

Toa Baja Municipal Solid Waste Landfill  
Amendment of Administrative Order On Consent  
Docket No. RCRA-02-2008-7308

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2

In the Matter of:

Toa Baja Municipal Solid Waste  
Landfill, Toa Baja, Puerto Rico.

Municipality of Toa Baja, Puerto  
Rico, and

Landfill Technologies Corp.,

Respondents.

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

AMENDMENT  
of  
ADMINISTRATIVE ORDER ON CONSENT

Docket No. RCRA-02-2008-7308

I. PRELIMINARY STATEMENT

1. This is an Amendment (the "Amendment") of the Administrative Order On Consent, Docket No. RCRA-02-2008-7308 (the "Consent Order"). The Amendment is authorized by paragraph 109 of the Consent Order.
2. The provisions and obligations of the Consent Order remain fully in effect, except as they may be modified by this Amendment.
3. The purposes of the Amendment are to provide a revised schedule for portions of the work and obligations under the Consent Order and to provide for a recycling and green waste management program that will reduce the volume of waste disposed of at the Toa Baja landfill, in accordance with policies of the Commonwealth of Puerto Rico and the United States Environmental Protection Agency ("EPA").

II. EPA FINDINGS OF FACT

4. On April 10, 2012, EPA representatives inspected the Toa Baja landfill. Operations at the landfill have improved pursuant to the 2007 AOC, but the currently active part of the landfill is near full capacity. A representative of Respondent Landfill Technologies stated that the landfill currently receives waste from the municipalities of Toa Baja, Guaynabo and Comerio, and from private carters. The landfill receives approximately 20,000 tons of solid waste monthly

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for disposal. A new waste disposal cell in Area C of the Facility is currently under construction. The EPA representatives noted that piping for use in storm water management had been received at the site.

5. The EPA representative observed that the northwest slope of the landfill located adjacent to nearby residences was quite steep, and was heavily vegetated. The EPA representatives reported a need for an updated engineering inspection of this slope to assess its stability.

6. Respondents have informed EPA they intend to take specific actions with respect to waste management at the Facility. These actions will include recycling provisions, and regulatory requirements that will ban disposal of certain materials at the Facility.

### III REQUIREMENTS AND PROVISIONS

7. Respondents shall perform actions and meet obligations pursuant to the provisions of this Amendment, and the provisions of the Consent Order to the extent such provisions of the Consent Order are not changed by this Amendment.

#### Cooperation Among Respondents; Assignment of Tasks

8. This paragraph is added to paragraph 64 of the Consent Order as sub-paragraph c. The Puerto Rico Land Authority ("PLA") is required to participate in the performance of the work required by the Consent Order, pursuant to an EPA Administrative Order issued to it, Docket No. RCRA-02-2008-7302. In the event EPA issues a new Order or an Amendment to the PLA Administrative Order, EPA reserves the right to assign to the PLA specific tasks or any portions of such tasks set forth in the Consent Order and this Amendment.

#### Slope Stability

9. Paragraph 66. e. of the Consent Order is deleted, and replaced with this paragraph. Pursuant to paragraph 66. e. of the Consent Order, Respondents inspected the slopes at the Facility that are adjacent to nearby residences to ensure that the slopes are not in danger of collapse or partial collapse. Respondents submitted a report on the inspection, dated January 13, 2009, that showed the slopes were stable. Within ninety (90) calendar days after the effective date of this Amendment, Respondents shall conduct an updated inspection of the slopes, and report to EPA in writing the results of the updated inspection within thirty (30) calendar days after its completion. Thereafter, Respondents shall undertake any protective measures that may be required. Respondents shall ensure the stability of all slopes during the remaining active life and after closure of the Facility.

