City Of Raleigh

North Carolina

Carmen Johnson
Fac/Perm/Co ID # 92-33T
Date 9/10/10
Doc ID#
DIN

May 27, 2008

Ms. Donna Wilson, Environmental Engineer
Solid Waste Section/Division of Waste Management
NC DENR
1646 Mail Service Center
Raleigh, NC 27699-1646

Dear Ms. Wilson:

Per your recent email, please find enclosed the City of Raleigh Transfer Station Signature Page that you requested.

If anything else is needed, please feel free to contact me.

Sincerely,

Frederick D. Battle
Solid Waste Services Director
City of Raleigh
400 W. Peace Street, Raleigh, NC 27603
919-831-6890 Phone
919-831-6073 Direct
919-831-6632 Fax
frederick.battle@ci.raleigh.nc.us

cc: File

Signature page of applicant – City of Raleigh

Name of facility City of Raleigh Transfer Station

The City of Raleigh is the owner of the transfer station and Wake County is the operator of the facility.

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.

Frederick D. Battle
Signature

Frederick D. Battle
Print Name

May 27, 2008
Date

SWS Director
Title

City of Raleigh
Business or organization name

Permit No. 9233-T

HAZEN AND SAWYER
Environmental Engineers & Scientists

Hazen and Sawyer, P.C.
4011 WestChase Blvd.
Suite 500
Raleigh, NC 27607
(919) 833-7152
(919) 833-1828 (Fax)

May 23, 2008

RECEIVED MAY 23 2008 SOLID WASTE SECTION

Issued
Projected Complete
12/19/08

Mr. Karim Pathan
Environmental Engineer, Solid Waste Section
State of North Carolina Department of
Environment and Natural Resources
401 Oberlin Rd., Suite 150
Raleigh, NC 27605

Re: Application for Permit To Operate
City of Raleigh
Solid Waste Transfer Facility
Permit No. 92-33T
H&S No. 30579

Dear Mr. Pathan,

On behalf of the City of Raleigh Department of Solid Waste Services, Hazen and Sawyer is pleased to submit three copies of this Application for Permit To Operate for the Solid Waste Transfer Facility. The information provided herein is in response to the provisions included in the Section's letter to Mr. Frederick Battle, Solid Waste Services Director, dated January 18, 2008. As you are aware the facility construction has recently been completed and transfer operations will commence as soon as the Permit To Operate is issued.

In the January 18, 2008 letter to the City of Raleigh, the Section listed a series of items to be submitted in order for the Permit To Operate to be issued. This Application addresses the items listed. We have provided a written response to each of the twelve items listed in the January 18, 2008 letter (shown in italics) below. Where applicable, attachments are provided to this submittal.

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a. Site inspection shall be made by a representative of the NC Solid Waste Section.

Response: A site visit was conducted by the Section on Friday May 16, 2008.

b. Site Preparation shall be in accordance with the approved construction plan, unless revisions or modifications are presented to the NC Solid Waste Section for approval. Three sets of "As-Built" drawings shall be submitted with the project engineer's certification, indicating that the transfer station and related infrastructure was constructed in accordance with the plans.

Response: Construction of the Solid Waste Transfer Facility has been completed in general accordance with the approved Drawing submitted with the 2002 Application for Permit To Construct. No significant modification have been made to the original site and building plans, and no requests for modifications have been submitted to the Section since issuance of the Permit To Construct in 2003.

Three sets of Record Drawings, based upon the Construction Bid Drawings issued in March 2007 are provided as Attachment 3 to this submittal. Hazen and Sawyer provided construction monitoring for the Solid Waste Transfer Facility. The Engineer's Certification prepared by Hazen and Sawyer is provided as

Attachment 1 of this submittal.

c. *A "final" operation plan shall be submitted for the transfer facility with the following items addressed:*

   a. *Finalized service area of the transfer station;*
   b. *Identify receiving landfill for the waste disposal and address the service area of the proposed receiving facility;*
   c. *Location of collection drains in the trailer loading area and location of said drains on the as-built drawings.*

