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Consulting Engineer

July 25, 2006

Mr. Ed Mussler
Permitting Branch, Solid Waste Section
NC Division of Waste Management
P.O. Box 29603
Raleigh, North Carolina 27603



Subject: C&D Landfill, Phase 1
FTT ~~Durham County~~, North Carolina
Permit No. 7407

Dear Mr. Mussler:

C&D Landfill, Inc. would like to renew the permit to operate for this facility. The landfill has been operating in compliance with the existing permit. Please find a copy of the operational plan enclosed.

I hope you will find this information satisfactory. Please do not hesitate to call if you have any questions.

With Best Regards,


John A.K. Tucker, P.E.

✓ cc: C&D Landfill, Inc.

**C&D LANDFILL, INC. -
CONSTRUCTION AND DEMOLITION LANDFILL
OPERATIONS MANUAL**

Prepared for

C&D LANDFILL, INC.

802 Recycling Lane

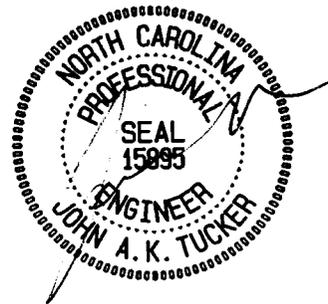
Greenville, North Carolina 27834

252-752-8274

May 2001

Prepared by

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SECTION 1 GENERAL OPERATIONS

1.1 Overview

This Operations Manual was prepared for C&D Landfill, Inc. - Construction and Demolition Debris Landfill, Phases 1 and 2. The information contained herein was prepared to provide landfill personnel with a clear understanding of how the Design Engineer assumed that the completed facility would be operated. While deviations from the operations outlined here may be acceptable, they should be reviewed and approved by the Design Engineer.

1.2 Contact Information

Owner: C&D Landfill, Inc.
Attention: Judson Whitehurst
802 Recycling Drive
Greenville, NC 27834

Phone 252-752-8274

North Carolina Division of Waste Management - Solid Waste Section:

Eastern Area Engineer	Toni Wyche	919-508-8400
Waste Management Specialist	Bobby Nelms	252-946-6481

1.3 Emergency Numbers

Pitt County Recycling/ Solid Waste Management	252-830-6352
Pactolus Fire Department	911 Emergency 252-752-7162 Non-Emergency
Pitt County Emergency Services	252-830-6345
Pitt County Engineer	252-830-6352 Ext 238
NCDENR- Washington Regional Office	252-946-6481

1.4 Access Control

Access to active areas of the landfill will be controlled by a combination of fences and natural barriers, such as the creeks, and strictly enforced operating hours. A landfill attendant will be on duty at all times when the facility is open for public use to enforce access restrictions.

The site will be accessed by the existing entrance at US 264. Scales and a scale house are provided near the entrance. All waste will have been weighed prior to being placed in the landfill. The entrances have gates which will be securely locked during non-operating hours.

Frequent inspections of gates and fences will be performed by landfill personnel. Evidence of trespassing, vandalism, or illegal operation will be reported to the Division of Waste Management and local law enforcement.

1.5 Access Roads

The access road shall consist of a prepared subgrade and 4" of ABC stone as an all weather surface. The road is to be inspected weekly for rutting and other signs of failure. These areas will be repaired in a timely fashion.

1.6 Signage

A prominent sign containing the information required by DWM will be placed just inside the main gate. This sign will provide information on operating hours, operating procedures, and acceptable wastes. Additional signage will be provided within the landfill complex to distinctly distinguish the roadway to the C & D landfill active disposal area. 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.

1.7 Emergency Plan

Equipment used in the operation of the landfill shall be used to control accidental fires. This equipment shall include a bulldozer, track excavator and dump truck. If necessary, additional equipment will be acquired from other sources.

In the case of a fire, the following actions shall be taken:

1. Notify the Pactolus Fire Department and the DMW.
2. Separate the burning material from the remaining waste as soon as possible.
3. Attempt to smother the fire with soil if possible.

4. Water should be used to extinguish the fire as a last resort. Should it be necessary to use water, diversion ditches should be cut to direct the water towards the sediment basins. All efforts should be made to prevent contaminated water from flowing directly into creeks or wetland areas.
5. Follow all instructions as directed by the North Carolina Division Waste Management.

