprayed water; posting of speed limits within the facility, surfacing all roadways and/or any other EPA approved engineering controls.

C. Starting no later than three (3) calendar days after the effective date of this Order, Respondent shall ensure that the Facility has adequate security to restrict unauthorized access to the Landfill so as to prevent theft, scavenging, trespass and unauthorized waste disposal.

Security measures shall include, but not be limited to, maintenance of existing fencing and ensuring that all entrance gates are locked during times when the Landfill is not operating and/or does not have an employee inspecting incoming loads.

If, at any time during the effective period of this Order, EPA or Respondent determines that the security measures currently implemented are insufficient, Respondent shall submit to EPA for review and approval, a plan to institute additional steps to prevent unauthorized access to the Landfill ("Enhanced Security Plan"). Additional measures may include additional security personnel, installation and maintenance of additional gates, securing perimeter fencing with barbed wire, and other measures deemed appropriate. Unless otherwise indicated by EPA, the Enhanced Security Plan shall be submitted within twenty (20) calendar days of either notification by EPA or Respondent's own determination of need and shall include a schedule for implementation. Upon receipt of EPA's approval, Respondent shall carry out the provisions of the Enhanced Security Plan.

D. Starting no later than three (3) calendar days after the effective date of this Order, Respondent shall inspect all incoming loads of waste to be deposited at the Landfill so as to prevent the disposal of the following prohibited materials: i) hazardous waste(s); ii) liquid waste(s) prohibited by 40 C.F.R. § 258.28; iii) ash² (unless the ash is being put in a new lined permitted cell compliant with 40 C.F.R. Part 258); and iv) white goods, scrap tires, recyclable material(s), or green waste (as those terms are defined in the provisions of the Order, including Appendix 3 regarding recycling) at the Landfill.

E. Starting no later than five (5) calendar days after the effective date of this Order, Respondent shall maintain a log of incoming waste loads. The log shall contain the delivery date, name of the hauler or carter, a brief description of each load's contents, an estimate of the volume of waste in each load, as well as details (similar to those just listed) regarding the receipt and rejection of any loads with prohibited materials. Respondent shall not deposit any solid waste into any unauthorized lateral expansion area or beyond the current waste footprint.

F. Starting no later than ten (10) calendar days of the effective date of this Order, Respondent shall only deposit waste on a single active face unless, for operational reasons, the use of multiple active faces cannot be avoided.

G. Starting no later than fifteen (15) calendar days after the effective date of this Order, Respondent shall cause the following NOTICE to be posted and maintained in Spanish and

² "Ash" shall mean the residue matter that remains after burning and includes, but is not limited to, residues produced by manufacturing, energy production, burning coal and other commercial processes.

English at any Landfill entrance in large lettering on mounted signs that are at least four feet by five feet in size:

NOTICE

THIS LANDFILL IS SUBJECT TO A UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ADMINISTRATIVE ORDER ON CONSENT WITH THE MUNICIPALITY OF LAJAS.

Respondent shall confirm in writing to EPA that the Notice has been posted at each entrance, and shall send EPA one or more photographs (either in digital form or clearly developed) of each of the Notice signs.

H. Within thirty (30) calendar days after the effective date of this Order, Respondent shall submit a written report to EPA documenting its early steps to comply with the Immediate and Ongoing Operational Requirements set forth above. The report shall contain the Certification set forth in Section VIII of this Order.

I. Consistent with the July 18, 2014 letter from the Fish and Wildlife Service of the U.S. Department of the Interior (FWS) to the Respondent, Respondent will fence the five acre area that is immediately adjacent to the Landfill and that is part of the twenty-five (25) acre Sierra Bermeja Plot purchased by Respondent in 2014. Respondent may recover material for use as landfill cover from this five acre area. If in the future Respondent needs to access any of remaining acres within the Sierra Bermeja Plot for landfill related purposes, the Respondent shall, prior to using such area(s), consult with EPA and other agencies as appropriate and shall comply with applicable laws and regulations.

74. **Slope Remediation Plan**

A. No later than thirty (30) calendar days after the effective date of this Order, Respondent shall submit a Slope Remediation Plan ("Slope Plan") to EPA for review and approval. At a minimum, the Slope Plan shall include: i) a methodology to study the slope geometry of all existing slopes on the Landfill; ii) a plan to grade all slopes to a maximum of 3:1 (*i.e.*, 3 horizontal to 1 vertical or gentler slopes) unless an equivalent or better slope stability can be engineered (*e.g.*, geo-grid reinforcement, retaining walls, buttressing); and iii) an implementation schedule.

B. The Slope Plan may provide that the slopes are stabilized first (interim stabilization) and then graded to a maximum slope of 3:1 or approved equivalent as part of closure (and the approved Closure Plan). Interim stabilized slopes shall have a minimum 1.5 safety factor on critical cross-sections against failure and yield accelerations for steady state/static conditions. The slope stability analysis shall be prepared by a licensed, professional geotechnical engineer

legally able to practice in the Commonwealth of Puerto Rico, and must be approved by EPA as part of the Slope Plan. Interim stabilization must be completed within 90 days of EPA's approval of the Slope Plan.

- C. Respondent shall make all revisions to the Plan as requested by EPA.
- D. Respondent shall implement the approved Slope Plan and comply with the timeframes specified therein unless otherwise approved by EPA.
- E. Respondent shall submit written quarterly reports to EPA detailing its implementation of the Slope Plan. Documentation of implementation, including photographs, shall be included in the submittal. The quarterly reports shall be submitted pursuant to Section VIII of this Order and contain a certification.

75. Solid Waste Extent Determination – the Actual Landfill

- A. No later than twenty (20) calendar days after the Effective Date of this Order, Respondent shall submit a Solid Waste Delineation Plan (“Delineation Plan”) to EPA for its review and approval. The Delineation Plan shall be designed to determine the full extent of solid waste disposal at the Facility as distinguished from the EQB permitted extent or otherwise approved extent. The full extent of waste disposal shall hereafter be referred to as the “Actual Landfill,” which at a minimum shall consist of existing Landfill Cells 1A and 1B.
- B. The Delineation Plan shall, at a minimum, include the following:
 - i. To the extent appropriate, the use of soil borings and/or trenching to determine the full extent of waste disposal;
 - ii. A system to temporarily delineate the full extent of waste disposal by the placement of highly visible markers (“temporary markers”) around the Actual Landfill; and
 - iii. A system of substantial engineering constructs such as a permanent roadway, a concrete post system, and/or perimeter fencing to demark, through final closure, the perimeter of the Actual Landfill (“Perimeter Marking System”).
- C. Respondent shall complete its waste extent survey and installation of temporary markers in accordance with the Delineation Plan within twenty (20) calendar days of EPA's approval of said Plan.
- D. Within thirty (30) calendar days of EPA's approval of the Delineation Plan, Respondent shall submit to EPA, for review and approval, a Solid Waste Delineation Final Report which documents the results of the waste extent survey and clearly identifies the parameters of the Actual Landfill, which shall be subject to closure under the terms of this Order.
- E. Within twenty (20) calendar days of EPA's approval of the Solid Waste Delineation Final Report, Respondent shall complete installation of the Perimeter Marking System, and provide EPA with documentation of said installation.

76. Run-on/Run-off Control Systems Prior to Closure

A. Within 40 calendar days of EPA approval of the Solid Waste Delineation Final Report, Respondent shall complete and submit to EPA, for review and approval, a design manual or document plans, schematic drawings and a schedule for constructing and implementing run-on/run-off control systems that meet the criteria set forth in 40 C.F.R. § 258.26 including:

- a run-on control system to prevent storm water run-on flow onto the active portion (*i.e.*, not closed and capped) of the landfill during the peak discharge from a 25-year storm; and
- a run-off control system from the active portion (*i.e.*, not closed and capped) of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

The system needs to be designed to become part of the run-on/run-off control system that will be part of the final Closure Plan.

B. In lieu of the above, Respondent may submit any storm water control plan already developed for this facility under the Clean Water Act (CWA) and/or pursuant to Administrative Compliance Order - Docket Number CWA-02-2013-3111 to EPA for review if Respondent believes that the storm water plan meets the above requirements.

C. Respondent shall construct and implement run-off/run-on control systems as approved by EPA in accordance with the EPA approved timetable.

77. Ground Water Monitoring

A. Within forty-five (45) calendar days after the Effective Date of the Order, Respondent shall submit to EPA a copy of the current Groundwater Monitoring Plan for the Landfill. Respondent shall also submit sufficient information concerning the implementation of such plan, including the most current and the last three years of groundwater monitoring analytical results, to allow EPA to determine whether the plan and its implementation are sufficient to detect contamination, above background levels, in the uppermost aquifer. Furthermore:

- i. If EPA determines that the Groundwater Monitoring Plan and its implementation are insufficient to detect contamination, above background levels, in the uppermost aquifer, Respondent shall, within 90 days of being notified of such determination,

submit to EPA, for review and approval, a revised Groundwater Monitoring Plan and implementation schedule that will be sufficient to detect such contamination.