Response: An updated Operations Plan is provided as Attachment 2 of this submittal. This Plan provides information on the Service Area and designated receiving landfill (Section 1.1). A strip drain is provided at either end of the truck loading bays. These drains convey any liquid directly to the pump station, where it is pumped to the City of Raleigh sanitary sewer system. The concrete floor within the truck loading bays has been constructed to drain to these strip drains. The location of the drains and pump station are provided on the Record Drawings, provided as Attachment 3 of this submittal.

d. *The permit number and words "No hazardous or liquid wastes accepted" shall be posted on an entrance sign with the facility name, permit number and emergency contact number. Site access control shall be installed and operational.*

Response: A sign that meets these requirements has been fabricated by the City of Raleigh and will be installed adjacent to the inbound lanes just north of the Scalehouse.

e. *If the transfer station will be operated by a third party, provide the name and contact information for the operator.*

Response: The Transfer Facility will be managed by the Wake County Solid Waste Division (SWMD) through an Interlocal Agreement with the City of Raleigh. The SWMD will provide an experienced Facility Manager. Contact information for the SWMD is provided in Section 1.2 of the Operations Plan, provided as Attachment 2 of this submittal. The City has selected East Coast Resources, LLC as the operations contractor, and the company information for this contractor will be provided to the Section by the City under separate cover.

f. *The operations plan proposed to serve the region including several adjacent counties and towns. Does the receiving landfill have an approved service area that matches the waste source? If not, describe how the waste will be diverted to a properly permitted landfill, so as not to jeopardize the receiving landfill's operating permit.*

Response: The City intends to maintain the service area outlined in the approved Permit To Construct. The receiving landfill is designated to be the South Wake Landfill, which is permitted to accept waste from

Wake County only. At this time, the City only will accept refuse from Wake County and all of this refuse will be hauled to South Wake Landfill. There are no agreements in place to accept any refuse from outside Wake County, although the City reserves the right to make these agreements in the future. Any waste from outside Wake County will be isolated and loaded into separate trailers and hauled to a private landfill permitted to accept the waste. It will not be hauled to South Wake Landfill. The Section will be notified in the event that the City enters into an agreement to manage refuse from outside Wake County. This information is provided in Section 1.1 of the Operations Plan, provided as Attachment 2 to this submittal.

g. *It is stated in Section 4.3 that no vector control is needed since this is not a disposal site. The Rule 15 NCAC 13B .0302(5) does require vector control. Specify measures that will be taken in case of vectors such as flies, rodents, etc. are evident.*

Response: A new subsection – 5.5 – Rodents or Flies has been added to Section 5 of the updated Operations Plan provided as Attachment 2 of this submittal.

h. *Update the Responsible Person List in Section 1.1 in Attachment 4-1. Change "Solid Waste Specialist – 919-733-0692" with "Brad Bailey, Env. Sr. Specialist (919) 508-8523".*

Response: This change has been made as requested to the updated Operations Plan provided as Attachment 2 of this submittal.

i. *The operations plan calls for Raleigh Fire Department to inspect the transfer station. Has there been such an agreement or arrangement made with the Raleigh Fire Department?*

Response: The RFD has been involved in the planning and permitting of the Solid Waste Transfer Facility, including design and operations requirements for fire control. As with any structure, the RFD will provide a final inspection prior to issuance of a Certification of Occupancy by the City of Raleigh. Since the facility is within the City limits, the RFD will respond to all fire emergencies.

j. *Section 2.2 of the operations plan requires random loads inspection more thoroughly. Specify the frequencies of these inspections. The standard industry requirement is 1 to 2 percent of the total loads.*

Response: This change has been made as requested to the updated Operations Plan provided as Attachment 2 of this submittal.

k. *To avoid discrepancies, delete some duplication of sections in Section 4 and Attachment 4-1.*

Response: Section 4 refers to the Application for Permit To Construct submitted to the Section in September 2002 and approved by the Section in October 2003. It is not our intent to update the 2002 Application. The Operations Plan, which was included in the 2002 Application as Attachment 4-1, has been updated for the Permit To Operate and is provided as Attachment 2 of this submittal.

l. *In Section 3.1.2, state that the personnel training documentation and certifications will be included in the operating records.*

Response: This change has been made as requested to the updated Operations Plan provided as Attachment 2 of this submittal.

