

| Fac/Perm/Co ID # | Date | Doc ID# |
|------------------|-----------|---------|
| 3424 | 9 117 110 | 11596 |

RECEIVED

June 30, 2010
File No. 102111 | GSO10R

AUG 9 2010

Ms. Pat A. Wylie
NCDHHS Epidemiology Section
1912 Mail Service Center
Raleigh, North Carolina 27699-1912

**SOLID WASTE SECTION
ASHEVILLE REGIONAL OFFICE**

RE: Abbey Green Recycling Center
5030 Overdale Road
Winston-Salem, North Carolina

Dear Ms. Wylie:

On behalf of Abbey Green, Inc., Kleinfelder is submitting this revised Operations Manual for the referenced project. This manual has been revised based upon comments provided from the North Carolina Department of Health and Human Services Division of Public Health Epidemiology Section letter dated June 24, 2010 regarding handling asbestos containing building materials.

Should you have any questions or require clarification, please contact Chris Hay at 336.668.0093 or chay@kleinfelder.com.

Very truly yours,

KLEINFELDER SOUTHEAST, INC.

John M. Stewart, P.G.
Project Professional

Christopher W. Hay, E.I.
Environmental Group Manager

JMS/CWH:cas

Enclosure: Operations Manual

Cc: Larry Frost – NCDENR DWM Solid Waste Section

0000 0 00A

2011/10/11

OPERATIONS MANUAL

ABBAY GREEN RECYCLING CENTER
5030 OVERDALE ROAD
WINSTON-SALEM, NORTH CAROLINA

Prepared for:

ABBAY GREEN, INC.



ABBEY GREEN RECYCLING CENTER

OPERATIONS MANUAL

TABLE OF CONTENTS

| | | |
|------------|--|----------|
| 1.0 | GENERAL FACILITY OPERATIONS | 1 |
| 1.1 | Overview | 1 |
| 1.2 | Contact Information | 1 |
| 1.3 | Facility Operating Hours | 1 |
| 1.4 | Access Control | 2 |
| 1.4.1 | Physical Restraints | 2 |
| 1.4.2 | Security | 2 |
| 1.5 | Signage | 2 |
| 1.6 | Personnel Requirements | 3 |
| 1.7 | Health and Safety | 3 |
| 1.7.1 | Personal Hygiene | 4 |
| 1.7.2 | Personal Protective Equipment | 4 |
| 1.7.3 | Mechanical Equipment Hazard Prevention | 5 |
| 1.7.4 | Employee Health and Safety | 5 |
| 1.7.5 | Physical Exposure | 6 |
| 1.8 | Communications | 6 |
| 1.9 | Utilities | 6 |
| 1.10 | Litter Control | 6 |
| 1.11 | Fire Prevention and Control | 7 |
| 1.12 | Severe Weather Conditions | 7 |
| 1.12.1 | Ice Storms | 7 |
| 1.12.2 | Electrical Storms | 8 |
| 1.12.3 | Windy Conditions | 8 |
| 1.12.4 | Violent Storms | 8 |
| 1.13 | Record Keeping Program | 8 |
| 1.14 | Financial Assurance | 9 |
| 2.0 | DEBRIS HANDLING OPERATIONS | 1 |
| 2.1 | Overview | 1 |
| 2.2 | Acceptable Debris | 1 |
| 2.3 | Prohibited Wastes | 1 |
| 2.4 | Debris Screening Program | 2 |
| 2.5 | Facility Operations | 3 |
| 2.5.1 | Operating Capacity | 3 |
| 2.5.2 | Service Area | 4 |
| 2.5.3 | Disposal Facilities | 5 |
| 2.5.4 | Mobile Equipment Requirements | 5 |
| 2.6 | Recycling Operations | 6 |
| 2.6.1 | General Procedures | 6 |
| 2.6.2 | Recycling/Source Separation | 7 |

| | | |
|------------|--------------------------------------|----------|
| 2.6.3 | Containers..... | 7 |
| 2.6.4 | Markets..... | 8 |
| 3.0 | ENVIRONMENTAL MANAGEMENT..... | 1 |
| 3.1 | Overview..... | 1 |
| 3.2 | Surface Water Control..... | 1 |
| 3.3 | Leachate Management..... | 2 |
| 3.4 | Vector Control..... | 2 |
| 3.5 | Dust Control..... | 2 |

Figure 1 Site Plan

Appendix A Letter of Approval for Asbestos Screening Plan

Appendix B NPDES Permit

Appendix C Forsyth County Environmental Affairs Department Air Quality Permit
Applicability Determination

1.0 GENERAL FACILITY OPERATIONS

1.1 Overview

This Operations Manual was prepared for operations of the Abbey Green Recycling Center facility (Permit No. XXX) located at 5030 Overdale Road in Winston-Salem, North Carolina. This document discusses the operation of the recycling facility and other solid waste management activities. The facility has been designed to accept construction and demolition (C&D) materials as well as new construction debris. Refer to the attached site plan for the general layout of the facility.