- ii. Upon notification of approval by EPA and by EQB if necessary, Respondent shall implement the revised Groundwater Monitoring Plan, in accordance with its approved provisions and timetable.

B. Respondent shall provide reports to EPA with the preceding quarter's analytical results with supporting documents (such as quality assurance/quality control) and other information requested by EPA) from any required periodic groundwater monitoring. These quarterly reports shall be submitted pursuant to Section VIII of this Order and contain a certification.

C. If information obtained through groundwater monitoring, or otherwise, indicates that measures and procedures are necessary to conduct a corrective action assessment and/or a corrective action remedy, as those terms are described in 40 C.F.R. §§ 258.56, 258.57, and 258.58, Respondent shall undertake such measures or procedures as approved by EPA and EQB.

78. Landfill Supervision

A. Upon the effective date of this Order, Respondent shall ensure that an onsite operator is present at the Landfill during all times of operation. The onsite operator must have at least one year of experience in operating a solid waste landfill.

B. Within ninety (90) calendar days of the effective date of this Order, the onsite operator must receive Solid Waste Association of North America ("SWANA") *Landfill Operations Basics* training or an equivalent education program approved in advance by EPA which includes:

- i. The basics of landfill gas, stormwater, and leachate management and groundwater monitoring;
- ii. Equipment selection, waste inspections and prohibitions, security measures, cell construction, daily cover, and litter and dust management; and
- iii. The fundamentals of accident prevention.

Such training must be maintained annually.

C. Within one hundred and eighty (180) calendar days of the effective date of this Order, Respondent shall ensure that the management of the Landfill is supervised by an individual who is:

- i. Properly trained in the operation of landfills and the implementation of design and operational plans;
- ii. Properly trained in the operation of landfill gas collection and treatment systems (when applicable);
- iii. Properly trained in the implementation of closure and post-closure plans; and
- iv. A certified supervisor of landfill operations (“SOLO”).

The SOLO certification shall be the SWANA *Certified Manager of Landfill Operations* or an equivalent independently-proctored exam and continuing education program approved in advance by EPA. SOLO certifications must be maintained or the equivalent training and exams provided annually.

79. Safety and Health Program

A. Within 90 calendar days after the effective date of this Order, Respondent shall develop, enforce, and maintain a Facility-wide Safety and Health Program. This Program must, at a minimum, meet the substantive provisions set forth in Appendix 2 and be tailored to meet the specific safety and health risks represented by operations at the Landfill, including:

- i. Steep slopes;
- ii. Unstable conditions;
- iii. Landfill gas;
- iv. Confined spaces;
- v. Pathogens;
- vi. Hazardous waste (including household hazardous waste);
- vii. Fire; and
- viii. Use of heavy equipment.

80. Intermediate Cover

A. Except as provided in below in Paragraphs 83.A and B., Respondent shall immediately apply intermediate cover on all areas in the Landfill where waste is not being deposited on a regular basis. Any intermediate cover shall be maintained until a Final Cover is installed.

B. For purposes of this Order, Intermediate Cover is defined as a waste cover, more durable than daily cover, consisting of at least 12 inches of compacted soil with appropriate storm water erosion controls (*e.g.*, vegetated cover, chutes, earthen channels, berms, and swales). An Intermediate Cover is intended to further limit precipitation infiltration and to control disease vectors, fires, odors, blowing litter and scavengers until a final landfill cover is installed, and must cover the disposal area in its entirety. Respondent may request that EPA approve

installation of an alternative form of Intermediate Cover that will provide equivalent protection.

81. Schedule for Cessation of Waste Disposal and Receipt

A. Within twenty (20) calendar days of the effective date of this Order, Respondent shall cease depositing any solid waste in Cell 1A, unless such placement is i) pursuant to an approved closure plan or ii) otherwise authorized by EPA in writing. Respondent shall secure Cell 1A against unauthorized waste disposal within seven days after it ceases depositing waste in Cell 1A pursuant to this paragraph.

B. Respondent shall permanently cease receiving waste for disposal in Cell 1B and the remainder of the Actual Landfill on the earlier of: i) the operation of a new Landfill cell(s) which both complies with the provisions referenced in Paragraph 84.B and is authorized by EQB); or ii) July 1, 2017, unless a later date is agreed upon in writing by EPA. Disposal of waste in Cell 1B may occur after this deadline if it is consistent with the provisions of the approved closure plan and has been specifically approved in writing by EPA. Respondent shall secure Cell 1B and the remainder of the Actual Landfill against unauthorized waste disposal within seven days after it ceases receiving waste for disposal in Cell 1B and the remainder of the Actual Landfill pursuant to this paragraph.

82. Notice to Carters

If thirty (30) calendar days before the date Respondent is required to cease to receive waste for disposal pursuant to Paragraph 81.B above and if there is not a new Landfill cell or cells within the Facility that is open, operating and authorized to receive waste for disposal, Respondent shall give written notice to carters serving customers of Lajas that dispose of waste in the Landfill specifying the date after which waste from such carters may no longer be deposited at the Landfill. This notification shall be made earlier if contractual arrangements for waste disposal require more advance notification to carters. Respondent shall send EPA copies of all notices sent, and provide EPA with a translation of each notice which was sent in Spanish.

83. Interim and Final Closure of Actual Landfill

A. Respondent shall complete the application of intermediate cover, as defined in Paragraph 80.B above, on Cell 1A in its entirety by no later than 60 calendar days after it ceases depositing waste in Cell 1A pursuant to Paragraph 81.A above. Intermediate cover shall be maintained until replaced with final cover pursuant to an approved closure plan.

B. Respondent shall complete the application of intermediate cover, as defined in Paragraph 80.B above, on Cell 1B and the remainder of the Actual Landfill within 60 calendar

days after it ceases receiving waste for deposit pursuant to Paragraph 81.B above. Intermediate cover shall be maintained until replaced with final cover pursuant to an approved closure plan. To the extent EPA has already approved a Closure Plan, Respondent may seek EPA's (written) approval to apply the final cover in lieu of the intermediate cover.

C. By no later than July 30, 2016, Respondent shall submit, in accordance with the provisions set forth in Paragraph 85 of this Order, a draft Closure and Post-Closure Plan for the Actual Landfill to EPA for review and approval, unless a later date is agreed to by EPA.

D. Permanent closure of the Actual Landfill must be completed pursuant to an approved closure plan by no later than December 31, 2017, unless a later date is agreed to by EPA.

84. Notice of Future Plans for New Cell or Lateral Expansion of an Existing Cell

A. Within 60 calendar days of the effective date of this Order, Respondent shall notify EPA concerning any plans, and its timetable, for the development of a new landfill cell(s) within the Facility. Respondent shall promptly notify EPA of any changes to these plans.

B. Any new cell or lateral expansion must meet the requirements of the federal landfill criteria set forth in 40 C.F.R. Part 258.

85. Closure and Post Closure Plans

A. Professional Engineer: Respondent, to the extent it has not already done so, shall retain the services of a professional engineer, experienced in landfill design and licensed by the Commonwealth of Puerto Rico or permitted to practice engineering in Puerto Rico, to prepare final Closure and Post-Closure Plans for the Actual Landfill.

B. Plan Preparation: Preparation of final Closure and Post-Closure Plans may, at Respondent's discretion, consist of amendments and/or modification of existing Closure and Post-Closure Plans. At a minimum, the Closure and Post-Closure Plans must meet the closure and post-closure criteria set forth in 40 C.F.R. §§ 258.60 and 258.61. Additionally, the Closure and Post-Closure Plans shall incorporate: i) measures to obtain any necessary permits or approvals and shall also incorporate measures to meet any applicable requirements of the Clean Water Act, 42 U.S.C. § 1252 et seq. ("CWA") relating to storm water discharges and its implementing regulations, including permit requirements set forth in 40 C.F.R. Part 122, Subpart B, Section 122.26; ii) a closure cap design that provides substantial reductions in rainwater infiltration into the waste mass and in leachate generation;³ iii) measures for the collection/interception and management of leachate; iv) a landfill gas system to provide for

³ "Substantial reductions" must be documented either thru *in situ* field studies, the Hydrologic Evaluation of Landfill Performance (HELP) model, or any other method approved by EPA.

significant reductions in methane and NMOC emissions; v) and, to the extent applicable, the requirements set forth in the Photovoltaic Power Generation and Landfill Cap System provisions of this Order. The Closure and Post Closure Plans shall also take into account any physical intersection of the Actual Landfill and any new cells that affect the design and implementation of the Closure Plan for the Actual Landfill and its post-closure care.