The City has paid the $500 permit review fee. As you are aware, the City of Raleigh and the Wake County SWMD wish to open the facility for management of refuse on or before May 28, 2008.

We trust that the information provided herein is responsive to the Section's comments and meets the provisions for issuance of the Permit To Operate. City of Raleigh and Hazen and Sawyer personnel are available to meet with you and your staff to discuss this Application and to answer any questions you may have. In the interim, if you have any questions or require additional information, please contact us.

Very truly yours,

HAZEN AND SAWYER, P.C.

John A. Bove, PE
Associate

Attachments: Attachment 1 – Engineer's Certification
Attachment 2 – Operations Plan (May 2008 Update)
Attachment 3 – Record Drawings

cc: Frederick Battle, City of Raleigh SWS
Bill Black, P.E., City of Raleigh CM
James Reynolds, P.E., Wake County SWMD
Ed Mussler, P.E., NCDENR Solid Waste Section

SUPERSEDED

92-33T

OPERATIONS PLAN

CITY OF RALEIGH SOLID WASTE SERVICES
SOLID WASTE TRANSFER FACILITY
RALEIGH, WAKE COUNTY, NORTH CAROLINA

August 2002
Updated May 2008

Prepared By

Hazen and Sawyer, P.C.
Raleigh, North Carolina

the Facility for more than 48 hours except under emergency conditions. In the event that rodents or flies infest a portion of the facility, The SWMD and the Operations and Hauling Contractor will investigate to identify the cause of such an infestation. The conditions causing the infestation will be removed or mitigated as needed. Suitable traps or suppression systems may be required in the event of a severe infestation.

END OF OPERATIONS PLAN

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1.0 Introduction

This Operations Plan has been developed for the City of Raleigh Solid Waste Transfer Facility. The facility is owned by the City of Raleigh Department of Solid Waste Services and will be operated by Wake County Solid Waste Management Division ("the SWMD") through an Interlocal Agreement between the City and the County. The County will control and operate the gates and scales with SWMD staff and will contract with an operations and hauling contractor ("The Operations and Hauling Contractor") for waste acceptance, tipping floor management, loading, hauling and general facility O&M. Both the SWMD and the Operations and Hauling Contractor will be required to comply with the provisions outlined in this Plan.

This Plan has been prepared as part of the Application for Permit To Operate a Solid Waste Transfer Facility ("The Application"). The Application provides more detailed information on regulatory requirements, engineering calculations and other information relating to operation of this facility. The Plan and the Application may be modified or updated periodically. The Operator should refer to the Permit for updated information that may affect the operation of the transfer station.

A copy of the facility Permit To Construct is provided as Appendix A to this Plan. When issued, the Permit To Operate will be included in this Plan as Appendix B.

1.1 Service Area

The City plans to manage up to 3000 tons of Municipal Solid Waste (MSW) per day at the facility. The service areas include Wake County, as well as Durham, Johnston, Chatham, and Franklin Counties. MSW will be hauled to the site by Wake County municipalities under an Interlocal agreement, commercial haulers and industries. Only MSW will be managed at the Transfer Station. The City may conduct recycling activities at the site, but no disposal will be conducted.

The designated receiving landfill is the South Wake Landfill owned by Wake County. This

facility is permitted to dispose of MSW generated in Wake County, North Carolina. The Raleigh Solid Waste Transfer Facility currently has no agreements to receive any MSW from outside of Wake County, so all the refuse managed at the Transfer Facility will be hauled to the South Wake Landfill.

Refuse generated outside of Wake County cannot be managed at the Raleigh Transfer Facility unless the Raleigh City Manager approves an agreement to accept this material, which cannot be hauled to the South Wake Landfill due to restrictions to that landfill's service area. Under this scenario, a separate hauling agreement will be made with private landfills in the region to dispose of this waste. MSW from outside of the County will be segregated on the tipping floor and loaded into trailers designated for landfills other than South Wake Landfill.

