

COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

DRAFT TITLE V OPERATING PERMIT AIR QUALITY AREA ENVIRONMENTAL QUALITY BOARD



Permit Number:
Permit Application Received:
Issue and/or Effectiveness Date:

Expiration Date:

PFE-TV-3341-07-1005-1692
October 5, 2005

[DATE]

[DATE]

In accordance with the provisions of Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) and the Code of Federal Regulations, Title 40, Part 70

THE BATTERY RECYCLING COMPANY, INC. ARECIBO, PUERTO RICO

hereinafter referred to as **The Battery Recycling Company, Inc., TBRCI** or **the permittee**, is authorized to operate a stationary source of air pollutants limited to the emission units and conditions described in this permit. Until such time as this permit expires, is modified or revoked, **The Battery Recycling Company, Inc.** is allowed to discharge air pollutants from those processes and activities directly related to or associated with air pollutant sources in accordance with the requirements, limitations and conditions of this permit.

The conditions in this permit are federally and state enforceable. Requirements, which are only state enforceable are identified as such in the permit. A copy of this permit shall be kept on-site at the above-mentioned facility at all times.

Cruz A. Matos Environmental Agencies Bldg., San José Industrial Park Urbanization 1375 Ponce de León Ave., San Juan, PR 00926-2604 PO Box 11488, San Juan, PR 00910 Tel. 787-767-8181 • Fax 787-756-5906

TABLE OF CONTENTS

| Section I - General Information | 1 |
|--|----|
| A. Facility Information: | 1 |
| B. Description of Process: | |
| Section II - Description of Emission Units | 2 |
| Section III - General Permit Conditions | 3 |
| Section IV - Allowable Emissions | 14 |
| Section VI - Conditions for secondary lead smelting and refining according to Hazardous Air Pollutants for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting and refining according to the Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions for Secondary Lead Smelting (40 CFR Part 63 Subsection VI - Conditions (40 CFR Part 64 Subsection VI - | |
| Section VII - Insignificant Emission Units | 30 |
| Section VIII - Permit Shield | 31 |
| Section IX - Permit Approval | 31 |
| Appendix | 33 |
| Appendix A - Definitions and Abbreviations | 34 |

THE BATTERY RECYCLING COMPANY, INC. ARECIBO, PUERTO RICO PFE-TV-3341-07-1005-1692 PAGE 1 OF 35

Section I- General Information

A. Facility Information:

| Name of the Company: | The Battery Recycling Company, Inc. |
|--|---|
| Mailing Address: | P.O. Box 1016 |
| City: | Arecibo |
| State: | Puerto Rico |
| Zip Code: | 00613-1016 |
| Plant Name: | The Battery Recycling Company, Inc. |
| Physical Address: | PR-2 Km 72.2 Cambalache Ward Arecibo, Puerto Rico |
| Responsible Officer: | Luis R. Figueroa Nieves President |
| | |
| Phone Numbers: | 787-880-5373 |
| Phone Numbers: Facility Contact Person: | 787-880-5373 Luis R. Figueroa Nieves President |
| | Luis R. Figueroa Nieves |
| Facility Contact Person: | Luis R. Figueroa Nieves President |
| Facility Contact Person: Phone Number: | Luis R. Figueroa Nieves President 787-880-5373 |

THE BATTERY RECYCLING COMPANY, INC. ARECIBO, PUERTO RICO PFE-TV-3341-07-1005-1692 PAGE 2 OF 35

B. Description of Process:

The Battery Recycling Company, Inc (TBRCI) is located in Cambalache Ward, PR-2 Km 72.2 in Arecibo. TBRCI is dedicated to the recycling of lead batteries and the production of secondary lead of different specifications.

TBRCI processes 66.67 tons per day of used lead batteries. Secondary lead is smelted at a rate of 50.05 tons per day. The furnace product is placed in refining kettles to produce refined lead as per clients' specifications. **TBRCI** operation is 24 hour per day, 7 days per week for 12 months per year, or approximately 8,760 hours per year.

Emissions from the kiln and each of the five kettles are discharged to the atmosphere through the control devic. Emissions from the fuel combustion of the kiln are also discharged through the control device. The emissions from the fuel combustion at each of the five kettles are discharged to the atmosphere through separate stacks.

This facility is a minor source of emissions. Normally, minor sources are not required to obtain a Title V permit under Part VI of the Regulations for the Control of Atmospheric Pollution (RCAP). However, as established in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting (40 CFR Part 63, Subpart X), area sources (minor sources) subject to such regulation must obtain a Title V permit. The facility is also affected by the New Source Performance Standard (NSPS) for Secondary Lead Smelters (40 CFR Part 60, Subpart L).