10. Within ninety (90) calendar days after Respondents certify to EPA that closure work of Areas A and C of the Facility have been completed, pursuant to paragraph 77. d. of the Consent Order, Respondents shall re-inspect all slopes at the Facility that are adjacent to nearby residences to confirm that slopes are stable. Respondents shall report to EPA in writing the results of the re-

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inspection within thirty (30) calendar days after its completion. Respondents shall undertake any protective measures that may be required to ensure continued slope stability.

Overview of Major Actions

11. Paragraph 67 of the Consent Order is deleted and replaced with this paragraph. There are several major actions that will take place under the amended Consent Order. These actions require close coordination by the Respondents and the professional engineer(s). EPA will provide review, appropriate approvals and oversight. The major actions are as follows:

- a. Respondents shall cease receiving all waste for disposal in Area A of the Facility no later than September 30, 2014, or by such other date as the parties may agree in writing.
- b. Respondents have submitted a Gas Collection and Control ("GCCS") design for EPA review. After EPA approval (including any modifications), the GCCS will be implemented and will be operated in accordance with the requirements of the Clean Air Act ("CAA") and the Consent Order.
- c. Respondents will submit a Closure Plan for EPA review within 120 days after the effective date of this Amendment. The Closure Plan will meet all the requirements of federal landfill criteria, and will also include interim measures, including earthen cover, storm water control and leachate management to be implemented prior to and in coordination with closure work. After EPA approval (including any modifications), the Closure Plan and the interim measures shall be implemented in accordance with its timetable.
- d. Respondents will submit a Recycling and Green Waste Management Plan to EPA for review and approval. After EPA approval (including any modifications), Respondents will carry out the Plan according to its implementation schedule.
- e. To the extent technologically and economically viable, Respondents have voluntarily agreed to recover gas from the landfill to be used for energy recovery, and to design and install a photovoltaic power generation system at the landfill after closure. After consultation with EPA, the Respondents shall make the final determination on the viability of these systems.
- f. The Post-Closure Plans for the Facility shall be submitted to EPA for review within 180 days after the effective date of this Amendment.

Waste Disposal In Areas A and C

12. Paragraph 68.a. of the Consent Order is deleted, and replaced with this paragraph. Respondents shall permanently cease receiving all waste for disposal in Area A of the MSWLF Facility no later than September 30, 2014, or such other date as the parties may agree in writing,

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and Respondents thereafter shall close and take necessary steps to prevent any further waste disposal in Area A.

13. Paragraph 68. c. of the Consent Order is deleted, and replaced with this paragraph. Respondents have elected to utilize Area C of the Facility for waste deposition, and intend that waste deposition can begin as early as practicable in 2014. The engineering and other requirements of paragraph 71 of the Consent Order continue to apply with respect to Area C. Area C is projected to have a maximum capacity of approximately 1.2 million cubic yards.

14. Paragraph 68. e. of the Consent Order is deleted, and replaced with this paragraph. Within thirty (30) calendar days after Area A of the Facility ceases receiving waste, but no later than October 31, 2014, Respondents shall submit a written report to EPA documenting that Respondents no longer permit the disposal of any solid waste at Area A of the Facility and that such disposal has ceased. The report shall be accompanied by a certification signed by a senior official of Respondents Toa Baja and Landfill Technologies in the form set forth in IX CERTIFICATIONS of the Consent Order.

Gas Collection and Control System ("GCCS")

15. Respondents have submitted a GCCS plan to EPA for review, pursuant to the applicable provisions of paragraphs 71. a., 72. a., and 73. a. of the Consent Order. After EPA review and approval, (with any modifications) the GCCS shall be implemented pursuant to the provisions of paragraph 77. a. of the Consent Order. EPA review of the GCCS plan will be in accordance with paragraph 76. of the Consent Order. The provisions of paragraph 78. b., c., d., and g. of the Consent Order with respect to timing requirements for submission of GCCS design capacity and related reports are no longer applicable. EPA will notify Respondents in writing if such reports are required to be submitted or resubmitted, and will specify the dates for submission of such report(s).