All personnel involved with the management or supervision of the facility shall review and update the documents as needed. A copy of this Operations Manual will be maintained at the facility and will be available for use at all times.

1.2 Contact Information

All correspondence and questions concerning the operation of the Abbey Green Recycling Center should be directed to the contact listed below. For fire or police emergencies, dial 911.

Abbey Green, Inc. (Operator)
5030 Overdale Road
Post Office Box 12339
Winston-Salem, North Carolina 27117
Phone: 336.345.7793
Contact: Mr. Jim Bryan
Email: jbryanlj@gmail.com

1.3 Facility Operating Hours

Proposed hours of operation will be 7:00 AM to 11:00 PM Monday through Friday and Saturday 7:00 AM to 4:00 PM. The facility will normally receive C&D debris from haulers and construction sites from 7:00 AM to 6:00 PM Monday through Friday. The facility will be closed on Sundays.

Deleted: No debris will be accepted on Saturday

In the event of disaster or other emergency situations, the supervisor may request approval from the DWM regional office to allow additional temporary operating hours.

1.4 Access Control

Access to process and storage areas of the facility will be controlled by a combination of fences, gates, and natural barriers and strictly enforced operating hours. An attendant will be on duty at all times when the facility is open for public use to enforce access restrictions.

1.4.1 Physical Restraints

The site will be accessed by an entrance from the private road to the northwest of Overdale Road. Waste will be screened at the scales by the scale house operator. All waste will have been weighed prior to being processed on the site. The entrance will have a gate which will be securely locked during non-operating hours.

1.4.2 Security

Haulers will be stopped at the scale house for scanning and photographic documentation of open loads. Drivers will be required to identify the contents of the load and origin. Incoming loads on closed trailers or trucks will be inspected upon unloading at the tipping floor. Unacceptable materials will leave the facility in the vehicle that brought them. Frequent inspections of gates and fences will be performed by facility personnel. Evidence of trespassing, vandalism, or illegal activities will be reported to the Owner. The facility will be securely locked during non-operating hours.

1.5 Signage

Prominent signage containing the information required by the North Carolina Division of Waste Management (DWM) and Health Hazards Control Unit will be placed at the main facility entrance. The signs will provide information on operating hours, operating procedures, and acceptable wastes. Service and maintenance roads for use by operations personnel will be clearly marked and barriers (e.g., traffic cones, barrels, etc.) will be provided as required.

1.6 Personnel Requirements

The anticipated personnel requirements for operation and maintenance of the facility are listed in the following table:

| DESCRIPTION | PRIMARY FUNCTION (ALLOCATION) |
|---------------------------------------|--|
| 1) General Manager & Office Staff (5) | Overall management of the facility |
| 2) Scale house attendant (1) | Receiving and weight for incoming loads, identification of load content and screening for prohibited waste |
| 3) Operators (4) | Management of tipping floor and recycling areas and screening for prohibited waste |
| 4) Commercial Drivers (4) * | Transfer of processed C&D material |
| 5) Labor (12) | General labor and operational staff around the site |

* Commercial drivers subject to change in response to actual volume of debris received.

At least one member of the supervisory staff will be experienced in management of the operations. Each facility employee will participate in an annual training course (led by supervisory staff). As part of this training, personnel learn to recognize loads which may contain prohibited wastes. All personnel will receive a minimum of two-hour asbestos awareness training. A minimum number of personnel will be required to operate the facility efficiently. A scale house attendant, laborers to work on the tipping floor and processing line(s), equipment operators, and a site supervisor are anticipated to be employed for the daily operation of the facility.

1.7 Health and Safety

All aspects of the operation of the facility were developed with the health and safety of operations staff, customers, and neighbors in mind. Prior to commencement of operation of the facility, a member of the operating staff will be designated as the site safety officer. This individual, together with the facility's management will modify the site safety and emergency response program to remain consistent with National Solid Waste Management Association and Occupational Safety and Health Administration (OSHA) guidance. All personnel will receive a minimum of two-hour asbestos awareness training.

