

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: ECOVERY LLC
FACILITY NAME: ECOVERY LLC
LOCATION: LOXLEY, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
501-0048-X001	7.5 Ton Holding Furnace and Aluminum Melting Rotary Furnace with Baghouse

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

**ECOVERY LLC
LOXLEY, ALABAMA
(PERMIT NO. 501-0048-X001)
PROVISOS**

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **two (2) hours**, the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**
6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **two (2) hours**, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.
7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires and the application is canceled if construction has not begun within 24 months of the date of issuance of the permit.
9. On completion of construction of the device for which this permit is issued, notification of the fact is to be given to the Chief of the Air Division. Authorization to operate the unit must be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division of construction and/or operation without authorization could result in revocation of this permit.

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10. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Prior to a date to be specified by the Chief of the Air Division in the authorization to operate, emission tests are to be conducted by persons familiar with and using the EPA Sampling Train and Test Procedure as described in the Code of Federal Regulations, Title 40, Part 60, for the following pollutants. Written tests results are to be reported to the Air Division within 15 working days of completion of testing.

Particulates	()	Carbon Monoxide	()
Sulfur Dioxide	()	Nitrogen Oxides	()
Volatile Organic Compounds	()	Visible Emissions	()
HCl	(x)		

12. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
13. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
14. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
15. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively

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or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

16. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
17. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
18. The furnace is subject to visible emission restrictions for stationary sources as stated in ADEM Administrative Code 335-3-4-.01(1)(a – b). Compliance with opacity standards in the Rule shall be determined by conducting observations in accordance with 40 CFR Part 60 Reference Method 9.
19. The particulate matter emission rate from the furnace shall not exceed 0.68 lbs/hr.
20. The HCl emission rate shall not exceed 2.17 lb/hr. Compliance with HCl limits shall be determined by 40 CFR Part 60 Reference Method 26A.
21. The furnace is subject to the National Emission Standards for Hazardous Air Pollutants as found in 40 CFR 63, Subpart RRR.
22. If an initial performance test is conducted or required to be conducted, the owner or operator of a Group 1 furnace at a secondary aluminum production facility that is a major or area source must not discharge or cause to be discharged to the atmosphere emissions in excess of 15µg of Dioxin/Furan TEQ per Mg (2.1 x 10⁻⁴ grain Dioxin/Furan TEQ per ton of feed). The owner or operator must test these units according to the requirements found in §63.1511(b) and (c) and §63.1512(d), (k), (n), (o), (p), (q), (r), and (s).
23. This unit is subject to the applicable requirements of 40 CFR 63 Subpart RRR, “National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing” to include the operating requirements in §63.1506(a)(1), (b)(1,2), (c), (d), (m), and (p).
24. The Permittee must provide and maintain easily visible labels for this unit according to §63.1506(b) of 40 CFR Part 63 Subpart RRR.
25. The Permittee must design, install, operate, and maintain the capture and collection system associated with this unit according to the requirements in §63.1506(c)(1)-(3) and §63.1510(d)(1)-(2) of 40 CFR Part 63 Subpart RRR.
26. The Permittee must measure and record the total weight of feed/charge or aluminum production according to the requirements in §63.1506(d) and §63.1510(e) of 40 CFR Part 63 Subpart RRR.
27. According to 40 CFR §63.1506(m) the Permittee must follow the following requirements:
 - (a) If a bag leak detection system is used to meet the monitoring requirement in §63.1510, the Permittee must:

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- (i). Initiate corrective action within 1 hour of bag leak detection system alarm.
 - (ii). Complete the corrective action procedures in accordance with the OM&M plan.
 - (iii). Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
- (b) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).
- (c) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
28. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.
29. These units are subject to the applicable requirements of 40 CFR 63 Subpart RRR, “National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Processing” to include the monitoring requirements in §63.1510(a-f), (h), (i), (j) and (w).
30. The Permittee must prepare and implement a written operation, maintenance and monitoring (OM&M) plan for this unit according to §63.1510(b)(1-8) of 40 CFR Part 63 Subpart RRR.
31. The Permittee must inspect the labels associated with this unit at least once per calendar month to confirm that posted labels are intact and legible.
32. The Permittee must inspect the capture/collection system associated with this unit at least each calendar year to ensure that the system is operating in accordance with the operating requirements §63.1506(c) of 40 CFR Part 63 Subpart RRR and record the results of each inspection.
33. The bag leak detection system associated with this unit must be installed, calibrated, operated and maintained according to §63.1510(f)(1)(i – x) of 40 CFR Part 63 Subpart RRR.