Hazardous Waste Contingency Plan

In the event that identifiable hazardous waste or waste of questionable character is detected at the landfill, appropriate equipment, protective equipment, personnel, and materials as necessary will be employed to isolate the wastes. DWM will be notified immediately (see Section 1.3) that an attempt was made to dispose of hazardous waste at the landfill. If the vehicle attempting disposal of such waste is known, all attempts will be made to prevent that vehicle from leaving the site or, if the vehicle has left the site, immediate notice will be served on the owner of the vehicle that hazardous waste, for which they have responsibility, has been disposed of at the landfill.

The landfill will assist DWM as necessary and appropriate in the removal and disposition of the hazardous waste and in the prosecution of responsible parties. If needed, the hazardous waste will be covered with either on-site soils or other tarping material until such time when an appropriate method can be implemented to properly handle the waste. The cost of the removal and disposing of the hazardous waste will be charged to the owner of the vehicle involved. Any vehicle owner or operator who knowingly dumps hazardous waste in the landfill may be barred from using the landfill.

Should an incident where hazardous waste is found at the landfill occur, the event will be documented by landfill staff using the waste screening form provided in Appendix A.

Records of information gathered as part of the waste screening programs will be maintained at the landfill site during its active life and as long as required by DWM.

In the case of a hazardous spill, the following actions shall be taken:

1. Notify the Pactolus Fire Department, Pitt County Emergency Services, and Pitt County Solid Waste Management.
2. Isolate the spilled material and wait for instructions from the Pactolus Fire Department

1.8 Record Keeping Program

The operator shall maintain the following records related to the C & D landfill:

- A. Waste inspection records;
- B. Daily tonnage records - including source of generation;
- C. Waste determination records;
- D. Quantity, location of disposal, generator, and special handling procedures for all special wastes disposed of at the site;
- E. List of generators and haulers that have attempted to dispose of restricted wastes;
- F. Employee training procedures and records of training completed;
- G. All ground water monitoring and surface water quality information including:
 - 1. Monitoring well construction records;
 - 2. Sampling dates and results;
 - 3. Statistical analyses; and
 - 4. Results of inspections, repairs, etc.
- H. All closure and post-closure information, where applicable, including:
 - 1. Testing;
 - 2. Certification; and
 - 3. Recordation.

The operating record will be kept up to date by the Solid Waste Director or his designee. It will be presented upon request to DWM for inspection. A copy of this Operations Manual will be kept at the landfill and will be available for use at all times

SECTION 2 WASTE HANDLING OPERATIONS

2.1 Overview

This section describes the required waste handling operations for C&D Landfill, Inc.

2.2 Acceptable Wastes

C&D Landfill, Inc. will only accept for disposal the following wastes generated within approved areas of service:

Construction and Demolition Debris Waste (Waste or debris from construction, remodeling, repair, or demolition operations on pavement or other structures)

Land Clearing and Inert Debris Waste: (yard waste, stumps, trees, limbs, brush, grass, concrete, brick, concrete block, uncontaminated soils and rock, untreated and unpainted wood, etc.)

Other Wastes as Approved by the Solid Waste Section of the Division of Waste Management.

2.3 Prohibited Wastes

No municipal solid (MSW), hazardous (as defined by 15A NCAC 13A including hazardous waste from conditionally exempt small quantity generators), or liquid waste will be accepted at this facility. In addition, no polychlorinated biphenyl (PCB), tires, or white goods waste will be accepted.

Asbestos wastes maybe accepted by the facility if handled according to Section 2.5.4.1.

2.4 Waste Disposal

Access

The location of access roads during waste placement will be determined by operations personnel in order to reflect waste placement strategy;

General Procedures

Waste transportation vehicles will arrive at the working face at random intervals. There may be a number of vehicles unloading waste at the same time, while other vehicles are waiting. In order to maintain control over the unloading of waste, a certain number of vehicles will be allowed on the working face at a time. The actual number will be

determined by the truck spotter. This procedure will be used in order to minimize the potential of unloading unacceptable waste and to control disposal activity. Operations at the working face will be conducted in a manner which will encourage the efficient movement of transportation vehicles to and from the working face, and to expedite the unloading of waste.