Processing equipment will be appointed with protection from moving parts, pinching, electrical connections, and sharp objects. Automated and/or manual emergency shut-off controls will also be provided. Safety devices for mobile equipment will include equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. Equipment exhaust should be vented at an appropriate height in excess of the breathing zone. Other personal protective equipment (gloves, hearing protection, coveralls, or boots) will be required based on an employee's duties. All personnel will be encouraged to complete the American Red Cross Basic First Aid course. All personnel should be familiar with the equipment and duties of their position such that they will be able to identify potential hazards.

Each facility employee will participate in monthly safety "lunch pail" meetings with topics relevant to worker safety at the Abbey Green facility. Each facility employee will participate in an annual training course in health and safety (led by supervisory staff). All training shall be documented and attested to by signatures of the trainer and trainee.

Each employee of Abbey Green will be required to submit to random drug and alcohol tests by a third party testing company.

The following are some general requirements for the health and safety of workers at the Abbey Green Recycling Center.

1.7.1 Personal Hygiene

The following items are recommended as a minimum of practice:

- ◆ Wash hands before eating, drinking, or smoking.
- ◆ Wear appropriate personal protective equipment.
- ◆ Wash, disinfect, and bandage any cuts, no matter how small. Any break in the skin can become a source of infection.
- ◆ Maintain fingernails closely trimmed and clean (dirty nails can harbor pathogens).

1.7.2 Personal Protective Equipment

Prior to the issuance of personal protective equipment (PPE) a job hazard analysis will be performed by a qualified industrial hygienist. PPE must be

evaluated as to the level of protection necessary for particular operating conditions and then made available to facility employees. The list below includes PPE typically used and/or required in a solid waste management facility workplace.

- ◆ Safety shoes with steel toes.
- ◆ Hearing protection should be used in areas where exposure to high decibel noise levels is expected.
- ◆ Dust filter masks.
- ◆ Hard hat.
- ◆ Abrasion-resistant gloves.
- ◆ High-visibility vest and/or other clothing.

Following use, PPE should be disposed of or adequately cleaned, dried, or readied for reuse.

1.7.3 Mechanical Equipment Hazard Prevention

The loaders and other equipment should be operated with care and caution. All safety equipment such as horns, backup alarms, and lights shall be functional or taken out of service until repaired. A Lockout-Tagout program shall be used to identify equipment in need of or under repair and ensure that operation is "off-limits" prior to maintenance or repair. All operators shall be trained in the proper operation of equipment.

1.7.4 Employee Health and Safety

Review the following periodically with each employee:

- ◆ Consider safety first when planning and conducting activities.
- ◆ Post emergency contact phone numbers.
- ◆ Post route to nearest emergency medical facility.
- ◆ Post evacuation plan.
- ◆ Provide easy and visible access to the Right to Know materials.
- ◆ Provide easy and visible access to the first aid kits and fire extinguishers.

1.7.5 Physical Exposure

Facility personnel may come in contact with fluids, solids, and airborne constituents found at the recycling center. Routine training should be conducted regarding the individual and collective materials used in the recycling process and their associated hazards. Training concerning safe work practices around these potential exposures should include use of PPE and proper disposal procedures. All personnel will receive a minimum of two-hour asbestos awareness training.

The tipping floor, sorting areas, and unloading areas must be maintained in a clean, sanitary condition.

1.8 Communications

The scale house and office have telephones in case of emergency and to conduct day-to-day business. The scale house and office will communicate with equipment operators and supervisors at the facility by radio.

In an emergency the facility will sound a horn and employees will be trained to congregate at a rally point. Emergency telephone numbers will be displayed in the scale house and office.

Fires and non-conforming waste incidents shall be reported to the Regional Waste Management Specialist within twenty-four hours followed by a written notification to be submitted within fifteen days.

1.9 Utilities

Electrical power, water, and telephone will be provided at the scale house and office. Water will also be available at the tipping floor and processing equipment in the event that asbestos containing materials are identified. Restrooms will be provided at the site.

