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Waste Industry Experts

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February 11, 2011

Geoff Little, P.E
Engineer, SW Permitting Branch
Department of Environment and Natural Resources
Division of Waste Management
1646 Mail Service Center
Raleigh, NC 27699-1646



RE: **Coble's Sandrock C&D Landfill**
Application for Permit Modification for Roofing Shingles Recycling
JEI PROJECT NO. 4191101.12 Task 02

Dear Geof,

On behalf of Coble's Sandrock, Inc. we are submitting the enclosed application for Permit Modification to include roofing shingles recycling at the referenced facility. The Permit Modification application is intended to provide the information outlined in the application guidance document for solid waste facilities transferring asphalt shingle scrap to issue the permit that includes the shingles recycling.

In your review of the Phase 3 construction quality assurance report and the revised financial assurance information submitted last fall, please consider combining all three submittals into the permit modification.

If you have questions or comments concerning the enclosed application, please contact me at your convenience. I will be glad to assist you in your review to expedite the permit approval process.

Sincerely,
JOYCE ENGINEERING, INC.

A handwritten signature in black ink that reads "Hannu Kemppinen". The signature is written in a cursive style.

Hannu Kemppinen, P.G.
Senior Project Consultant

Enclosure

C: Ed Mussler, Permitting Branch Supervisor, SWS, NCDENR
Brenda and Kent Coble, Coble's Sandrock, Inc.

Prepared for:

**Coble's Sandrock, Inc.
5833 Foster Store Road
Liberty, North Carolina, 27298**

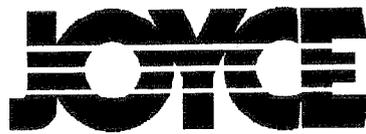
**PERMIT MODIFICATION FOR
ASPHALT SHINGLES RECYCLING**

**COBLE'S SANDROCK, INC. C&D LANDFILL
PERMIT NO. 01-05**

ALAMANCE COUNTY, NORTH CAROLINA

FEBRUARY 2011

Prepared by:



ENGINEERING, INC.

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 Site Plan

Appendix A

 Supply Specification

 Supply Certification

 Applicant Signature Page

1.0 General information

The owner and operator of the facility is:

Brenda and Kent Coble

Coble's Sandrock Construction and Demolition Landfill

5833 Foster Store Road, Liberty, NC 27298

Telephone: 336-565-4750, Fax: 336-565-4752

Email: Brendalcoble@bellsouth.net

The engineer for the facility is:

Joyce Engineering, Inc.

2211 West Meadowview Road, Suite 101, Greensboro, NC 27407

2.0 Operations Plan

The following addresses only the elements of operations plan concerning the management of asphalt roofing shingle scrap.

2.1 Strategies for clean and secure supply of scrap shingles

- a. Source Separated – The roofing contractor or hauler must separate out tear-off shingles and other roofing debris at the job site. Ideally, the shingles are loaded to a dedicated trailer or roll-off box, and the other roofing demolition/construction debris to another trailer or roll-off box. The source separated material will be unloaded at the facility to maintain the scrap shingles separate from other waste.
- b. Mixed Roofing Material – The roofing contractor may be instructed to load the tear-off shingles first at the bottom of the trailer or roll-off box, and then load the other roofing debris (wood, plastic, paper, metal, etc.) on top of the shingles. If tipped without mixing at the landfill, the debris should remain on top of the pile and is relatively easy to remove from the pile of shingles. Wood, plastic, paper, metal, etc. can be further separated for recycling and beneficial use.

Mixed load containing demolition/construction debris deemed difficult and cost prohibitive to sort out the tear-off shingles will be disposed of in the C&D landfill without recycling the shingles.

- c. Marketing Plan – The facility should develop a comprehensive marketing plan based on multiple outlets and not just one buyer for the final recycled asphalt shingle (RAS) product. A diverse list of end users will help stabilize and sustain a shingle recycling business. The hot mix asphalt (HMA) is most mature and developed market for the RAS products. Other markets, not as developed, include cement kilns as a fuel and mineral supplement, coal-fired fuel supplement in the production of electricity, supplement material for road base and subbase on road and parking area construction,

light weight pavement for parking lots and driveways, cold patch for pavement pothole repairs, and for dust control on gravel roads by mixing with traditional gravel aggregates to cover rural unpaved roads.