At least 30-days prior to acceptance of refuse originating outside of Wake County, the City will notify the NCDENR Solid Waste Section and submit a revised Operations Plan for review to show how such refuse will be managed at the tipping floor, how the incoming and outgoing loads will be tracked and recorded, and what the designated MSW disposal facility will be. At this time, any documentation required by the NCDENR Solid Waste Section regarding the receiving landfill will be provided by the City.

Separate accounting and reporting for MSW generated from outside Wake County will be completed under a program developed by the City of Raleigh and approved by the Raleigh City Manager.

1.2 Responsible Persons

In an emergency, the following persons are to be contacted:

OWNER:

Solid Waste Services Director:	Frederick D. Battle	919-831-6073
Solid Waste Services Assistant Director:	Phillip White	919-831-6133

WAKE COUNTY SWMD:

Director, Solid Waste Management:	James Reynolds	919-856-5200
Facility Operations Supervisor	Tommy Smith	919-856-5318
OPERATIONS AND HAULING CONTRACTOR:	East Coast Resources, LLC (ECR)	
Site Supervisor:	Carlton Dudding, P.E.	703-898-4178
Lead Operator:	Craig R. Peterson	804-226-8625
Fire, Police, and Rescue:		911
Hospital:	Wake Medical Center (2 miles west of Facility on New Bern Ave.)	
NCDENR Solid Waste Section	Brad Bailey, Environmental Senior Specialist 919-508-8565	

1.3 Access Control

Access to the transfer station must be controlled in order to prevent unauthorized or illegal dumping, to discourage trespassing and resulting injury, and to reduce the risk of vandalism. Since the transfer station is an open structure, access to the building is not restricted; access restriction must be at the site perimeter.

1.3.1 Physical Restraints

Vehicle access is restricted to the access road (Corporation Parkway) at the northern end of the site. There are no other roads into the site. All haulers, including City vehicles are directed to pass over the scales. All other vehicles are directed to the bypass lane, which is controlled by a remote gate. Access to the facility during work hours is controlled by scale house personnel. Only those with business at the facility, including customers, staff, maintenance staff, etc. will be allowed into the facility. The facility will not be open to the public during normal operating hours.

Locking gates will be used to prohibit vehicle access during hours when the facility is closed. The entire perimeter of the facility is fenced to restrict access by those on foot. Since the site is bounded by railroad tracks, the closed Wilders Grove Landfill and the City's former soil borrow

site, no egress onto the site should be necessary and all pedestrian access is to be considered trespassing. The perimeter fence should be visually checked on a regular basis and repaired promptly when evidence of trespassing or other damage is observed.

The office building and shop/recycling buildings will be kept locked when the site is closed. Surveillance cameras will be installed at these facilities as directed by the City.

Evidence of trespassing or vandalism should be reported to Solid Waste Services and the Raleigh Police. Illegal dumping should be reported to the Solid Waste Services Department and the NCDENR Solid Waste Section.

Scavenging from the tipping floor or from trailers is prohibited.

1.4 Signage

A prominent sign containing the information required under the Permit will be located just outside the scale area along Corporation Parkway. The sign will provide information on operating hours, operating restrictions, and the types of material accepted for transfer. The facility Permit number, an emergency contact number and other warning information will also be posted. A sign directing all haulers to the scales and all visitors and staff to the bypass lane and office will be provided near the entrance. Inside the facility, signs directing the haulers, transfer trailers and recycling operations, as appropriate will be provided. Signs will direct refuse trailers to the designated staging and loading areas.

1.5 Safety

1.5.1 Fire

The potential for fire within the refuse or in equipment must be anticipated and mitigated. Fire prevention is the most effective mitigation measure. Dedicated equipment such as loaders and yard tractors will be equipped with fire suppression systems and/or portable fire extinguishers.

All structures will be equipped with the number and type of fire extinguishers recommended by the Raleigh Fire Department and applicable fire codes. Operations staff or Fire Department staff will conduct periodic inspections of fire suppression equipment and promptly replace or repair equipment as needed.