1.10 Litter Control

The perimeter fence will act as a barrier to keep litter contained within the site. Facility operators will inspect materials entering the facility. If unacceptable materials are delivered to the facility, the operators will deny the load or unacceptable materials will be returned on the same truck. De minimus litter

sorted out during processing will be contained in an appropriate receptacle for delivery to an approved disposal facility. Windblown materials must be collected by the end of the day and no windblown material may be allowed to leave the facility boundary.

1.11 Fire Prevention and Control

Due to the risk of fire and health and safety of personnel, incentives will be in place to discourage smoking on the premises. However, smoking is limited to personnel breaks and only in designated areas screened and located well away from the tipping floor, the processing line, and the storage of processed materials. Fire lanes will be maintained and passable at all times.

The possibility of fire within the facility or a piece of equipment must be anticipated in the daily operation of the facility. Fire suppression equipment shall be provided to control accidental fires and arrangements have been made with the local fire protection agency to ensure any incident at the facility will be handled with the appropriate equipment. A combination of factory installed fire suppression systems and/or portable fire extinguishers will be operational on all heavy pieces of equipment at all times. For larger or more serious outbreaks, local fire and emergency agencies will be called (dial 911).

Abbey Green, Inc will verbally notify the DWM within 24 hours of discovery of a fire within the recycling area. Additionally, written documentation describing the fire, the actions carried out to extinguish the fire, and a strategy for preventing future occurrences will be provided to the DWM within fifteen days following any such occurrence.

1.12 Severe Weather Conditions

Unusual weather conditions can directly affect the operation of the facility. Some of these weather conditions and recommended operational responses are as follows:

1.12.1 Ice Storms

An ice storm can make access to the facility dangerous, prevent movement and, thus, may require closure of the facility until the ice is removed or has melted. Additionally, the "processing line" is powered by

2.0 DEBRIS HANDLING OPERATIONS

2.1 Overview

This section describes the required debris handling operations for the Abbey Green Recycling Center facility. In addition to the C&D debris received at this facility, the facility also processes new construction debris such as lumber, ferrous and non-ferrous metals, etc. These materials are stored at the facility until there are sufficient quantities for pick up or delivery to various recycling contractors or end-users. Materials that are susceptible to degradation due to rain will be covered with waterproof tarps.

2.2 Acceptable Debris

The following debris may be recycled at the facility:

- ◆ clean wood (treated, untreated, and engineered wood products);
- ◆ agricultural processing wastes;

Agricultural Process Wastes is defined for Abbey Green, Inc. as: leafy waste(s) associated with harvesting plants, crops, etc. and dry animal waste (such as stable manure, dry bird- turkey and/or chicken- droppings).

- ◆ aggregates (clean concrete, asphalt pavement, brick, and block);
- ◆ unused drywall;
- ◆ new three-tab single-ply post-consumer roofing shingles;
- ◆ clean metals;
- ◆ white goods;
- ◆ plastics (poly vinyl chloride, poly ethylene, high density poly ethylene, and ABS plastics);
- ◆ clean baled cardboard;
- ◆ carpet and padding; and
- ◆ other wastes as approved by the Solid Waste Section of the Division of Waste Management.

2.3 Prohibited Wastes

Only wastes, as defined in Section 2.2 above or approved by the DWM may be accepted. No other wastes may be accepted. Asbestos containing materials will

Formatted: Indent: Left: 54 pt, Bulleted + Level: 1 + Aligned at: 57 pt + Tab after: 75 pt + Indent at: 75 pt

Formatted: Indent: Left: 72 pt

Formatted: Font: (Default) Arial

Formatted: Bullets and Numbering

not be accepted. Suspect asbestos-containing materials found to contain greater than 1 percent asbestos will not be accepted.

2.4 Debris Screening Program

In order to assure that prohibited wastes are not entering the facility, a screening program will be implemented. Debris entering the facility will be screened by trained personnel. These individuals have been trained to recognize indications of suspicious wastes, including: hazardous placards or markings; liquids, powders, or dusts; asbestos containing materials; sludge; bright or unusual colors; drums or commercial size containers; and "chemical" odors. The screening program for visual and olfactory characteristics of prohibited wastes is an ongoing part of the facility operation.

All vehicles must stop at the scale house located at the entrance of the facility and visitors are required to sign-in. All debris transportation vehicles are weighed and the content of the load assessed by the scale attendant's inquiry, photographic equipment, and scanners. The scale attendant requests from the driver of the vehicle a description of the debris it is carrying to ensure that unacceptable waste is not allowed into the facility. The attendant then visually checks the vehicle as it crosses the scale. Signs informing users of the acceptable and unacceptable types of waste are posted at the scale house. Once passing the scales, the vehicles are routed to the tipping floor.