Closure Plan

16. The time requirements for submission of the Closure Plan for EPA review contained in paragraphs 72. b. and 74. a. of the Consent Order are no longer applicable and are replaced by the time requirements contained in this paragraph. Respondents shall within one hundred twenty (120) calendar days after the effective date of this Amendment submit a Closure Plan for Areas A and C of the Facility for EPA approval. The Closure Plan shall meet all the substantive requirements of paragraphs 72. b. and 74. a. of the Consent Order. The Closure Plan shall also include interim measures concerning the provision and maintenance of earthen cover, storm water controls, re-grading and partial leachate management, to be undertaken prior to and in coordination with final closure work. The Closure Plan shall include an implementation timetable, as required by paragraph 72. b. of the Consent Order, and which shall include the provision of interim measures, and which shall be coordinated with the implementation timetable for the GCCS. After submittal to EPA, the Closure Plan shall be subject to the review, modification and approval procedures set forth in paragraph 76 of the Consent Order.

### Energy Recovery

17. To the extent technologically and economically viable, Respondents voluntarily agree to recover gas from the Landfill and either market it for energy recovery or directly use it to generate electrical power for market. Respondents shall maintain compliance with applicable regulations governing the GCCS in connection with any energy recovery system. Respondents agree to periodically, and upon EPA request, consult with and supply status reports to EPA on this matter. Upon request, and subject to workload constraints, EPA will provide limited technical assistance to Respondents with planning landfill gas to energy systems. After due consultation with EPA, Respondents shall make the final determination on the technological and economic viability of any gas to energy system.

### Photovoltaic Power Generation and Landfill Cap System

18. To the extent technologically and economically viable, Respondents voluntarily agree to design and install an integrated geo-membrane and photovoltaic power generation system applied as a closure system ("PV Cap System"). Respondents agree to periodically, and upon EPA's request, consult with and supply status reports to EPA on this matter. Upon request, and subject to workload constraints, EPA will provide limited technical assistance to Respondents with planning the PV Cap System. After due consultation with EPA, Respondents shall make the final determination on the technological and economic viability of any PV Cap System.

### Post-Closure

19. Paragraph 75. a. of the Consent Order is hereby amended to change the date for submittal of a Post-Closure Plan for Area A to EPA by Respondent Toa Baja. The due date for such submittal is one hundred eighty (180) days after the effective date of this Amendment.

20. Paragraph 75 c. of the Consent Order is hereby amended to change the date for the submittal of a Post-Closure Plan for Area C to EPA by Respondent Toa Baja. The due date for such submittal is one hundred eighty (180) calendar days after the effective date of this Amendment.

### Recycling and Green Waste Management Program

21. Within one hundred twenty (120) calendar days after the effective date of this Amendment, Respondents shall submit to EPA for review and approval a plan for a Recycling and Green Waste Management Program ("Recycling Program"), which shall be consistent with all Commonwealth of Puerto Rico regulations and/or requirements. The Recycling Program will include all the definitions, requirements and time schedules or phases that are set forth below, and will specify joint or separate responsibilities of the Respondents for tasks contained in the Recycling Program. EPA will review the Recycling Program, and provide its comments in writing to Respondents. Within thirty (30) calendar days after receipt of EPA's comments, or by such other deadline as is approved by EPA, Respondents shall resubmit a revised Recycling Program. EPA and Respondents will consult as necessary, and, after any further revisions are

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incorporated into the Recycling Program, EPA will notify Respondents in writing of its approval of the Recycling Program. Respondents shall carry out the Recycling Program in accordance with its implementation schedules, and the Program shall be implemented pursuant to this Order for as long as the Facility receives waste for disposal.