C. Timetable: The Closure Plan shall include a timetable for prompt implementation, including any stages or phases that may be part of the plan. The timetable shall provide dates for timely completion of any designated stages or phases that the plan may contain but must, unless otherwise approved by EPA, provide for completion of final closure for the Actual Landfill by December 31, 2017.

D. Submittal of Closure and Post-Closure Plans for Actual Landfill to EPA: The Closure and Post-Closure Plans shall be submitted to EPA for review no later than July 30, 2016, unless EPA approves a later date in writing. EPA will notify Respondent in writing of EPA's approval or non-approval of the Plans. In the event of non-approval of either the Closure or Post-Closure Plans, EPA will specify deficiencies in the Plan(s) in writing and outline necessary revisions or modifications. Thereafter, Respondent shall within thirty (30) calendar days of receipt of EPA's notice of non-approval of the Plan(s), modify/revise the Plan(s) and resubmit the Plan(s) to EPA for final review. This process shall be repeated in the event of EPA's non-approval of the resubmitted Plan(s), but if the repeated process does not produce acceptable revised Plan(s), EPA may in its discretion determine that it is necessary to invoke the procedures set forth below in the Final Notice of Deficiencies paragraph, below. Throughout the process, EPA and Respondent shall confer as necessary and appropriate in order to clarify and resolve any outstanding issues. EPA will notify Respondent in writing of its final approval or non-approval of each of the Closure and Post-Closure Plans.

E. Final Notice of Deficiencies: When EPA determines in its sole discretion that it is necessary to invoke the procedures in this subparagraph in order to achieve approvable Closure and Post-Closure Plans, it will notify Respondent in writing setting forth a final date for Respondent's submission of acceptable Plan(s) to EPA. The written notice will specify the corrections, amendments and/or changes that Respondent needs to make to previously submitted Plan(s) to achieve EPA approval, and the reasons why such corrections, amendments and/or changes are necessary. The notification letter will carry the caption: FINAL NOTICE OF DEFICIENCIES across the top of the page and will specify the date by which the Plan(s), signed by the professional engineer and approved by Respondent, must be submitted to EPA. If the professional engineer believes in his/her best professional judgment that certain proposed corrections, amendments and/or changes described in the FINAL NOTICE OF DEFICIENCIES cannot or should not be complied with, Respondent may provide notice to EPA that the matter is subject to the Dispute Resolution provisions set forth herein. After a decision on any matter or matters submitted for dispute resolution, EPA will, if necessary, submit a SECOND FINAL

NOTICE OF DEFICIENCIES letter specifying the date by which the Plan(s) must be resubmitted to EPA. Thereafter, EPA will promptly notify Respondent in writing of its final approval or non-approval of the Closure and/or Post Closure Plans. Respondent's failure to submit acceptable Closure and/or Post Closure Plans by the date specified in the FINAL NOTIFICATION OF DEFICIENCIES, or in the event of a dispute resolution, by the date specified in the SECOND FINAL NOTIFICATION OF DEFICIENCIES, shall constitute Respondent's failure to comply with a requirement of this Order, and Respondent shall be subject to stipulated penalties for such failure.

F. Submittals to Puerto Rico Environmental Quality Board: Respondent shall submit the final Closure and Post-Closure Plans to EQB for its review and comments prior to or simultaneously with their submittal to EPA. Respondent shall obtain any required approvals from EQB for such Plans.

G. Closure Plan Implementation: Respondent shall implement the Closure Plan for the Actual Landfill in accordance with its approved provisions, the requirements set forth below, and applicable timetables in this Order.

- i. Closure Plan Work: Respondent shall begin Closure Plan work in accordance with its implementation schedule, or within twenty (20) calendar days of any required EQB approval, whichever comes later.
- ii. Quarterly Reports: During implementation of the approved Closure Plan, Respondent shall submit quarterly reports to EPA on the status of implementation activities, with accompanying certifications, pursuant to Section VIII.
- iii. Certification of Completion of Closure Plan Work: Respondent shall notify EPA in writing within 30 calendar days after completion of the Closure Plan work, and shall certify that the work has been performed in accordance with the provisions of the Closure Plan approved by EPA, its associated plans and specifications, and any permits or other forms of prior approval Respondent obtained in connection with the Closure work. The notification shall be signed by a professional engineer retained by Respondent who is experienced in landfill design and closure and authorized to practice in the Commonwealth. A senior official of Respondent shall also certify in writing that the work has been completed.
- iv. Implementation of the Post-Closure Plan: Respondent shall implement the provisions of the Post-Closure Plan upon final closure of the Landfill. If monitoring discloses that repairs or alterations must be made to the landfill cap, the gas monitoring system, the groundwater monitoring system, or any other component, Respondent shall timely make such repairs.

- v. Post-Closure Reports: Respondent annually shall submit a report to EPA that describes post-closure activities during the preceding year. The report shall include information on the results of groundwater and gas monitoring and the status of the permanent landfill cap, operating and maintenance activities, financial assurance, and other relevant information. The annual report shall be submitted on or before October 15 of each calendar year beginning after the Closure Plan work has been completed.

86. Photovoltaic Power Generation and Landfill Cap System

A. To the extent technically and economically viable, Respondent agrees to design and install an integrated geomembrane and photovoltaic power generation system (“PV Cap System”) as part of the closure system. Respondent agrees to periodically, and upon EPA request, consult with and supply status reports to EPA on this matter.

B. Upon request and as EPA resources allow, EPA will provide technical assistance to Respondent with planning the PV Cap System. Final determination on the technical and economic viability of the PV Cap System, after due consultation with EPA, will be made by Respondent.

Recycling and Composting Program

87. Within ninety (90) calendar days after the effective date of this Order, Respondent shall submit to EPA for review and approval a plan for a Recycling and Composting Program (“Recycling Plan”), which shall be consistent with all Commonwealth of Puerto Rico regulations and/or requirements. The Recycling Plan shall include all the definitions and requirements that are set forth in Appendix 3, and shall include an implementation schedule covering each component of the Program.

VI. FINANCIAL ASSURANCE

88. Within sixty (60) days of the effective date of this Order, Respondent shall submit to EPA for review a Financial Assurance Plan (“FAP”), describing how Respondent plans to comply with the requirements set forth in 40 C.F.R. Part 258 Subpart G with respect to financial assurance for closure and post-closure care.

89. The FAP shall be amended and resubmitted to describe how Respondent plans to comply with the requirements set forth in 40 C.F.R. Part 258 Subpart G with respect to financial assurance for corrective action if corrective measures/action is required at the Landfill.

90. Respondent shall submit documentation of financial assurance to EPA upon its request.

VII. ORDER SUBMITTALS

91. All submittals required under this Order, including plans, reports and schedules, shall be submitted to the EPA Project Coordinator identified in Section X. of this Order, unless otherwise specified. A copy of each submittal required under this Order shall be also sent to EQB, at the address identified in Section XI.

92. Incorporation. All plans, reports and schedules required by the terms of this Order are, unless otherwise specified, upon approval by EPA, incorporated by reference into this Order. Upon incorporation, the provisions of each such document shall be binding upon the Respondent and shall have the same legal force and effect as the other requirements of this Order.

93. Approval/Modification of Submittals. Unless otherwise specified, Respondent(s) shall submit plans and reports required by this Order to the EPA Project Coordinator for review and comment. Unless otherwise specified, the Agency shall review any plan, report, specification, or schedule submitted pursuant to, or required by, this Order, and provide its written approval, disapproval, comments and/or modifications to the Respondent. Unless otherwise specified by the Agency, the Respondent shall submit a revised proposal within thirty (30) days of its receipt of the EPA's written comments and/or modifications. The EPA Project Coordinator shall grant or deny any request for an extension. The revised proposal, as approved by EPA, shall become final. All final approvals shall be given to the Respondent in writing.

VIII. QUARTERLY REPORTS AND CERTIFICATIONS

94. Quarterly reports required by this Order shall be submitted to EPA's Project Coordinator on the following dates each year: January 15, April 15, July 15 and October 15. A copy of each report shall also be submitted to EQB at the address identified in Section XI.

95. Wherever this Order requires that a "Certification" be submitted to accompany written reports or documents, the following Certification form shall be submitted, and shall be dated and signed by a senior official of Respondent:

"I certify under penalty of law that this document [Identify Document] and all attachments being submitted were prepared under my direction or supervision in order to ensure that qualified personnel properly gathered, evaluated and prepared this submission. Based on my review of the documents, data and other information available at the time of this certification, including my inquiry of the person or persons who prepared the submission, the information

contained in this submission is to the best of my knowledge, true, accurate and complete. I am aware that there are significant potential penalties for submitting false information.”