Facility staff trained to identify wastes that are unacceptable will inspect the debris discharged at the tipping floor. If unacceptable waste (other than asbestos) is found upon unloading on the tipping floor, the load will be isolated, reloaded, and the generator/hauler will be logged and escorted out of the facility. Periodically, minor wastes may be encountered while sorting and processing (i.e. random bag of household waste, litter, etc.). Containers will be staged on-site such that these minor wastes will be placed in a container to be disposed at an appropriate licensed facility.

A facility representative who has successfully completed an approved asbestos contractor/supervisor training class will be present at the facility during hours of operation. Any incoming waste including recognizable suspect asbestos containing material must be accompanied by a report from an accredited

asbestos inspector indicating the materials do not contain asbestos. Recognizable suspect asbestos-containing materials will not be unloaded without proper documentation. If unacceptable waste is found upon unloading on the tipping floor, the load will be isolated, wetted, and covered until it can be determined whether the material contains asbestos. Water will be available throughout the facility to eliminate dust production and migration. Sampling suspect material will be completed by a North Carolina accredited asbestos inspector. If asbestos-containing material is found to have entered the waste stream, the area around the material should be properly marked and the material wetted and covered. North Carolina accredited personnel will be required to clean-up the contaminated site in accordance with applicable regulations and transport the asbestos-containing waste to a proper disposal facility. The facility will have an accredited inspector and abatement contractor respond should a suspect load be received. If asbestos containing materials have contaminated the staging area or pick line, all work will stop and the Health Hazards Control Unit will be notified. A letter from Pat Wylie of the Division of Epidemiology has been included in Appendix A indicating the division's approval of the asbestos screening plan.

2.5 Facility Operations

2.5.1 Operating Capacity

The Operating Capacity for the recycling facility is estimated to be approximately 450 tons per day of C&D debris. Summarized below is the design capacity which is projected to be attained in 2013. This shows the proportions of recycled materials received as mixed debris. Data was taken from nationally published figures on C&D debris and adjusted based on specific studies completed at the Old Salisbury Road Landfill and our conservative expectation that source separation over time will affect the debris stream reducing the amounts of metal and aggregates.

The first column (% Total) is our projected expectation of the percentages of the material we will find in the debris stream measured by weight. The second column (2013 Diversion Rate) is the percentage of that stream that we project we will recover for sale by presorting or on the picking

line. We project we will screen 20% of the material and this will be used as alternate daily cover (ADC) once approved by the Utility Commission.

Deleted: ¶
Page Break

| | % Total | 2013 Diversion Rate | Tons |
|--------------------------------------|---------|---------------------------|---------|
| TOTAL Annual Tipping Tons | | | 110,000 |
| Product Sales - Metal | 5% | 90% | 4,950 |
| Product Sales - Aggregates | 25% | 60% | 16,500 |
| Product Sales - Wood | 28% | 60% | 18,480 |
| Product Sales - Roofing | 13% | 40% | 5,720 |
| Product Sales - Drywall | 14% | 60% | 9,240 |
| Product Sales - Card Board | 3% | 60% | 1,980 |
| Product Sales - Plastic / PVC | 2% | 40% | 880 |
| Other-Lights & difficult to separate | 10% | 0% | 0 |
| TOTAL Product Rate | 100% | 52.5% | 57,750 |
| Material to be used as ADC | | 20% | 22,000 |
| Total Recycle Rate | | 72.5% | 79,750 |

Processed materials will not be stored on site for more than 90 days.

2.5.2 Service Area

The anticipated service area for the facility is generally anticipated to be concentrated in Forsyth County and its surrounding counties. Debris will not be accepted from out-of-state. Specifically, the facility will service the following counties:

| | | |
|----------|-------------|--------|
| Alamance | Guilford | Surry |
| Cabarrus | Mecklenburg | Union |
| Davidson | Randolph | Yadkin |
| Davie | Rockingham | |
| Forsyth | Stokes | |

2.5.3 Disposal Facilities

The disposal facility(s) will be the Forsyth County facility located at Old Salisbury Road (Permit No. 3412-CDLF-1995). Municipal Solid Waste generated by the facility will be disposed of at the Hanes Mill Road MSW Landfill.

A small portion of the recycled inert and aggregate-like material may be retained on site as beneficial fill to improve the site topography.