A hydrant will be located at the site for fire fighting. The City of Raleigh Fire Department is to be called in the event of a fire that cannot be quickly extinguished by operations personnel. All flammable liquids should be stored in areas that are clearly marked. Open burning is prohibited at the site.

A series of six "Rate-of Rise" type heat detectors are located in the truck loading bays. In the event that these devices detect a fire, audible and visual alarms located on the tipping floor level will be activated. The Scalehouse and the Raleigh Fire Department will be notified automatically.

If a "hot load" is detected prior to dumping, the load will preferably be dumped on the tipping floor once other refuse is cleared. It is imperative that other refuse be far enough away from the hot load so that a potential fire cannot spread and enough clearance is provided to fight the fire. If is it impossible to dump the load safely on the tipping floor, the Facility Manager may designate another safe zone to dump the load in order to manage the fire. One such location is the trailer storage area, which will be surfaced with crushed stone aggregate or pavement. This area is preferred since stormwater controls will be in place and potential stormwater impacts can be managed properly.

For any burning loads that are dumped on the tipping floor or other designated area, the nature of the material in the load should be visually characterized to the extent possible. If the load contains hazardous or toxic material, or other material that cannot be properly managed by on site personnel, the Fire Department should be notified immediately. If necessary, the area where the load has been dumped can be contained by placing loads of soil on or around the refuse. Other vehicles, personnel and refuse should be kept a safe distance from the area.

Burning loads dumped on the tipping floor should be extinguished once it is established that the operations personnel are not in danger. If the use of water is deemed appropriate, the refuse should be extinguished using the two fire hoses located at the eastern and western edges of the transfer station near the north (front) edge of the building or using fire extinguishers. The load should be carefully spread using a loader and sprayed with water to assure the fire has been extinguished. Once the load has cooled and no evidence of fire is observed, the Facility Manager can direct the load to be placed in a trailer for hauling to the landfill.

The fire control hoses, which are also used for cleaning of the tipping floor, should be properly stored on the reels and within the heated enclosure after each use. Inspect the hoses, fittings and connections on a weekly basis and replace any worn or damaged parts as required. Provide proper clearance to the front and sides of each hose reel enclosure to allow unrestricted access to the hoses in the event of a fire.

Fire can also occur in refuse loads after they have been loaded into the trailers for transport to the landfill. Where practical, the trailer should be directed to a location well away from refuse, structures or other trailers and unhitched from the tractor. Water can be sprayed into the trailer, but the loads should not be dumped unless approved by the SWMD.

Fires requiring emergency response will be reported to the Solid Waste Section verbally within 24-hours and written notification will be submitted within 15-days of the incident, or once the report from the emergency responders is received. Copies of all reports will be maintained in the Operating Record.

1.5.2 Hazard Control

Compliance with all applicable City, State and Federal safety requirements must be assured even if the requirements are not referenced in this Plan.

All operations staff and visitors working on the tipping floor are required to wear the proper safety equipment, including shoes, eye and hearing protection, and safety vests. Additional safety equipment such as gloves, belts, hard hats or harnesses will be provided to staff as needed.

Personal communications equipment will be issued to key operations staff in order to allow prompt alert in the event of an emergency or unsafe condition. All heavy equipment will have operating backup alarms. Restricted areas for equipment or personnel will be clearly marked. All personnel will be properly trained in the proper use of safety equipment and in safety procedures.

Portable safety barriers should be placed around the perimeter of the loading pits when the pits are inactive. Barriers should be of sufficient size to prevent staff on foot from falling into the pits.

2.0 Waste Acceptance Guidelines

2.1 Acceptable Material

The wastes that the facility can accept are regulated by the North Carolina Solid Waste Management Regulations, the Permit and the Raleigh Solid Waste Services Department. Only approved waste can be placed into trailers for transport to the landfill. The Permit and applicable State regulations should be periodically reviewed to note any modifications to the list of acceptable waste.