- a. Respondents shall develop and implement disposal restrictions to ensure that bulk ash, bulk green waste, and bulk recyclable materials are not disposed of at the Facility. The disposal restrictions shall be specified in the Recycling Program to be submitted to EPA, and may include phased implementation. The program shall include routine documented inspections of loads coming into the Facility, and shall also include the prohibition by local ordinance or regulation of the disposal of these materials in the Facility if Respondents determine such action to be necessary to achieve compliance with the disposal restrictions.
- b. The following definitions (which shall be used for the purposes of this Amendment) apply to development and implementation of Respondents' Recycling and Green Waste Management Program.
  - i. "Agricultural waste" is defined as waste vegetation 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 grounds.
  - ii. "Ash" is defined as the residue of matter that remains after burning, and includes, but is not limited to, such residues produced by manufacturing, energy production, burning coal and other commercial processes.
  - iii. "Composting" is defined as 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. (Material that is or will be composted is hereinafter referred to as "compostable material.")
  - iv. "Green Waste" is defined as agricultural and yard waste, as defined herein, which are subject to the composting and mulching requirements in this Order.
  - v. "Mulching" is defined as the collection and processing of agricultural and yard wastes to reduce their volume and their subsequent application to soil to provide insulation, limit evaporation, and control weeds and erosion.

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(Material that is or will be mulched is hereinafter referred to as “mulch material.”)

- vi. “Recycling” is defined as the collection, processing, and sale or distribution of waste glass, paper (including cardboard), metals, plastics, electronics, and batteries as defined in 40 C.F.R 273.9 (hereinafter “recyclable materials”).
  - vii. “Yard waste” is defined as waste vegetation, such as grass, bushes, shrubs, trees, and associated clippings, generated by residential and/or commercial sources through the maintenance of private or public lands.
- c. The Recycling Program’s objective is to have all households and small businesses in the municipality participate in the Program by 2020. The Program shall include the following:
- i. Within ninety (90) calendar days of EPA’s approval of the Recycling Program, Respondents shall develop an Education and Outreach Series regarding the Municipality’s Recycling Program, and specifying the responsibilities of each Respondent with respect to its implementation. Implementation shall be coordinated with each phase of the Recycling Program. This Education and Outreach shall be repeated on an annual basis for all covered households and businesses.
  - ii. The Recycling Program shall incorporate requirements that suitable receptacles will be used for recycling by households and small businesses in the municipality on a phased schedule. The Program shall also incorporate the use of suitable receptacles at regional collection points in those areas where there is no curbside trash collection.
  - iii. Respondents shall develop and implement a phased program to ensure that green waste and recyclable materials generated from households, businesses, and other entities in Toa Baja are not disposed of at the landfill Facility. The program shall include routine documented inspections of incoming loads.
  - iv. Respondents shall implement a composting project. The Recycling Program will contain details about the Composting Project, including its location, procedures and an implementation timetable. The Composting Project will be designed so that it can expand over time.

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- v. Respondent Toa Baja shall develop a suitable enforcement program to address non-compliance with the municipality's recycling and green waste management requirements, including such actions or procedures as it may determine are suitable to help achieve compliance with the Recycling Program.
- vi. Unless otherwise approved by EPA, the Recycling Program shall be based on the following phased schedule. The Recycling Program shall contain details describing the specific actions to be taken in each phase to incrementally expand the program to incorporate all households and small businesses in the municipality, either through curbside or "Drop Off" collection procedures. The details shall include the number of households in each phase, the percentage of households utilizing "Drop Off" collection, and the percentage of households utilizing curbside collection, and other appropriate actions.
  - 1. A first phase to begin implementation in 2014 and to continue thereafter.
  - 2. A second phase to begin implementation in 2015 and to continue thereafter.
  - 3. A third phase to begin implementation in 2016 and to continue thereafter.
  - 4. A fourth phase to begin implementation in 2017 and to continue thereafter.