IX. RETENTION OF RECORDS

96. Respondent shall maintain business records pertaining to the operations of the Landfill and the recycling and composting management program and shall make such records available to EPA and its representatives for inspection upon request. Respondent shall also maintain business records pertaining to the work being performed pursuant to this Order, including the recycling and green waste management program, and shall make such records available to EPA and its representatives for inspection upon request. Each record relating to closure shall be maintained for a period of at least five (5) years from the date that permanent closure of the Actual Landfill is completed. Post-closure records shall be retained until the completion of post-closure or for a period of at least five (5) years whichever is longer. Records relating to this recycling and composting program shall be maintained for a period of at least ten years from the Effective Date of this Order, and shall be maintained at Lajas’s Municipal planning and engineering offices located at Victoria Street #4, Lajas, Puerto Rico 00667.

X. PROJECT COORDINATORS

97. On or before the effective date of this Order, EPA and the Respondent each shall designate a Project Coordinator ("PC") and the name of at least one alternate who may function in the absence of the designated Project Coordinator. The Project Coordinators shall be responsible for overseeing implementation of this Order. EPA and the Respondent shall each have the right to change the PC and shall inform the other party should such change occur. The EPA has designated Meghan La Reau, Environmental Scientist, as Project Coordinator and Steven Petrucelli, as Alternate Project Coordinator. Unless approved by EPA, counsel for Respondent may not serve as a PC.

98. All communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed to and through the respective Project Coordinators.

XI. NOTICES

99. For purposes of this Order, all written communications, notices or submissions required by this Order shall be directed to a person specified by each party. EPA and the Respondent, with written advance notice, shall each have the right to change the person(s) who are to receive documents. The EPA has designated the EPA Project Coordinator as recipient, at the following address:

Meghan La Reau
Environmental Scientist
U.S. Environmental Protection Agency, Region 2
RCRA Compliance Branch, 21st Floor
290 Broadway
New York, New York 10007-1866

Copies of all written submittals and reports required under this Order shall be sent to EQB, at the following address:

Laura M. Vélez Vélez
PREQB Executive Director
P.O. Box 11488
Santurce, Puerto Rico 00910

100. By no later than fifteen (15) calendar days after the effective date of this Order, Respondent shall designate a person or persons to receive such written communications, notices or response to submissions required by this Order and shall provide a mailing address for such person(s).

XII. EMERGENCY PROVISIONS/CORRECTIVE ACTION

101. In the event Respondent identifies a current or immediate threat to human health or the environment at the Landfill other than those identified in Section III herein, Respondent shall immediately upon becoming aware of it, notify EPA orally and in writing within twenty four (24) hours summarizing the immediacy and magnitude of the potential threat to human health or the environment. The Respondent shall thereafter submit to EPA for approval, as soon as possible, a plan to mitigate this threat. EPA will approve or modify this plan, and the Respondent shall implement this plan as approved or modified by EPA. In the case of an extreme emergency, Respondent may act as it deems appropriate at its own risk.

102. In the event Respondent identifies the need for corrective action due to conditions at the Landfill, or off-site, caused by contamination released from the Landfill, other than those conditions identified in Section III herein or identified by groundwater monitoring carried out pursuant to the Post-Closure Plan, Respondent shall notify EPA within fifteen (15) calendar days of such identification. After review of available information, EPA may, after consultation with Respondent, require Respondent to prepare and implement a corrective action assessment and/or corrective action remedy. The corrective action assessment and/or corrective action remedy shall be implemented subject to EPA oversight.

103. If EPA determines that activities in compliance or non-compliance with this Order have caused or may cause a release of a hazardous waste or hazardous constituent, or may pose a threat to human health or the environment, EPA may direct Respondent, as it deems appropriate, to stop further implementation of this Order, or a portion of this Order, for such period of time as EPA determines may be needed to abate any such release or threat, and/or to undertake any action which EPA determines to be necessary.

104. If EPA determines the need for corrective action due to conditions at the Landfill, or off-site, caused by contamination released from the Landfill, other than those conditions identified in Section III herein or identified by groundwater monitoring pursuant to the Post-Closure Plan, EPA will notify Respondent and may, after consultation with Respondent, require Respondent to prepare and implement a corrective action assessment and/or corrective action remedy. The corrective action assessment and/or corrective action remedy shall be implemented subject to EPA oversight

XIII. RESERVATION OF RIGHTS

105. EPA expressly reserves, without limitation, all of its statutory and regulatory powers, authorities, rights, remedies and defenses, both legal and equitable, including the right to seek injunctive relief, cost recovery, monetary penalties, or punitive damages. EPA may exercise its authority under federal law to undertake removal or remedial actions.

106. This Order shall not be construed as a covenant not to sue, or as a release, waiver or limitation of any claim, rights, remedies, defenses, powers and or authorities which EPA has under RCRA, or any other statutory, regulatory or common law authority of the United States.

107. This Order shall not limit or otherwise preclude:

- i. EPA from taking any additional legal action against the Respondent should EPA determine that any such additional legal action is necessary or warranted.
- ii. This Order shall not limit or otherwise preclude Respondent from taking legal actions, which may be otherwise brought, against any other person(s) for indemnification, contribution or other legal action it may deem appropriate; provided however, EPA is not a party in such actions. Third party actions initiated by or against Respondent shall not alter the obligations in the Order and shall not toll deadlines in this Order.

108. Notwithstanding compliance with the terms of this Order, the Respondent is not released for the costs of any response actions taken by EPA. EPA reserves the right to seek reimbursement from Respondent for any costs incurred by the United States.

XIV. STIPULATED PENALTIES

109. Unless the Respondent are excused under the "Force Majeure and Excusable Delay" provision of the Order, Respondent shall pay a stipulated penalty for failure to comply with any requirement, term, or condition set forth in or required by this Order.

For the following major requirements, terms, or conditions:

Failure to:

- i. comply with the operational requirements set forth in Paragraph 73 of the Order;
- ii. timely submit the Slope Remediation Plan (paragraph 74);
- iii. timely submit the Solid Waste Delineation Plan (paragraph 75) ;
- iv. timely submit Run-on/Run-off Control Systems Plan (paragraph 76);
- v. timely submit the Groundwater Monitoring Plan and other information referenced in Paragraph 77;
- vi. cease disposal of waste in Cell 1A within 20 days of the effective date of the Order or later Date agreed to by EPA in approval of a closure plan or otherwise authorized by EPA in writing (paragraph 81 A);
- vii. cease receipt of waste for disposal in Cell 1B and the remainder of the Actual Landfill on the earlier of: i) the operation of a new Landfill cell(s) which complies with the provisions referenced in Paragraph 84.B and is authorized by EQB); or ii) July 1, 2017, unless a later date is agreed upon in writing by EPA (paragraph 81.B);
- viii. timely apply Intermediate Cover in all instances required under the Order (paragraphs 80 and 83);
- ix. timely submit the Closure and/or Post Closure Plan (paragraphs 83.C and 85.D);
- x. timely submit the Recycling and Composting Plan (paragraph 87) ;
- xi. complete final closure of the Actual Landfill by December 31, 2017 or a later Date agreed to by EPA in writing (paragraph 83.D.); and
- xii. timely comply with any requirement(s) set forth in the above referenced plans once such plans are approved by EPA.

The stipulated penalty for each act of non-compliance is as follows:

<u>Period of Failure to Comply</u>	<u>Penalty for Non-compliance per Calendar Day</u>
1 st through 60 th day	\$500
61 st through 120 th day	\$1,000

121 st through 180 th day	\$1,500
181 st day and thereafter	\$3,000

For failure to comply with any other requirement, term, or condition set forth in or required by the Consent Order. The stipulated penalty for each act of non-compliance is as follows:

<u>Period of Failure to Comply</u>	<u>Penalty for Non-compliance per Calendar Day</u>
1 st through 60 th day	\$200
61 st through 180 th day	\$300
181 th day and thereafter	\$500

Stipulated penalties shall be paid by cashier's or certified check, payable to the Treasurer, United States of America, and mailed to the

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000

Said payment(s) shall be identified as **Lajas Municipal Solid Waste Landfill, Lajas, Puerto Rico** and must reference the **Docket Number** set forth on the title page of this Order.

110. All stipulated penalties begin to accrue on the day each act of noncompliance with any requirement, term, or condition set forth in or required by this Order first takes place. Said stipulated penalties shall continue to accrue through, and including, the day on which any failure to comply with such requirement, term, or condition is remedied. Nothing herein shall preclude, or is intended to preclude, the simultaneous accrual of separate stipulated penalties for each separate act of noncompliance with this Order. Penalties shall accrue regardless of whether EPA has notified Respondent of the act or acts of non-compliance, but need only be paid upon demand.

111. After receipt of a demand from EPA for stipulated penalties pursuant to this Section of the Order, Respondent may within thirty (30) calendar days of such demand, provide EPA with a written explanation of why it believes the stipulated penalties are not appropriate for the act(s) of non-compliance cited by EPA. If Respondent elects not to file such explanation, the stipulated penalties shall be paid within ninety (90) calendar days after receipt of the penalty demand.