The transfer facility is permitted to manage Municipal Solid Waste (MSW) from government, commercial haulers, industries or residents within the generation area outlined in the Permit. Waste generated from outside the permitted limits will be rejected at the scale house. The following is a list of **prohibited materials** (except where small quantities for residential loads are exempted by law):

- Hazardous Waste
- Radioactive Waste
- Infectious or Medical Waste
- Liquid Wastes
- Septage
- Unapproved Industrial Waste

Barrels and drums can only be accepted for disposal if they are visually inspected to assure they are empty and perforated to prevent accumulation of liquids. Loads of yard waste will not be accepted at the facility. This material will be directed to the Raleigh Yard Waste Center on New Hope Road. Loads containing predominately recyclable items may be prohibited. Other loads may also be rejected that generate excessive dust, odor or materials that negatively impact the operation of the facility.

Some materials may be accepted at the site for recycling. These materials, as approved by the Solid Waste Services Director, will be hauled to other buildings at the site and will not affect the transfer station operations. Safety provisions outlined in this Plan apply to recycling operations as well.

2.2 Waste Screening and Separation

All hauling vehicles are required to stop at the scales for identification and weighing. Each vehicle delivering waste will have its identity recorded along with the type, source and weight of the waste it carries.

The scale house operator will identify questionable loads and ask each driver to describe the origin and contents of each truck. Other trucks can be inspected as necessary at the entrance to the facility if there is a question as to the nature of waste they are hauling. A waste inspection area is provided just south of the scale house near the parking area. Conduct random inspections of incoming loads at this location or other suitable location identified by the SWMD or the Operations and Hauling Contractor. Random inspection of incoming loads will be conducted at a rate of at least one percent of the total loads. Inspections will be conducted on at least a bi-weekly basis on randomly selected loads. This does not replace segregation and inspection of questionable loads required by operations staff when required.

Document each inspection and include, at a minimum, the following information:

- Date, time, name of inspector
- Hauler name, driver name, type of truck
- Source of load
- Description of load
- Record any unacceptable wastes with estimated quantities
- Provide photos, videos as appropriate

- Describe final disposition of load (e.g. rejected, accepted, etc.)

The scale house operators will have phone or radio contact with the Operations and Hauling Contractor staff and other key operations staff. Inspections should be conducted by properly trained staff at locations suitable for proper management of the load as required.

Loads will be also be visually inspected on the tipping floor and screened for suspected hazardous wastes, liquid wastes or liquid waste containers, or other materials not permitted for management at the site. Such wastes will not be accepted. Random loads should be more thoroughly inspected to confirm that the screening process is working. Waste that is not acceptable will be reloaded onto the truck that brought it and removed from the facility. Where this is not practical or safe, a properly trained and equipped hauling contractor will be contacted to properly manage the load.

Attempts by haulers to dispose of hazardous wastes at the facility should be noted in the Operating Record and reported to the NCDENR Solid Waste Section as soon as practical. The date, time, hauler's name, truck description and ID number, the nature of the load and the disposition of the load (e.g. rejected prior to unloading, reloaded and removed after unloading, etc.) should be recorded. When the suitability of any load is in question, the operations staff should reject the load if hazardous or other unsuitable materials are observed or if the materials cannot be identified.

3.0 Transfer Operations

3.1 General Operations

3.1.1 Hours of Operations

The transfer facility may be open to accept loads between the hours of 4:00 AM and 7:00 PM Monday through Friday and between 7:00 AM and 7:00 PM on Saturday. Within these limits, actual hours of accepting waste may change from time to time as determined by the Solid Waste Services Director or the SWMD to account for variations in waste delivery and other operational considerations. The facility will be closed on Sundays and designated holidays except in emergency situations as designated by the Solid Waste Services Director or the SWMD. Operations staff may work past 7:00 PM to assure that all refuse is properly loaded and trailers are secured and staged properly. The hours of operation may be adjusted by the Solid Waste Services Director or the SWMD to accommodate fluctuations in the waste load, transportation problems or landfill operating hours. The availability of the landfill for disposal may dictate extended hours of operations for the transfer facility.