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34. The Permittee must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases associated with these units according to the requirements in §63.1510(h) of 40 CFR Part 63 Subpart RRR.
35. The Permittee must verify that lime is free-flowing to the fabric filter system associated with these units according to the requirements in §63.1510(i)(1) of 40 CFR Part 63 Subpart RRR.
36. The Permittee must record the lime feeder settings on the continuous lime injection systems associated with these units once each day of operation according to the requirements in §63.1510(i)(2) of 40 CFR Part 63 Subpart RRR.
37. The Permittee must install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source according to the requirements in 40 CFR §63.1510(j):
 - (a) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
 - (b) The accuracy of the weight measurement device must be ± 1 percent of the weight of the reactive component of the flux being measured. The Permittee may apply to the Department for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards.
 - (c) The Permittee must verify the calibration of the weight measurement device in accordance with schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
 - (d) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - (e) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
 - (i). Gaseous or liquid reactive flux other than chlorine; and
 - (ii). Solid reactive flux
 - (f) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1510.
 - (g) The Permittee may apply to the Department for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
38. This source is subject to the applicable requirements of 40 CFR Part 63 Subpart RRR, "National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum

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Processing" to include the notification, reporting, and recordkeeping standards in §63.1515, §63.1516(a, b, & c), and §63.1517(a),(b)(1, 4-6, 13-17).

39. The Permittee must develop and implement a written startup, shutdown, and malfunction plan according to the requirements in §63.1516(a) of 40 CFR Part 63 Subpart RRR.
40. The Permittee must submit semiannual reports within 60 days after the end of each 6-month period according to the requirements in §63.1516(b) of 40 CFR Part 63 Subpart RRR.
41. The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63 Subpart RRR for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record including the following records for each source:
 - (a) For the bag leak detection systems associated with these units, record of the total operating hours during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
 - (b) Records of the 15-minute block average inlet temperatures of each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.
 - (c) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days.
 - (d) Records of daily inspections of lime feeder settings, including records of any deviation of the feeder settings from the settings used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
 - (e) Records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate, and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid, or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
 - (f) For each continuous monitoring system, records required by 40 CFR Part 63 Subpart A §63.10(c).
 - (g) Records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
 - (h) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - (i) Records of annual inspections of emission capture/collection and closed vent systems.
 - (j) Records for any approved alternative monitoring or test procedure.

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- (k) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (i). Startup, shutdown, and malfunction plan,
 - (ii). OM&M plan; and
 - (iii). Site-specific secondary aluminum processing unit emission plan (if applicable).
- (l) Records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

DRAFT
Date

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: ECOVERY LLC
FACILITY NAME: ECOVERY LLC
LOCATION: LOXLEY, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
501-0048-X002	Slag Crushing System with Baghouse

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

**ECOVERY LLC
LOXLEY, ALABAMA
(PERMIT NO. 501-0048-X002)
PROVISOS**

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.
2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.
3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.
4. Each point of emission, which requires testing, will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.
5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **two (2) hours**, the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**
6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **two (2) hours**, the person responsible for such equipment shall notify the Department within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected.
7. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.
8. This permit expires and the application is canceled if construction has not begun within 24 months of the date of issuance of the permit.
9. On completion of construction of the device for which this permit is issued, notification of the fact is to be given to the Chief of the Air Division. Authorization to operate the unit must be received from the Chief of the Air Division. Failure to notify the Chief of the Air Division of construction and/or operation without authorization could result in revocation of this permit.

PERMIT NO. 501-0048-X002

10. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.
11. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.
12. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.
13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.
14. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

- (a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;
- (b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;
- (c) by paving;
- (d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

15. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.
16. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.
17. The slag crushing system is subject to visible emission restrictions for stationary sources as stated in ADEM Administrative Code 335-3-4-.01(1)(a – b). Compliance with opacity

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standards in the Rule shall be determined by conducting observations in accordance with 40 CFR Part 60 Reference Method 9.

18. The particulate matter emission rate from the slag crushing system shall not exceed 1.60 lbs/hr.

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Date