112. The Director of the Division of Enforcement and Compliance Assistance may, in his or her sole discretion, reduce or eliminate such stipulated penalties based on Respondent's written explanation as specified immediately above. If Respondent makes a submittal as specified above, and the Division Director does not eliminate the stipulated penalties, then EPA will again notify Respondent in writing that the original or reduced stipulated penalties must be paid by Respondent. Respondent shall pay the stipulated penalties as set forth in EPA's notice pursuant to this sub-section within ninety (90) calendar days of its receipt of the notice.

113. At any time prior to Respondent's payment of stipulated penalties, the Director of the Division of Enforcement and Compliance Assistance may, for good cause as independently determined by him or her, reduce or eliminate the stipulated penalties. If the Director makes such determination, EPA will notify Respondent in writing of the change.

Except as provided above, all penalties owed to EPA under this Section shall be due and owing within ninety (90) calendar days after receipt of EPA's written notice to Respondent described above. Interest shall also accrue on any amount not paid when due at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. § 3717.

114. If Respondent fails to pay stipulated penalties as required under this Order, EPA may refer this matter to the U. S. Department of the Treasury or the Department of Justice for collection under applicable law. Nothing in this section, however, limits, or shall be construed as limiting, any rights or remedies available to EPA to enforce this Order and to seek compliance with the terms and conditions of this Order or any other applicable law or regulation.

XV. NON-RELEASE OF OTHER CLAIMS AND PARTIES/COOPERATION WITH THIRD PARTIES

115. Nothing in this Order shall constitute, or be construed to constitute, a release from any claim, cause of action or demand in law or equity brought by EPA against any person, firm, partnership, or corporation for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituent, hazardous substance, solid waste, hazardous waste, pollutant, or contaminant found at, taken to, taken from, or emanating from the Landfill.

116. In carrying out its responsibilities under this Order, Respondent, upon notification from EPA, shall use its best efforts to cooperate with any third party who is issued a unilateral or consent order relating to the closure of the Landfill. Respondent shall keep all such third parties fully informed of its activities pursuant to the Order's requirements and shall, unless otherwise

Lajas Municipal Solid Waste Landfill Administrative Order On Consent Docket No. RCRA-02-2014-7301
agreed to by the parties, provide copies to such parties of all correspondence and submissions to EPA under the Order.

XVI. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

117. Respondent shall indemnify, save and hold harmless the United States Government, its agencies, departments, agents, and/or employees, from any and all claims or causes of action arising from or on account of acts or omissions of Respondent or its agents, independent contractors, receivers, trustees, subcontractors or successors and/or assigns in carrying out activities required by this Order. This indemnification shall not be construed as in any way affecting or limiting the rights or obligations of the Respondent or the United States under their various contracts or statutes.

XVII. OTHER APPLICABLE LAWS

118. Nothing herein shall relieve Respondent of its obligations to undertake all actions required by this Order in accordance with local, Commonwealth and federal laws and regulations, nor preclude enforcement by EPA and/or EQB for violating such laws and/or regulations. Respondent shall obtain all permits or approvals necessary to perform the work required by this Order.

XVIII. SEVERABILITY

119. If any provision or authority of this Order or the application of this Order to any party or circumstance is found to be invalid, or is temporarily stayed, the remainder of this Order shall remain in force and shall not be affected thereby.

XIX. FORCE MAJEURE AND EXCUSABLE DELAY

120. Respondent shall perform all the requirements of this Order within the time limits set forth, approved, or established herein, unless the performance is prevented or delayed solely by events which constitute a force majeure. A force majeure is defined as any event arising from causes not reasonably foreseeable and beyond the control of the Respondent which could not be overcome by due diligence and which delays or prevents performance by a date required by this Order. Such events do not include unanticipated or increased costs of performance, changed economic circumstances, normal precipitation events, or failure to obtain federal, Commonwealth, or local permits. Nothing in this Section XVIII. bars Respondent from seeking a scheduling modification pursuant to XXII. MODIFICATION, herein.

121. The Respondent shall notify in writing the EPA Project Coordinator within ten (10) days after becoming aware of any event, which it knows or should know, constitutes a force majeure. Such notice shall detail the estimated length of delay, including necessary demobilization and remobilization, its causes, measures taken or to be taken to minimize the delay, and an estimated timetable for implementation of these measures. Respondent shall adopt all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall constitute a waiver of Respondent's right to assert a force majeure and may be grounds for EPA to deny Respondent an extension of time for performance.

122. After receiving notice from Respondent that it is invoking the force majeure provisions of this Order, EPA will respond in writing indicating either EPA's agreement that the event constitutes a force majeure or its disagreement and the reasons therefore.

123. If the Parties agree that a force majeure has occurred, the time for performance may be extended, upon EPA approval, for a period equal to the delay resulting from such circumstances. This shall be accomplished through written amendment to this Order, or modifying the schedule in a previously approved plan. Such an extension or modification will not alter the schedule for performance or completion of any other tasks required by this Order unless EPA determines that the delayed task is a prerequisite or necessary requirement for other specified tasks and the schedule is specifically altered in accordance with XXI. MODIFICATION, herein.

124. In the event the parties cannot agree that any delay or failure has been or will be caused by a force majeure, or if there is no agreement on the length of the extension, the dispute will be resolved in accordance with the Dispute Resolution provisions contained in this Order.

XX. ON-SITE AND OFF-SITE ACCESS

125. Respondent shall permit EPA representatives, including authorized designees, employees, agents, contractors, subcontractors, or consultants to enter and freely move about the Landfill for, but not limited to, the following purpose(s): observing conditions and/or activities at the Landfill, including work performed pursuant to this Order, interviewing personnel, conducting sampling or monitoring, taking photographs and verifying information or data that have been submitted.

126. Respondent shall make available to EPA for inspection, copying, or photographing, all records, files, photographs, documents, or any other writing, including monitoring and sampling data that pertain to any work undertaken pursuant to this Order.

127. To the extent that work required by this Order must be performed on property not owned or controlled by Respondent, Respondent shall use best efforts to obtain "Site Access

Agreements" to perform such work within thirty (30) days of the date Respondent become aware or should be aware of the need to perform such work. Any such access agreement shall provide for reasonable access by EPA. In the event that Site Access Agreements are not obtained within the thirty (30) day period, Respondent shall notify EPA, in writing, documenting their best efforts to obtain such agreements.

128. Nothing in this Order shall be construed to limit or otherwise affect EPA's right of access and entry pursuant to any applicable laws and regulations.

129. Nothing in this Order shall be construed to limit or otherwise affect Respondent's liabilities and obligations to perform corrective action, including corrective action beyond the Landfill property boundary, notwithstanding the lack of access. EPA may determine that additional on-site measures must be taken to address releases beyond the Landfill boundary if access to off-site areas cannot be obtained.

XXI. NO FINAL AGENCY ACTION

130. Notwithstanding any other provision of this Order, no action or decision by EPA pursuant to this Order, including without limitation, decisions of the Regional Administrator, Region 2, or any authorized representative of EPA, shall constitute final agency action giving rise to any rights of judicial review prior to EPA's initiation of a judicial action for a violation of this Order, which may include an action for penalties, an action to compel Respondent's compliance with the terms and conditions of this Order, or such other relief as may be available at law.

131. In any action brought by EPA for a violation of this Order, Respondent shall bear the burden of proving that EPA's action was arbitrary and/or capricious and not in accordance with law, or this Order. In any such action, EPA shall bear the burden of proving that Respondent has violated a term or terms of this Order.

XXII. MODIFICATION

132. This Order may be amended by Respondent and EPA. Such amendment(s) shall be in writing, shall first be signed by Respondent, and shall have as their effective date the date on which they are signed by the EPA Regional Administrator.

133. Notwithstanding the above, EPA's and the Respondent's Project Coordinators may agree to changes in the scheduling of events. Any such changes shall normally be requested in writing by the Respondent and must be approved in writing by the EPA PC.

134. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondent will be construed as an amendment or modification to this Order.

XXIII. TRANSFER OF OBLIGATIONS

135. Respondent shall give notice, and a copy, of this Order to any successor in interest prior to any transfer of ownership or responsibility for the Landfill. Respondent shall give notice to EPA at least sixty (60) days prior to any such transfer. No such transfer shall in any way alter, extinguish or otherwise affect Respondent's responsibility to meet all the terms and obligations of this Order. Respondent may, however, transfer the responsibility for unperformed obligations imposed by this Order to a new owner/operator of the Landfill, provided there is a demonstration provided to EPA's satisfaction that the new owner/operator is capable of undertaking these obligations and has expressly agreed to do so in writing, provided further that EPA has given its approval in writing to any such transfer of obligations, and provided finally that this Order has been modified to reflect the transfer. Any stipulated penalties which may have accrued pursuant to the terms of this Order shall remain the responsibility of the Respondent against whom the penalties accrued unless EPA consents in writing to the transfer of said liability to the successor. The Order Modification reflecting the transfer of obligations to a successor party or parties may, if appropriate, establish modified schedules for continuing obligations under the Order.