3.1.2 Personnel

All Facility personnel, including City staff and contract personnel, will be properly trained in safety and fire prevention procedures, identification of unacceptable wastes, and basic facility operations. Personnel training documentation and certifications will be maintained in the Facility Operating Records. Safety equipment will be provided to all operations personnel and first aid equipment will be made available at all work places in accordance with City Standard Operations Procedures.

Operations staff, working hours and specific responsibilities will be established by the SWMD and the Operations and Hauling Contractor, and will vary through the work day. At a minimum, the following job tasks will be filled:

SWMD Facility Supervisor– Responsible for day-to-day operations of the Transfer Station, operations staff, and contractors. SWMD Facility Supervisor will make final determination in the event that questionable waste is brought to the facility, and is responsible for reporting to City and State authorities.

Scale Attendant – Responsible for operating the scales, recording incoming and outgoing load data, initial waste screening and monitoring the vehicles and personnel who enter the facility.

Spotter – Directs hauling vehicles to the proper location on the tipping floor for safe and efficient operations. Responsible for identification of unacceptable waste once loads are dumped on the tipping floor.

Equipment Operator(s) – Responsible for operation of loaders, yard tractors and other heavy equipment needed for facility operation.

3.1.3 Scale House Operations

Each vehicle will be directed to stop outside the scales. All vehicles will have their identity recorded along with type and source of waste. An area north of the scales will be provided for removal of tarps to facilitate visual inspection. Vehicles without proper tarps or covers may be rejected.

Vehicle information, including owner, operator, tare weight, and history will be maintained in the scale house using an automated ticket system. Certain vehicles will be weighed when exiting in order to determine load and cost information.

The attendant will also conduct initial screening of the loads. The attendant will be in radio or cellular telephone contact with the Operations and Hauling Contractor staff to arrange additional waste inspections as required.

3.1.4 Traffic Control

Proper and efficient operation of the facility requires strict adherence to traffic controls set up at the site. Stop signs at the scale entrance, at the main access road and near the tipping floor are necessary for safety. Portions of the main access road are one way and will be clearly marked. Hauling vehicles and trailers should be kept separated to the degree practical. Loaded trailers will be directed away from the office and shop areas. Empty trailers will be limited to the staging/storage area and the loading areas of the transfer station.

The City will install and maintain traffic controls. Visitors will be directed to the Scalehouse or office, where an escort can be arranged as necessary. Where required, the Facility Manager or spotter, when authorized, may set up temporary traffic controls (cones, barrels, etc.) to direct traffic away from unsafe or congested areas.

3.2 Tipping Floor Operations

Once haul vehicles are weighed at the scale house, they will be directed to the concrete apron outside the transfer station. From this stopping point, each vehicle will be directed to the proper location on the tipping floor by the spotter. Vehicles will turn around on the apron and back into the building where directed by the Spotter. Once the truck is in the proper location and secured, the load will be dumped onto the tipping floor. The spotter will observe the vehicle immediately prior to and during load discharge for evidence of unacceptable material. In the event that such material is identified, the spotter will immediately notify his supervisor and the scale house

attendants and isolate the load and vehicle using cones, barrels, warning tape, etc. The Facility Supervisor will be notified once the unacceptable waste is segregated and secured.

The tipping floor is approximately 180-feet wide. This means that about seven to eight vehicle "bays" can be in operation serving the two loading ports. The spotter will direct each vehicle to an open "bay" or loading area on the basis of the status of trailers at the port, the type of waste in the vehicle and the number of offloading vehicles on the tipping floor and waiting on the apron. Private or commercial pickup trucks may be limited to certain "bays" near the push walls at the far ends of the transfer station. This restriction is necessary due to the length of time needed for unloading of these vehicles as well as for the safety for the drivers. **It should be noted that for safety or efficiency considerations, certain vehicles may be prohibited or restricted from the facility.**

Once each vehicle has discharged its load onto the tipping floor, it will be directed to pull straight out of the building to the designated access way along the north edge of the apron. From here, the vehicles exit the site through the scale area and are re-weighed as necessary.

Loaders will push the refuse either directly to the pit, to the push walls for loading or to an existing stockpile. Loader operators and the spotter will be in radio communication and visual contact to properly manage the tipping floor.