In the event that new disposal facility agreements are negotiated, the facility will make application for a permit modification with The Division of Waste Management, Solid Waste Section.

2.5.4 Mobile Equipment Requirements

The Owner will maintain on-site equipment required to perform the necessary recycling activities. Periodic maintenance of all equipment and minor and major repair work will be performed within designated maintenance zones or off-site. Generally, loading, hauling, dumping, mixing, and lift equipment may be used for various tasks at the facility.

Deleted: The anticipated disposal facilities for the recycling center (subject to change) include any facility in the State of North Carolina that holds a solid waste permit for the specific waste disposed.

Formatted: Indent: Left: 72 pt

Formatted: Font: Arial, Not Italic

Formatted: Font: Arial

Deleted: ¶
The major recipient of processed debris that can not be recycled will be the Forsyth County facility at Old Salisbury Road (Permit No. 3412-CDLF-1995).¶
A municipal solid waste transfer station is located adjacent to the site. Per approval from the Winston-Salem/Forsyth County Utilities Commission and the DWM, some of the non-recycled materials may be transferred for disposal through this facility.¶

Deleted: provide a notice to the Division of Waste Management within 30 calendar days.

Formatted: Font: Arial, Not Italic

The anticipated equipment requirements for operation and maintenance of the site are listed in the following table:

| DESCRIPTION | PRIMARY FUNCTION (ALLOCATION) |
|--------------------------|---|
| 1) Excavator | Loading |
| 2) Front End Loader(s) | Loading, recycling, storage, and site cleanup |
| 3) Transfer Trucks (4) * | Collection and transfer of C&D material |

* Commercial drivers subject to change in response to actual volume of debris received.

2.6 Recycling Operations

The facility's recycling area is used to store, separate, and contain co-mingled recyclable materials or pre-sorted materials such as new construction materials. The facility will utilize equipment as defined in Section 2.5.4 to facilitate hand sorting of materials and bins for storage.

2.6.1 General Procedures

The transfer operations will be conducted in accordance with the approved Operation Plan and conditions of the Solid Waste Permit issued by the DWM.

Facility operations are anticipated as follows:

- 1) Collection vehicles delivering debris to the facility will enter through the main entrance;
- 2) Log in, screening for prohibited wastes, and weighed by the scale house attendant;
- 3) Continue along the access road until reaching the tipping floor;
- 4) Facility staff will direct the vehicle to the proper discharge location, and the debris load will be screened for prohibited waste while being discharged;
- 5) Only an amount of waste sufficient to begin sorting operations the next day may be left on the tipping floor;
- 6) In the event the sorting process is not operational, then waste may not be deposited on the tipping floor and must be diverted directly to a landfill;

- 7) Except for wood, concrete, and aggregate, recoverable materials must be placed in containers;
- 8) Non-recyclable materials must be securely placed in containers or trucks, and removed within 72 hours.

2.6.2 Recycling/Source Separation

As a means of capturing recyclable materials and/or debris screening, source separation will be conducted as follows:

- 1) The track hoe, loader, or laborers will separate materials to be recycled and/or processed. It is anticipated that most of the recyclables and materials to be separated will arrive at the facility as new construction debris.
- 2) All materials to be recycled and/or processed may stay on the floor until the the end of the day. A small amount of material not in containers, staged for processing immediately the next day, may be stored on the tipping floor overnight. Additional material to be recycled or processed may be stored for a minimum of 24 hours in leakproof containers and covered, except that a minimal amount of waste may be stored in leakproof containers and covered for a maximum of 72 hours when the facility is closed during a weekend or holiday.
- 3) Concrete (cement and asphaltic/bituminous): may be delivered and stockpiled at the limits of the recycling area. The concrete debris will be crushed and subsequently stockpiled in this same area until it is removed from the site for sale as fill, aggregate, etc. as markets allow.
- 4) Source separated wood pallets and cardboard must be unloaded directly onto the sorted clean wood pile and cardboard containers, respectively. These materials should not be unloaded on the tipping floor.

Deleted: M

Deleted: (not in containers) for no more than

Deleted: 48

Deleted: or

Deleted: two (2) working days

2.6.3 Containers

Containers, generally 8'x20' or 8'x15', used for holding recyclables and unacceptable waste will be stored in the recycling area. The containers

will be removed from the processing area to designated storage areas as they are filled.