XXIV. DISPUTE RESOLUTION

136. All parties shall use their best efforts to informally and in good faith resolve all disputes and differences of opinion, which may arise concerning provisions of this Order. Notwithstanding the foregoing, if Respondent disagrees, in whole or in part, with any disapproval or modification or other decision or directive made by EPA pursuant to this Order, Respondent shall notify EPA in writing of such disagreements and their basis or bases within twenty (20) calendar days of receipt of EPA's disapproval, modification, decision or directive. The notice shall set forth the specific points of the dispute, the position Respondent maintains, the basis or bases for Respondent's position, and any matters the Respondent consider necessary for EPA's review. EPA may unilaterally refuse to review any dispute brought by Respondent under this provision if Respondent fails to fully set forth the basis or bases of their position and/or fails to provide materials which are necessary for EPA's determination. EPA may, but is not obliged, to request that Respondent submit additional information regarding any points concerning any dispute brought by Respondent. EPA will determine which of its officials will have responsibility for a decision concerning a dispute. Within thirty (30) calendar days of EPA's receipt of such written notice, or by any other date as may be agreed upon by the parties, EPA shall provide to Respondent its decision in writing on the pending dispute, which decision

shall be binding. The parties may continue to confer and to use informal efforts to resolve the dispute during the period that EPA's final determination is pending. Notwithstanding the above, Respondent may not invoke the dispute resolution procedures for the deadline(s) for ceasing receiving solid waste for disposal in Cell 1A or Cell 1B and the remainder of the Actual Landfill, nor may Respondent invoke the dispute resolution procedures concerning which EPA official is designated by EPA as the official to make a determination concerning the dispute.

137. EPA's decision on any dispute shall be incorporated into and become an enforceable part of this Order, and shall no longer be subject to dispute pursuant to this Order. Respondent shall proceed in accordance with EPA's decision regarding the matter in dispute. If Respondent does not actually perform the work in accordance with EPA's decision, EPA reserves the right in its sole discretion to conduct the work itself, and seek reimbursement from Respondent, seek enforcement of this Order, seek stipulated penalties, and/or seek any other appropriate relief. Any disputes arising under this Order, and EPA's decisions concerning such disputes, are not subject to judicial review until such time as EPA seeks judicial enforcement of this Order.

138. The existence of a dispute as defined herein, and EPA's consideration of such matters as are placed into dispute, shall excuse, toll or suspend during the pendency of the dispute resolution process the compliance obligation which is demonstrably dependent on the matters in dispute, and EPA shall not seek to impose a penalty for non-compliance with the obligation for the period of time during which the obligation was excused, tolled or suspended, regardless of the final decision on the dispute. No compliance obligation shall be excused, tolled or suspended, unless Respondent's dispute is in good faith and Respondent exercises due diligence to resolve the dispute.

XXV. TERMINATION

139. This Order and all of its terms and provisions shall remain in effect until all of the activities called for by the Order are completed and Respondent is so notified in writing by the EPA. Such notice shall be signed by the Regional Administrator, EPA Region 2. Respondent may request that EPA Region 2 provide Respondent with such notice, and shall supply EPA with such information, including certifications, as EPA may specify.

XXVI. ENFORCEMENT

140. The failure of Respondent to comply with any provision of this Order may be considered a violation of this Order. Such violation may give rise to an enforcement action pursuant to Section 7003(b) of the Act, 42 U.S.C. § 6973(b), as amended by the Debt Collection Improvement Act of 1996, 31 U.S.C. Section 3701 et seq.

141. Nothing herein shall preclude EPA from taking any additional enforcement actions, and/or such other actions as it may deem necessary for the abatement or prevention of an imminent threat to public health or the environment arising from conditions at the Landfill. Nor shall EPA be precluded from taking any such other enforcement actions under the Act or other laws as EPA may deem necessary based on additional information about conditions at the Landfill.

XXVII. GENERAL PROVISIONS

142. Nothing in this Order constitutes a satisfaction or release from liability with respect to any conditions or claims arising as a result of past, current or future operation, ownership or use of the Landfill by the Respondent, its agents, officials, successors or assigns.

143. Nothing in this Order affects any right, claim, interest, defense or cause of action of EPA with respect to the Respondent or any third parties.

XXVIII. CONSENT/AUTHORITY TO SIGN

144. Respondent consents to and agrees not to contest EPA's jurisdiction to issue this Order. In addition, whether brought in an administrative or judicial proceeding, Respondent consents to and agrees not to contest EPA's jurisdiction to enforce or compel compliance with any term of this Order. Respondent neither admits nor denies the EPA's Findings of Fact and Conclusions of Law stated herein. Respondent enters into this Order in good faith, and the execution of this Order is not intended and shall not be construed as an admission relating to any violations of any law or regulations or an assumption of liability beyond that expressly stated herein.

145. Finding this Order to be accurate and reasonable, Respondent consents to its issuance and its terms, and agrees to undertake all actions required by the terms and conditions of this Order. Respondent consents to the issuance of this Order, as an Order, pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, and explicitly waives any rights it may have to request a hearing on this matter.

146. Respondent agrees not to contest and agrees to waive any defense concerning the validity of this Order, or any particular provision contained herein.

147. Each signatory to this Order certifies that he or she is fully authorized to sign this Order

XXIX. EFFECTIVE DATE

148. The effective date of this Order shall be fifteen (15) days after the date the Order is signed by the Regional Administrator, EPA Region 2.

Respondent: Municipality of Lajas, Puerto Rico

By: _____

Name: _____

Marcos A Irizarry Pagán
(PRINT)

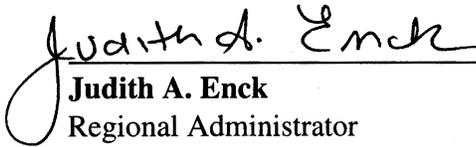
Title: _____

mayor

Date: _____

July 29, 2014

It is so Ordered:



Date: 9/23/14

Judith A. Enck
Regional Administrator
U.S. Environmental Protection Agency, Region 2
290 Broadway
New York, New York 10007-1866

Appendix 1

Map of Landfill Cells

Appendix 2

Safety & Health Program

The Facility Safety & Health Program must comply with applicable Commonwealth and Federal Occupational Safety & Health Administration (“OSHA”) regulations and must, at a minimum, meet the following substantive requirements (regulatory references given below, which are believed to be correct, are to Federal OSHA regulations):

1. Management Commitment to Safety and Health
 - a. Provide employees with sanitary and safe working conditions [29 CFR §1926.20(a)].
 - b. Assign safety and health responsibilities [29 CFR 1926.20(b)].
 - c. Give safety and health designees authority to correct hazards [29 CFR 1926.32(f)].
 - d. Ensure employees that they may voice safety and health concerns without fear of reprisal [29 CFR 1903.11(d)].
 - e. Inform employees of hazards [29 CFR 1926.21(b), 29 CFR 1910.1020, 29 CFR 1910.1200, 29 CFR 1926 Subpart Z].
 - f. Coordinate hazard communication with other employers on site [29 CFR 1926.59, 29 CFR 1926.65, 29 CFR 1926.652].
 - g. Post the OSHA State or Federal Poster [29 CFR 1903.2(a)].
2. Hazard Identification and Determination
 - a. Evaluate operations, procedures, facilities, and equipment to identify hazards [29 CFR 1926.20(a), 29 CFR 1926.21(b), 29 CFR 1926 Subpart O, 29 CFR 1926.400 (b), 29 CFR 1926.416].
 - b. Monitor exposure levels [29 CFR 1926.55, 29 CFR 1926.62, 29 CFR 1926 Subpart Z, 29 CFR 1926.1101].
 - c. Ensure regular safety and health inspections [29 CFR 1926.20(b)(2)].
 - d. Conduct accident investigations [29 CFR 1904.4, 29 CFR 1926.20(b)].
 - e. Determine if engineering or administrative controls or personnel protective equipment are to be used [29 CFR 1926.20(f), 29 CFR 1926 Subpart E].
3. Hazard Elimination and Control
 - a. Ensure machines and tools are in safe working order and in compliance with relevant standards [29 CFR 1926.20(b)(3), 29 CFR 1926 Subpart O].
 - b. Institute engineering and work practice controls to eliminate health hazards [29 CFR 1926.55, 29 CFR 1926 Subpart E, 29 CFR 1926 Subpart Z].