Section II- Description of Emission Units

The emission units regulated by this permit are the following:

| Emission Unit | Description | Control Equipment |
|------------------|--|---|
| EU-1 | Smelting furnace type rotary/reverberatory, as a capacity of 5.0 m³, will process 20.75 metric tons of mix per batch; at a maximum rate of 3.35 batches of mix per day and produces a maximum of 50.05 metric tons per day of lead. Furnace Burner, consumes used oil at a rate of 89.76 gallons per hour with a maximum sulfur content of 0.5% by weight. With a capacity of 12.0 millions Btu/hr. Uses propane for startup. | CD-1 Baghouse Have 8 modules, 99.5% efficiency for particulate matter, a discharge volumen of 46.79 feet ³ /min through a stack of 78.5 feet of height and a diameter of 62.25 inches. |

| Emission Unit | Description | Control Equipment | | |
|--------------------------------------|---|---|--|--|
| EU-2 EU-3 EU-4 EU-5 EU-6 | Five lead refining kettles. Each one has a capacity of 40 metric tons of secondary lead. | CD-1 Baghouse Have 8 modules, 99.5% efficiency for particulate matter, a discharge volumen of 46.79 feet ³ /min through a stack of 78.5 feet of height and a diameter of 62.25 inches. | | |
| | Five burners of the lead refining kettles. Each one consumes used oil at a rate of 18.48 gallons per hour with a maximum sulfur content of 0.5% by weight. Each one with a capacity of 2.5 millions Btu/hr. Uses propane for startup. | None | | |

Section III - General Permit Conditions

- 1. Sanctions and Penalties: TBRCI is obligated to comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Any violation of the terms of this permit will be subject to administrative, civil or criminal penalties as established in the Puerto Rico Environmental Public Policy Act, Article 16 (Act Number 416, September 22, 2004, as amended).
- 2. **Right of Entry:** As specified under Rules 103 and 603(c)(2) of the RCAP, **TBRCI** shall allow the Board or an authorized representative, upon presentation of credentials and other documents as may be required by law, to perform the following activities:
 - a. Enter upon **TBRCI** premises where an emission source is located or where emissions related activities are conducted, or where records must be kept under the conditions of this permit, under the RCAP, or under the Clean Air Act;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit, under the RCAP, or under the Clean Air Act;
 - c. Inspect and examine any facility, equipment (including monitoring and air pollution control equipment), practices or operations (including QA/QC methods) regulated or required under this permit; as well as sampling emissions of air quality and fuels; and

THE BATTERY RECYCLING COMPANY, INC. ARECIBO, PUERTO RICO PFE-TV-3341-07-1005-1692 PAGE 14 OF 35

- 42. **Reports:** Any requirement of information submittal to the Board shall be addressed to: Manager, Air Quality Area, P.O. Box 11488, San Juan, P.R. 00910.
- 43. **Reservation of Rights:** Except as expressly provided in this Title V permit:
 - a. Nothing herein shall prevent EPA or the Board from taking administrative enforcement measures or seeking legal or equitable relief to enforce the terms of the Title V permits, including but not limited to the right to seek injunctive relief, and imposition of statutory penalties, and/or fines.
 - b. Nothing herein shall be construed to limit the rights of EPA or the Board to undertake any criminal enforcement activity against **TBRCI** or any person.
 - c. Nothing herein shall be construed to limit the authority of EPA or the Board to undertake any actions in response to conditions that present an imminent and substantial endangerment to public health or welfare, or the environment.
 - d. Nothing herein shall be construed to limit **TBRCI's** rights to administrative hearing and judicial appeal of termination/ revocation/ disputes over modification/ denial actions in accordance with regulations and the Environmental Public Policy Act.
 - e. The Environmental Quality Board and EPA reserve its right to require additional performance tests or test for any or all the pollutants that the source emits.

Section IV – Allowable Emissions

A. The emissions described on the following table represent the facility allowable emissions at the moment of the permit application and will be used only for payment purposes. According to Resolution RI-06-02³, the emission calculations shall be based on **TBRCI's** actual emissions, although calculations based on the facility allowable emissions will be accepted. If **TBRCI** decides to realize the calculations based on allowable emissions, **TBRCI** shall pay the same charge per ton as the facilities that decide to do the calculations based on actual emissions. Also, when **TBRCI** applies for a modification, administrative change or minor modification to its Title V permit, the source will pay only those charges related with any emission increase (if any) per tonnage, based on the change and not based on the total fees paid previously according to Rule 610(a) of the RCAP.

³ EQB Resolution - Payment procedure of Title V operation fees and charges for Title V renewal permits (Procedimiento de Pago de los cargos de operación de Título V y Cargos por renovación de permiso Título V) issued on March 20, 2006.

THE BATTERY RECYCLING COMPANY, INC. ARECIBO, PUERTO RICO PFE-TV-3341-07-1005-1692 PAGE 15 OF 35

| Criteria Pollutant | Allowable Emissions (tons /year) |
|--------------------|--|
| PM | 20.39 |
| SO_2 | 59.68 |
| NO_x | 9.58 |
| CO | 1.26 |
| VOC | 0.60 |
| Lead | 1.24 |

Section V - Specific Permit Conditions

1. EU-1: Smelting furnace

| Condition | Parameter | Value | Units | Test Method | Method Frequency | Record keeping Requirements | Reporting Frequency |
|---|--------------------|-----------|----------------------|-----------------------------|--------------------------------|---|---------------------------|
| Emission limit for particulate matter | Particulate matter | 50 | mg/dscm | Method 5 | Initial Performance Test | Test results | 60 days after the test |
| Opacity limit | Opacity | 20 | Percent | Method 9 | Initial Performance Test | Test results | 60 days after the test |
| SO ₂ emission limit | Sulfur Content | ≤ 0.5 | Percent by weight | Fuel supplier certification | With each fuel receipt | Record of the sulfur content in the fuel with each receipt | Monthly |
| Fuel Consumption limit | Used Oil | 786,297.6 | Gallons per year | Consumption | Daily | Record | Monthly |

a. PARTICULATE MATTER EMISSION LIMIT:

(i) The permittee shall not cause nor permit the emission of particulate matter, in excess of 50 mg/dscm (0.022 grains/dry standard cubic feet). [40 CFR §60.122(a)(1)]