2.2 Flow and management of the scrap shingles

- a. Material acceptance – Publish a written specification for the type and quality of material acceptable and the criteria for rejecting loads. (Appendix A - an example).
- b. Inspect loads for compliance and acceptance.
- c. Supply certification form to be filled at the gate by hauler before unloading at the facility. (Appendix A - an example).
- d. The area dedicated for the RAS handling and sorting will be approximately 100 feet by 100 feet, attached Site Plan Drawing.
- e. Pre-sorted scrap shingles will be piled separate from mixed load.
- f. Mixed load will be sorted to remove debris for recycling or to landfilling.
- g. Sorted scrap shingles will be collected and stored in the pile up to 90 days.

2.3 Equipment used at facility for material handling and processing

Coble's Sandrock, Inc. will be using the existing landfill equipment for handling the RAS. The facility equipment currently includes a front loader for handling C&D material for sorting recyclables. The front loader is planned for the sorting and loading of the scrap shingles. With improvements in RAS economy and success in retaining multiple end users, the facility may upgrade the equipment and storage area.

2.4 Changes at the facility to accommodate management of shingles

The facility will prepare an area dedicated for the RAS processing and handling (attached Drawing). All loads will be inspected before tipping to avoid re-handling of rejected loads. At the scalehouse the hauler will be given supply certification form to fill which identifies the load origin and type of material.

2.5 Facilities receiving transferred shingles

Coble's Sandrock has contacted approved vendor for recycling the tear-off asphalt shingles for hot mix asphalt (HMA) production. Other end users will be researched for marketing and development of multiple outlets.

A letter of approval from the Health Hazards Control Unit will be required from each vendor for the vendor compliance with asbestos regulations.

2.6 Record keeping of scrap shingles at the facility

The record keeping at the facility should consist of keeping track of every load of roofing shingles for recycling. Each load received must be signed by the hauler declaring the

source of the shingles on the supply certification form. The material leaving the facility to the end user must be recorded. The load destined to recycling record should show the shipping weight, receiving location and date of delivery.

3.0 Financial Assurance

Owners and operators of C&DLF must provide proof of financial assurance to ensure closure of the site and to cover the costs. The Coble's C&D landfill is permitted to receive construction and demolition waste including roofing construction and demolition waste material. The permit modification for recycling of tear-off roofing shingles does not affect the landfill closure cost estimate or closure requirements, therefore; the current financial assurance approved by the Section provides for the financial assurance as required by the Rule .0546.

4.0 Applicant Signature Page

Applicant signature page is included in Appendix A.

5.0 Engineering Drawings

Attached site plan drawing indicates the recycled shingles waste unloading area, sorting area, and storage area. The sorted shingles may be stockpiled or placed in containers ready for transfer to the end user.

Drawing

Appendix A

SUPPLY SPECIFICATION (Example)

**Source Separated Tear – Off Shingles
List of Acceptable / Unacceptable Items**

ROOFING WASTE ITEMS FOR RECYCLING

ACCEPTABLE MATERIAL

Scrap Shingles

Felt attached to shingles

UNACCEPTABLE MATERIAL

Wood

Paper

Plastic

Metal flashings, gutters, etc.

Nails (best effort)

Other Trash

SUPPLY CERTIFICATION (Example)

Roofing Company or Other Supplier of Tear-off Shingles

Delivery Company Name: _____

Address: _____

Contact: _____

Telephone: _____

Email: _____

The undersigned certifies that:

1. All tear-off scrap shingles came from residential buildings having four or fewer dwelling units.
2. These residential buildings are not “regulated facilities” according to state and federal NESHAP rules, and
3. The roofing waste material delivered consists of asphalt shingles and normal roofing construction debris only and contains no known hazardous material e.g. asbestos.

Residential roofing project address where tear-off shingles originated:

Address: _____

Company where the scrap shingles were delivered for processing:

Company: _____

Address: _____

Applicant Signature Page

Name of facility COBLE'S SANDROCK, INC. C&D LANDFILL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that the information provided in this application is true, accurate, and complete to the best of my knowledge.

I understand that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars (\$15,000.00) per day per each violation of the Solid Waste Management Rules. I further understand that the Solid Waste Management Rules may be revised or amended in the future and that the facility siting and operations of this solid waste management facility will be required to comply with all such revisions or amendments.

Hannu Kemppinen
Signature

Hannu Kemppinen
Print Name

FEB 11, 2011
Date

Senior Project Consultant
Title

Jayce Engineering, Inc.
Business or organization name