- c. Perform housekeeping to remove hazards posed by scrap and debris in work areas [29 CFR 1926.25, 29 CFR 1926.152(c)(5)].
 - d. Provide appropriate personal protective equipment when other controls are infeasible [29 CFR 1926.28(a), 29 CFR 1926 Subpart E].
 - e. Guarantee safe means of egress [29 CFR 1926.34]
4. Emergency Response Planning
 - a. Develop emergency response plans [29 CFR 1926.35, 29 CFR 1926.65(q)].
 - b. Develop fire prevention and protection programs [29 CFR 1926.24, 29 CFR 1926 Subpart F].
5. First Aid and Medical
 - a. Provide medical services, first aid treatment, and supplies [29 CFR 1926.50(a), 29 CFR 1926.103, 29 CFR 1926.50(c), 29 CFR 1926.50(d), 29 CFR 1926 Subpart Z].
 - b. Ensure availability of emergency rescue for injured employees [29 CFR 1926.50(e), 29 CFR 1926.106(a), 29 CFR 1926.21(b)(6)].
 - c. Post emergency numbers for physicians, hospitals, or ambulances [29 CFR 1926.50(f)].
6. Training
 - a. Train employees to recognize hazards [29 CFR 1926.21(b)(2), 29 CFR 1926.65, 29 CFR 1926.302(e)]
 - b. Train workers to recognize and avoid unsafe conditions [29 CFR 1926.21(b)(2), 29 CFR 1926.65, 29 CFR 1926.454].
 - c. Provide training on safe work practices and applicable standards [29 CFR 1926.21(b)].
 - d. Provide training on safe operation of equipment and machinery [29 CFR 1926.20(b)(4), 29 CFR 1926.302(e)].
 - e. Provide training on confined and enclosed space entry hazards and precautions [29 CFR 1926.21(b)(6)].

Appendix 3

Recycling and Composting Program

1. Recycling Management Program Development

- 1.1. Within ninety (90) calendar days after the effective date of this Order, the Municipality of Lajas shall, pursuant to Section VII of the Order, submit to EPA for review and approval a plan for a Recycling and Composting Program ("Recycling Plan"), which shall be consistent with all applicable Commonwealth of Puerto Rico regulations and/or requirements. Respondent shall carry out the approved Recycling Plan in accordance with its implementation schedule, and pursuant to the terms of this Order.
- 1.2. The Recycling Plan shall include all the definitions and requirements that are set forth below, and shall include an implementation schedule covering each component of the Program. The Recycling Plan, which shall be implemented by the Municipality, shall have the goal of eliminating the disposal of "Recyclable Material," "Scrap Tires," "Auto Shredder Residue" ("ASR"), "White Goods," and "Compostable Material," as those terms are defined in Section 5 below, at the municipal solid waste landfill located in the Municipality ("Landfill") or at any other solid waste landfill or incinerator. The Recycling Plan shall also have the goal of eliminating these materials from loads of waste brought to the Landfill from other municipalities.
- 1.3. The Municipality shall designate and retain a Qualified Municipal Recycling Manager who shall have the responsibility of implementing the approved Recycling Plan and submitting any required reports.
- 1.4. The Recycling Plan shall include the following:
 - 1.4.1. The development and implementation of a Collection Plan to ensure that Recyclable Material, Scrap Tires, ASR, White Goods, Agricultural Waste and Yard Waste⁴ generated in locations throughout the Municipality are placed in bins or other suitable receptacles for collection, on a regularly scheduled basis, in order to

⁴ Agricultural and Yard Wastes are Compostable Materials subject to the pilot program for composting materials referenced below in Section 1.4.5. However, because Agricultural and Yard Wastes can be collected immediately, they may be collected and managed under either the: Recycling Plan as referenced in Section 1.4.1; or the pilot and approved composting programs referenced in Sections 1.4.5 and 4.2., respectively. In no instance, however, shall agricultural and/or yard waste be discarded in the Landfill.

be transported to approved/permitted locations for proper disposition. The Municipality may collect and transport these materials itself and/or enter into agreements with licensed haulers to do so.

- 1.4.2. The Recycling Plan shall cover residences, apartment buildings, schools, hospitals, businesses and governmental establishments (hereafter, "covered entities"), and shall contain provisions to ensure that collection bins, or other suitable receptacles approved by EPA, are utilized by the covered entities for the curbside collection of Recyclable Material and Compostable Material.⁵
- 1.4.3. The Recycling Plan shall provide for curbside collection at all residences and businesses in urban areas. Additionally, it shall provide for curbside collection at all apartment buildings, schools, hospitals, businesses and governmental establishments in all urban and rural areas.
- 1.4.4. A program to recycle Recyclable Material, Scrap Tires, ASR and White Goods collected in the Municipality, or agreements with a MRF(s), or other facility(ies), to process these collected materials. All facilities processing these materials must have any permits/authorizations required by the Commonwealth for recycling.
- 1.4.5. A pilot program for composting material. The composting pilot program shall involve: a) increasing the use of Compostable Materials to create compost in residences, government and/or businesses; and/or b) the bulk collection of Compostable Materials for composting by the Municipality or by other entities that have entered into an agreement with the Municipality to collect and/or compost the Compostable Material pursuant to the program.
- 1.4.6. The development and implementation of disposal restrictions to ensure that Recyclable Material, Scrap Tires, ASR, White Goods and Compostable Materials are not disposed of at the Landfill. The program shall include routine documented inspections of loads coming into the Landfill, and shall also include the prohibition by local ordinance or regulation of the disposal of these materials in the Landfill if Respondent determines such an ordinance or regulation to be necessary to achieve compliance with the disposal restrictions.

⁵ EPA believes that there are at least 9,670 households and 153 government or private establishments that should be subject to the Municipality of Lajas Recycling and Composting Program. See Municipality of Lajas's *Profile of General Population and Housing Characteristics: 2010* and *Geographic Area Series: Economy-Wide Key Statistics* from the 2010 U.S. Census, which is found at http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml

- 1.4.7. The identification of a specific area at the Landfill to temporarily store, pending the proper disposition of, any Recyclable Material, Scrap Tires, ASR, White Goods and/or Compostable Materials detected in, and removed from, incoming loads of waste. (This area shall only be used when the truck that delivered the material to the Landfill is not able to transport the material from the Landfill to another destination for proper handling.) The Plan must further ensure that these materials are removed from the temporary location and sent to designated facilities to be recycled and/or composted within seven (7) days of receipt.

- 1.4.8. The establishment of Recycling and Composting Collection Centers in rural areas for covered entities not receiving curbside collection pursuant to Section 1.4.3 above. The Recycling Plan must indicate the location of these centers, the size of the population being served, and the process for collecting materials at, and transporting materials from, the centers for proper disposition.

- 1.5. An educational and community outreach program, including community workshops, to educate the community regarding recycling and composting, their benefits, and guidelines for household and/or commercial implementation. Outreach must be extended to households, schools, industries, municipal and other government facilities, businesses, hospital and clinics, farms, and other establishments within the Municipality that generate solid waste.

- 1.6. Respondent shall develop a suitable enforcement program to address non-compliance with the municipality's approved Recycling Plan, including such actions or procedures as it may determine are suitable to help achieve compliance with the Recycling Plan.

- 1.7. When any compliance obligation under the Recycling Plan requires the Municipality to obtain a Commonwealth or local permit or approval, the Municipality shall submit timely and complete applications and take all other actions necessary to obtain such permits or approvals. Nothing in the Recycling Plan shall be interpreted to relieve the Municipality of any requirements imposed by Commonwealth law governing recycling or composting.

- 1.8. The Municipality may apply for federal or Commonwealth grants in connection with the implementation of the Recycling Plan. However, the Municipality shall be obligated to implement the Recycling Plan regardless of whether it is successful in obtaining any such grants.

1.9. Upon request and as EPA resources allow, EPA will provide technical assistance to the Municipality in the development of recycling and composting strategies, including identification of potential funding sources.

2. Recycling Plan Implementation

2.1. Within 30 days after EPA approval of the Recycling Plan or by such other date as is approved by EPA, the Municipality shall begin implementation of the Recycling Plan.

2.2. Within 30 days after EPA approval of the Recycling Plan, the Municipality shall initiate its inspection program of incoming loads at the Landfill to ensure that Recyclable Material, Scrap Tires, ASR, White Goods and Compostable Materials are not being disposed of in the Landfill.

2.3. Within 90 days of EPA's approval of the Recycling Plan, and on an annual basis thereafter, the Municipality shall implement its educational and outreach program concerning recycling and composting.

2.4. For one full year, beginning 30 days after EPA approval of the Recycling Plan, the Municipality shall:

2.4.1. Perform waste characterization, with respect to Recyclable Material and Compostable Material to determine material quality, quantity, and percentage composition in order to assist in identifying potential markets; and

2.4.2. Conduct a community survey to measure Recycling participation rates.

3. Recycling Plan Reports

3.1. The Municipality shall submit biannual reports to EPA, on or before April 15 and October 15 of each year, summarizing the efforts undertaken during the prior six months to implement the requirements of the Recycling Plan. The first such report shall be submitted on April 15, 2014. The Municipality may submit supplemental reports to EPA to inform EPA of any information concerning market conditions, Commonwealth regulations, or other factors that may affect the Recycling Plan.