Stipulated Penalties

22. Paragraph 92. a. and 92.c. of the Consent Order are deleted and replaced by this paragraph. Stipulated penalties for each non-complying act referenced in this paragraph are set forth below. Failure to meet the requirements of paragraphs 9 and 10 of this Amendment concerning slope stability, failure to meet the deadline in paragraph 12 of this Amendment concerning cessation of waste receipt in Area A of the Facility, failure to comply with paragraphs 15 and 16 of this Amendment concerning the GCCS and Closure Plan, failure to comply with paragraph 77. a. of the Consent Order concerning performance of work under the GCCS and Closure Plans, and failure to comply with the provisions of paragraphs 19 and 20 of this Amendment concerning Post-Closure.

<u>Period of Failure To Comply</u>	<u>Penalty per Calendar Day</u>
1 <sup>st</sup> through 15 <sup>th</sup> day	\$200.00
16 <sup>th</sup> through 60 <sup>th</sup> day	\$500.00
61 <sup>st</sup> through 120 <sup>th</sup> day	\$1,000.00
121 <sup>st</sup> through 180 <sup>th</sup> day	\$3,500.00
181 <sup>st</sup> day and thereafter	\$5,000.00

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Stipulated penalties for failure to comply with any requirement of the Recycling and Green Waste Management Program set forth in paragraph 21 of this Amendment shall be \$200.00 per calendar day.

Stipulated penalties shall be made by cashier's or certified check or by Electronic Fund Transfer (EFT). If the payment is made by check, then the check shall be payable to the "**Treasurer, United States of America**", and shall be mailed to:

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

The check shall be identified with a notation thereon listing the following: **IN THE MATTER OF: Toa Baja Municipal Solid Waste Landfill, Toa Baja, Puerto Rico** and shall bear thereon the **Docket Number RCRA-02-2008-7308**.

If Respondent chooses to make the payment by EFT, then Respondent shall provide the following information to its remitter bank:

- a. Amount of Payment
- b. SWIFT address: FRNYUS33, 33 Liberty Street, New York, NY 10045
- c. Account Code for Federal Reserve Bank of New York receiving payment:  
68010727
- d. Federal Reserve Bank of New York ABA routing number: 021030004
- e. Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"
- f. Name of Respondents: Municipality of Toa Baja, Puerto Rico and Landfill Technologies Corp.
- g. Case Number: RCRA-02-2008-7308

Whether the payment is made by check or by EFT, the Respondent shall promptly thereafter furnish reasonable proof that such payment has been made to:

Robert G. Hazen  
Assistant Regional Counsel  
U. S. Environmental Protection Agency, Region 2  
290 Broadway, Room 1648  
New York, New York 10007-1866

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Project Coordinators

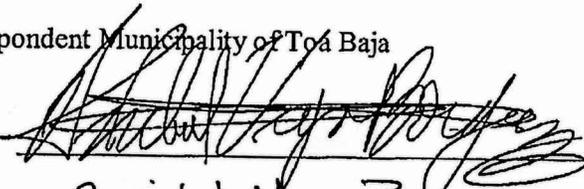
23. Paragraph 84 of the Consent Order is hereby amended. The designated EPA Project Coordinator for the Consent Order and this Amendment is Ronald Voelkel, Environmental Scientist, U. S. Environmental Protection Agency, Region 2, 290 Broadway, New York, New York 10007-1866. Carl Plossl, Environmental Engineer, is the EPA designated alternate Project Coordinator.

Dispute Resolution

24. Paragraph 113 of the Consent Order is hereby amended by adding the following sentence. Notwithstanding the foregoing, Respondents may not invoke the dispute resolution procedures for the deadline for ceasing waste receipt at Area A at the Facility, nor may Respondents invoke the dispute resolution procedures concerning which EPA official is designated by EPA as the official to make a determination concerning the dispute.

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Respondent Municipality of Toa Baja

By: 

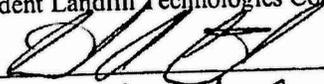
Name: Anibal Vega Borges  
(PRINT)

Title: Mayor

Date: 9/24/12

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Respondent Landfill Technologies Corp.

By: 

Name: Carlos A. Contreras  
(PRINT)

Title: President

Date: 9/24/12