2.6.4 Markets and Down-stream processing

1) The final destination of the recyclable materials may vary depending upon market prices for such materials. In general, materials which have valid markets will be recycled; however, markets shall fluctuate. In any case, no more than one load, respective to the material, shall be stored at any one time and in no case more than 90 days. Recycled materials sensitive to moisture and/or likely to generate leachate shall be covered with tarpaulins.

Anticipated end markets for the recyclable materials are as follows:

| | |
|--------------------------|--|
| Metals | Delivered to local metals recycling facility |
| Wood | Facility near site for boiler fuel |
| Concrete and Aggregates | Bricks may be banded and palletized for sale to landscaping contractors; concrete, asphalt, and broken brick and block will be crushed and stockpiled until it is removed from the site for sale as fill, aggregate, etc. as markets allow |
| Drywall | Process on-site and sell raw gypsum or soil amendment as markets allow |
| Carpeting and Padding | Local recycling facility, as markets allow |
| Baled Plastic | Delivered to local recycled plastics company |
| Baled Cardboard | Sale in local market for recycled paper products |
| Shingles | If certified as asbestos-free, may be ground on-site for use in asphalt manufacturing. If this becomes a viable market, the Health Hazards Control Unit will be notified. |
| <u>Soils and Mulches</u> | <u>Delivered to local landscapers and wholesalers</u> |

2) Down-stream processing

- ◆ Wood will be shredded with a slow speed shredder and screened.
- ◆ Sheetrock will be shredded with a slow speed shredder and screened
- ◆ Plastics will be shredded with a slow speed shredder
- ◆ Asphalt shingles will be shredded once a market is identified
- ◆ Concrete and other inerts will be pulverized and screened
- ◆ Cardboard will sold either loose or baled
- ◆ Soils will be screened and mixed with other recycled soil amendments

Formatted: Font: (Default) Arial

Formatted: Bullets and Numbering

Deleted: 3.0

3.0 ENVIRONMENTAL MANAGEMENT

3.1 Overview

This section reviews the overall environmental management tasks required for the successful operation of the facility.

3.2 Surface Water Control

As used herein, the definition of "surface water" is water which results from precipitation or site run-on that has not contacted the debris.

Proper control of surface water will accomplish the following goals:

- ◆ Prevent run-on of surface water into debris handling areas;
- ◆ Prevent the run-off of surface water that has come into contact with the debris (i.e. leachate);
- ◆ Limit the erosion caused by surface waters; and
- ◆ Limit sediments carried off-site by surface waters.

An erosion and sedimentation control plan has been approved for the site by Forsyth County. This plan describes both short and long term engineered features and practices for preventing erosion and controlling sedimentation at this site. Sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act (NCGS 113A-50, et seq.) and rules promulgated thereunder (15A NCAC 4).

Erosion control measures have been designed/engineered within the drainage channels and at points of stormwater discharge. The erosion control maintenance plan includes the following:

- 1) Inspect all sedimentation and erosion control devices for stability and function each week and following each rainfall event.
- 2) Remove silt/sediment from sediment traps and stormwater pond when accumulated volume has reached 50% of capacity.
- 3) Remove accumulated silt/sediment from behind temporary sediment fence when depth exceeds approximately 0.5 feet. Repair and replace silt fence as necessary.

3.3 Leachate Management

The facility will have a roof covering the tipping floor when it begins operation. All in-coming materials will be unloaded on the tipping floor beneath the roof. The tipping floor will be sloped to a sump. The sump will be plumbed to the sanitary sewer. Pre-sorting activities and staged materials for the picking line will be covered by the roof. The picking line will also be covered.

Containerized waste will be covered at all times.

3.4 Vector Control

Control of insects, rodents, and other vermin will be accomplished by periodic cleaning of the facility. Spilled or wind-blown debris along the access road will be cleaned up daily. The facility will be cleaned, as necessary, each day to maintain a sanitary operation. Effective vector control measures must be applied at all times.

3.5 Dust Control

A letter from the Forsyth County Environmental Affairs Department dated November 19, 2008 indicates that an air quality permit is not required for the facility as planned. A copy of the letter is included in Appendix C.

Dust related to debris hauler traffic on the access roads will be minimized by using a water truck or a sprinkler system to limit dust on the gravel portion of the road, if necessary. Fugitive dust emissions are prohibited.

Contractors on-site to process concrete, brick, block, and sheetrock are required to comply with all applicable air quality requirements including 40 CFR Part 63, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.