3.2. The Biannual reports must include, without limitation, the following information for the prior six month period:

3.2.1. The number of households serviced with Curbside Collection;

- 3.2.2. The number and type of other locations serviced with Curbside Collection;
 - 3.2.3. The tons of waste material generated in the Municipality that were recycled under the Recycling Plan, including a breakdown of the amount of Recyclable and Compostable Materials obtained using Curbside Collection; and the amount of Recyclable and Compostable Materials obtained at Recycling and Composting Collection Centers (referenced in Section 1.4 above);
 - 3.2.4. Tons of waste material generated in the Municipality that were sent to the Landfill or other solid waste landfills or incinerators for disposal;
 - 3.2.5. The Recycling Rate of the Municipality;
 - 3.2.6. The material quality, quantity, and percentage composition of each type of Recyclable and Compostable Material collected under the Recycling Plan;
 - 3.2.7. To the extent the Municipality contracts with MRFs, the amount charged by MRFs to take Recycled Materials; and
 - 3.2.8. The status of the Composting Program.
- 3.3. In any of the biannual or supplemental reports, the Municipality may submit to EPA, for review and approval, proposed changes to the Recycling Plan based on the information obtained during operation of the Recycling Plan prior to the submission of the report, in order to improve the efficiency of the recovery efforts or to vary the quantity, quality, and diversity of Recyclable Material collected. Such reports may include a request to temporarily exempt certain materials from the list of Recyclable Material based on market conditions.

4. Expansion of the Pilot Composting Program

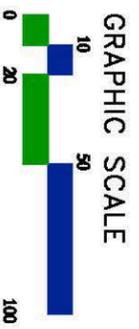
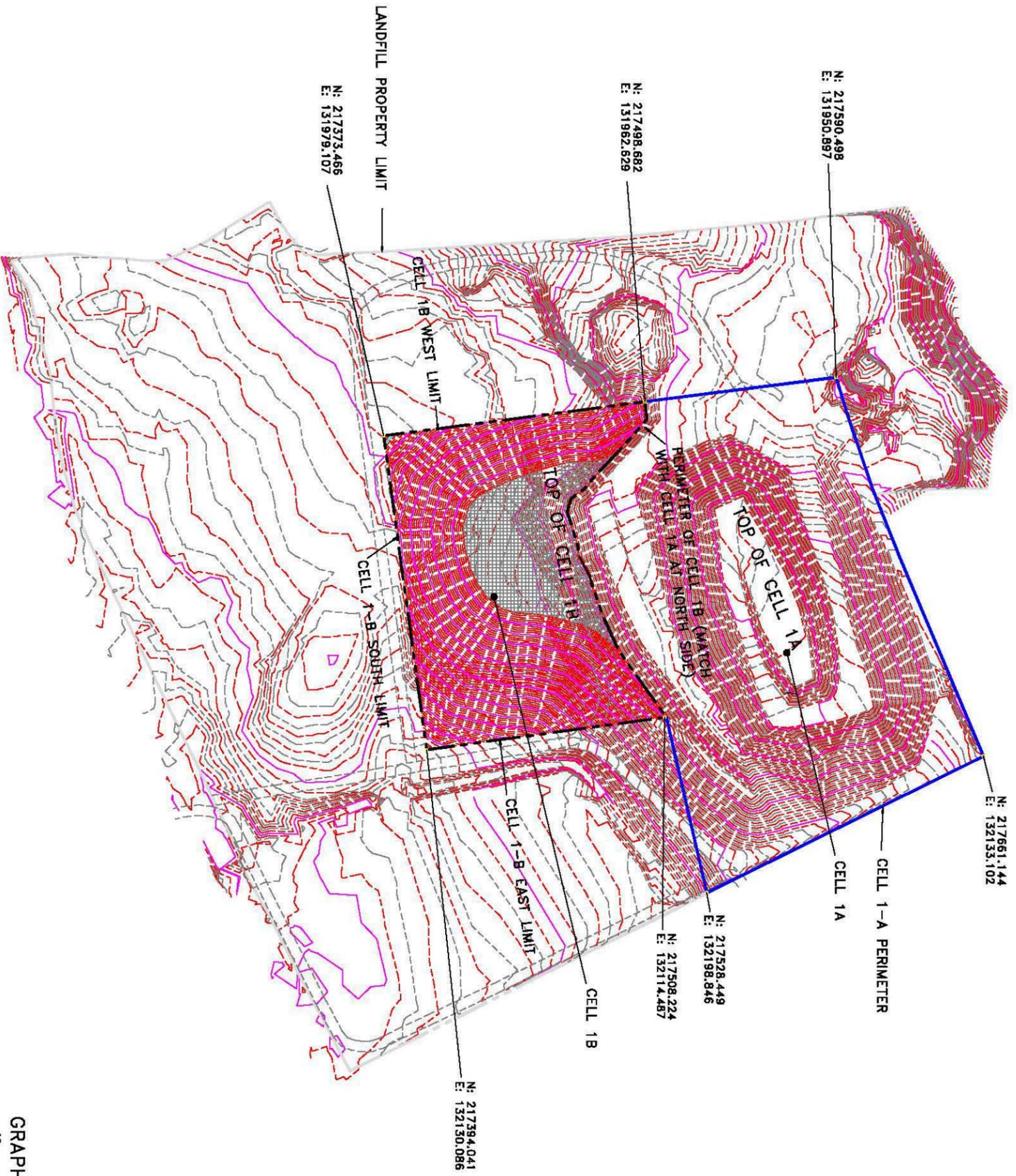
- 4.1. On or before April 15, 2015, the Municipality shall submit to EPA (a) a report describing the results of its pilot composting program, and (b) for EPA's review and approval, a plan addressing areas of potential improvement and/or expansion of the pilot composting program.
- 4.2. The Municipality shall begin implementation of the approved revised municipal composting program within 30 days of EPA's approval of the revised program.

5. Definitions

The following definitions apply to recycling and composting conducted under this Order. To the extent, however, applicable regulations promulgated by the Commonwealth define these terms to include a wider range of materials, those materials are hereby incorporated by reference into the definitions below.

- 5.1. "Agricultural Waste" shall mean plant waste generated by residential sources, commercial sources and/or from agricultural activities including, but not limited to, bean, nut and grain hulls and chaff, sugar cane bagasse, orchard pruning, and coffee bean hulls and ground.
- 5.2. "Auto Shredder Residue" or "ASR" shall mean the residues, after removal of metals, from the shredding of automobiles and major household appliances. ASR consists of glass, fiber, rubber, automobile liquids, plastics and dirt.
- 5.3. "Compostable Material" shall mean Agricultural Waste, Yard Waste, food waste, and other biodegradable material not otherwise included in the definition of Recyclable Material.
- 5.4. "Composting" shall mean the controlled biological aerobic decomposition of organic material that is sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth in that it has the unique ability to improve the chemical, physical, and biological characteristics of soils or growing media.
- 5.5. "Curbside Collection" shall mean regular collection of Recyclable and/or Compostable Material directly from households and other establishments.
- 5.6. "Material Recovery Facility" or "MRF" shall mean a permitted facility where Recyclable Material is sorted into specific categories and processed, or transported to processors, for re-manufacturing (*i.e.*, making the recycled material into new products).
- 5.7. "Qualified Municipal Recycling Manager" shall mean one or more individuals who are certified as a *Manager of Recycling Systems* by the Solid Waste Association of North America ("SWANA") or an equivalent independently-proctored exam. The Qualified Municipal Recycling Manager(s) must maintain the *Manager of Recycling Systems* certification.

- 5.8. "Recyclable Material" shall mean glass, paper, cardboard, metals, plastics, electronics, batteries, and other material that may be identified by EPA as economically recyclable in Puerto Rico.
- 5.9. "Recycling" shall mean the separation, collection, processing, and sale or distribution of Recyclable Material as a precursor to making the recycled material into new products.
- 5.10. "Recycling Rate" shall be 100% multiplied by the tons of waste generated in the Municipality that were recycled divided by the total tons of waste material generated in the Municipality.
- 5.11. "Scrap Tires" shall mean motor vehicle, truck or heavy equipment tires that are discarded.
- 5.12. "Yard Waste" shall mean vegetation waste, such as grass, bushes, shrubs, trees and associated clippings, generated by residential and/or commercial sources through the maintenance of private or public lands.
- 5.13. "White Goods" shall mean refrigerators, stoves, washers, dryers, sinks or other such objects that are discarded.



CELL 1A & 1B
 MUNICIPALITY OF LAJAS
 MUNICIPAL SOLID WASTE LANDFILL
 PR-303
 LAJAS, PUERTO RICO

Project CELL 1A & 1B	Sheet 1/1
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