The approach to the working face will be maintained such that two or more vehicles may safely unload side by side. A vehicle turn-around area large enough to enable vehicles to arrive and turn around safely with reasonable speed will be provided adjacent to the unloading area. The vehicles will back to a vacant area near the working face to unload. Upon completion of the unloading operation, the transportation vehicles will immediately leave the working face area. Personnel will direct traffic necessary to expedite safe movement of vehicles.

Waste unloading at the landfill will be controlled to prevent disposal in locations other than those specified by site management. Such control will also be used to confine the working face to a minimum width, yet allow safe and efficient operations. The width and length of the working face will be maintained as small as practical in order to maintain the appearance of the site, control windblown waste, and minimize the amount of cover required each day. Normally, only one working face will be active on any given day, with all deposited waste in other areas covered by either periodic or final cover, as appropriate.

The procedures for placement and compaction of solid waste include: unloading of vehicles, spreading of waste into 2 foot lifts, and compaction on relatively flat slopes (i.e. 5H: 1V max.) using a minimum number of three flu passes.

The use of portable signs with directional arrows and portable traffic barricades will facilitate the unloading of wastes to the designated disposal locations. These signs and barricades will be placed along the access route to the working face of the landfill or other designated disposal areas which may be established.

Asbestos Management

Asbestos may be disposed within the C & D landfill. Asbestos will only be accepted if it has been processed and packaged in accordance with State and Federal (40 CFR 61) regulations. Asbestos will arrive at the site in vehicles that contain only the asbestos waste and only after advance notification by the generator.

Once the hauler brings the asbestos to the landfill, the hauler will be directed to the designated asbestos disposal area by operations personnel. The designated disposal area will be prepared by operations personnel by leveling a small area using a dozer or loader. Prior to disposal, the landfill operators will stockpile cover soil near the designated asbestos disposal area. The volume of soil stockpiled will be sufficient to cover the waste

and to provide any berms, etc. to maintain temporary separation from other landfill traffic.

Once placed in the prepared area, the asbestos waste will be covered with a minimum of 18 inches of daily cover soil placed in a single lift. The surface of the cover soil will be compacted and graded using a tracked dozer or loader. The landfill compactor will be prohibited from operating over asbestos disposal areas until at least 18 inches of cover are in-place.

The landfill staff will record the approximate location and elevation of the asbestos waste once cover is in-place. The Solid Waste Director will then review pertinent disposal and location information to assure compliance with regulatory requirements and enter the information into the Operating Record.

Once disposal and recording for asbestos waste is completed, the disposal area may be covered with waste. No excavation into designated asbestos disposal areas will be permitted.

Periodic Cover

At the completion of waste placement each week or sooner if the area of exposed waste exceeds one acre in size, a 6 inch layer of earthen material will be placed over the exposed waste. This periodic cover is intended to control vectors, fire, odors, and blowing debris.

2.5 WASTE SCREENING PROGRAMS

In order to assure that prohibited wastes are not entering the landfill facility, screening programs have been implemented at the landfill. Waste received at both the scale house entrance and waste taken to the working face is inspected by trained personnel. These individuals have been trained to spot indications of suspicious wastes, including: hazardous placarding or markings, liquids, powders or dusts, sludges, bright or unusual colors, drums or commercial size containers, and chemical odors. Screening programs for visual and olfactory characteristics of prohibited wastes are an ongoing part of the landfill operation.

Waste Receiving and Inspection

All vehicles must stop at the scale house located near the entrance of the facility and visitors are required to sign-in. All waste transportation vehicles are weighed and the content of the load assessed. The scale attendant(s) requests from the driver of the vehicle a description of the waste it is carrying to ensure that unacceptable waste is not allowed into the landfill. The attendant(s) 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 containing C & D wastes are routed to the landfill.

Vehicles are selected for screening at random a minimum of three times per quarter (i.e. three months). Selected vehicles are directed to an area of intermediate cover adjacent to the working face where the vehicle will be unloaded. Waste is carefully spread using suitable equipment. An attendant trained to identify wastes that are unacceptable at the landfill inspects the waste discharged at the screening site. If unacceptable waste is found, including wastes generated from outside of the service area, the load will be isolated and secured by berming off the area. Unacceptable wastes that are non-hazardous will be removed from the C & D area and either taken to the on-site transfer station or removed from the facility.

For unacceptable wastes that are hazardous, the Emergency Plan outlined in Section 1.7 will be followed. The hauler is responsible for removing unacceptable waste from the landfill property. If no unacceptable waste is found, the load will be pushed to the working face and incorporated into the daily waste cell. All random waste inspections will be documented by landfill staff using the waste screening form provided in Appendix A.

2.6 Severe Weather Conditions

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

Ice Storms

An ice storm can make access to the landfill dangerous, prevent movement or placement of periodic cover, and, thus, may require closure of the landfill until the ice is removed or has melted.

Heavy Rains

Exposed soil surfaces can create a muddy situation in some portions of the landfill during rainy periods. The control of drainage and use of crushed stone on unpaved roads should provide all-weather access for the site and promote drainage away from critical areas. In areas where the aggregate surface is washed away or otherwise damaged, new aggregate should be used for repair.

Intense rains can affect newly constructed drainage structures such as swales, diversions, cover soils, and vegetation. After such a rain event, inspection by landfill personnel will be initiated and corrective measures taken to repair any damage found before the next rainfall.

Electrical Storms

The open area of a landfill is susceptible to the hazards of an electrical storm. If necessary, landfilling activities will be temporarily suspended during such an event. To guarantee the safety of all field personnel, refuge will be taken in the on-site buildings or in rubber-tired vehicles.

Windy Conditions

The proposed operational sequence minimizes the occurrence of unsheltered operations relative to prevailing winds. If this is not adequate during a particularly windy period, work will be temporarily shifted to a more sheltered area. When this is done, the previously exposed face will be immediately covered with daily cover.

Violent Storms

In the event of hurricane, tornado, or severe winter storm warning issued by the National Weather Service, landfill operations may be temporarily suspended until the warning is lifted. Daily cover will be placed on exposed waste and buildings and equipment will be properly secured.

2.7 Height Monitoring

On a weekly basis, the landfill staff will monitor landfill top and side slope elevations. When such elevations approach the grades shown on Final Cover Grading Plan, the final top-of-waste grades will be staked to limit over-placement of waste.

SECTION 3 ENVIRONMENTAL MANAGEMENT

3.1 Overview

This section reviews the overall environmental management tasks required for the successful operation of the C & D landfill.

3.2 Erosion and Sedimentation Control

A approved erosion and sedimentation control plan is provided as part of the Permit Application. This plan describes the engineered features and practices for preventing erosion and controlling sedimentation at this site. The erosion and sediment control system consists of the following components:

1. Diversion Berms/Benches
2. Ditches
3. Down Pipes
4. Sediment Basin.

The landfill side slopes are designed with 3H: 1V slopes and diversion berms or benches placed at slope breaks. These features are designed to keep water volumes and velocities low enough to minimize erosion of the landfill cover. Maintenance of the cover system will involve periodic mowing and repair of any erosion problems and bare spots. These items will be inspected at least once a month and after any significant rainfall events.

The down pipes are designed to carry concentrated flows of surface water off of the landfill. The down pipes will be anchored at 10 foot intervals along the side slopes. The down pipes will be inspected at least once a month and after any significant rainfall event.

Additional erosion control measures have been taken within the drainage channels and at points of stormwater discharge. All final cover should be inspected regularly for erosion damage and promptly repaired.

Stormwater run-off from the C & D landfill is conveyed to the existing sedimentation basin located to the west of the landfill. This basin should be inspected regularly for sediment build-up or erosion damage. The basin should be cleaned out when sediments fill the lower half of the basin.

3.3 Landfill Gas Control

Due to the nature of the waste disposed in this landfill, landfill gas control is not anticipated to be of concern.

3.4 Vector Control

Due to the nature of the waste disposed in this landfill, vector control will not be of concern.

Note that the use of periodic cover will discourage animals from nesting in the waste.

3.5 Odor Control

Due to the nature of the waste disposed in this landfill, odor control will not be of concern.

3.6 Dust Control

Dust related to waste hauler traffic on the access roads will be minimized by using a water truck to limit dust on the gravel portion of the road. Dust generated by excavation of cover soil will be limited by watering the cut soil areas if accessible to the water truck.

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