All refuse must be removed from the tipping floor and loaded into trailers at the end of the day's operation. **No refuse is to remain on the tipping floor after operations are completed for the day.**

3.3 Refuse Trailer Loading

Two loading ports are provided that can accommodate open top 53-foot long and up to 13.5-foot high trailers. Truck detection loops will be provided beneath each of the two loading pits to alert the equipment operators on the tipping floor to the presence of a trailer. A green signal on the

indicator light at the top of the push wall indicates that a vehicle is in place on the loading bays below. The loader operators must first visually check for the presence of an empty properly staged trailer in the pit before pushing refuse to the edge of the pit. A properly staged trailer means that the trailer is located in the proper position with no gaps along the trailer edges. The tractor cab should not be visible beneath the pit and the tractor operator should be outside the vehicle a safe distance away.

If the loader operator observes a safety hazard or unsuitable waste, the operator will notify his supervisor in order to determine how to best manage the situation. Where possible, do not load questionable material into trailers. The Facility Supervisor will be notified as required.

The loader operators place the refuse into the trailer, and distribute and compact each load. Once the trailer is filled, an audible signal or direct instructions via cellular telephone or radio will be given to the tractor operator and the loaded trailer is removed. Once the loader operator verifies that another properly staged trailer is in place, the operation is repeated. No refuse is to remain at the edge of the pit during trailer staging so that material is not inadvertently pushed on top of the tractor, trailer or operator.

Move loaded trailers to a location just outside the transfer station building to conduct a final visual inspection of the load as required and to place a tarp over the load. This should be done in a manner that minimizes litter. If necessary, additional litter control measures will be implemented to control litter from this area.

3.4 Tipping Floor Cleanup

The tipping floor should be washed at least once per day, generally at the end of the day. Water from the two 100 gpm hoses located at the east and west walls of the Transfer Station are used. As a first step, refuse should be collected and removed from the floor to the extent possible using the loaders or other equipment. The exposed floor is then washed using the hoses provided. Water that contacts the tipping floor enters a dedicated drainage system through a series of four

inlets on the floor. Staff should make certain that the inlet lids are properly opened and secured and that the inlets are open and free from debris. Wash the floor in a manner that assures free flow of the liquid to the inlets. Refuse should not be allowed to flow outside of the tipping floor area.

The lower pit area should also be cleaned daily. Litter should be removed frequently from the trailer staging areas and the entrance and exit to the pit. Wash the roadway area beneath the pit as needed.

Water that contacts the tipping floor is collected and drained into a solids separator which outlets to the pump station. From this pump station, contact water is conveyed into the City of Raleigh sanitary sewer for treatment. This structure should be inspected on at least a weekly basis and cleaned out as needed. Floatable particles trapped by the separator can be skimmed out from the water surface. Debris that settles below the separator outlet must be periodically removed using a vacuum truck. It is important that solids are not allowed to bypass the separator and enter the pump station. This condition may lead to damage or reduction of service life of the pumps.
In the event that liquid hazardous waste contacts the tipping floor and drains to the pump station, the pump controls at the pump station should be turned to "manual" and "off" as quickly as possible. This will confine any spill to the collection system until a determination as to the fate of the liquid can be made. If the liquid cannot be discharged into the sewer system, the pump should remain in the "off" position and the liquid removed from the pump station by a qualified and trained hazardous waste contractor.

The sanitary pump station required routine inspection and maintenance. It is fitted with a visual alarm to indicate excessive wetwell levels. The City or the Operations and Hauling Contractor will establish a maintenance contract for the pumps and controls. In the event of an extended outage, the pump station is designed to store liquids generated over three to four days of normal facility operations.

4.0 Erosion Control and Surface Water Management

4.1 Erosion Control

The Facility will operate under an Erosion and Sediment Control Plan approved by the NCDENR Division of Land Resources Land Quality Section. This Plan will be in place prior to land disturbance activities. Any construction activity will be conducted such that transport of sediment is restricted to properly designed and maintained erosion and sediment control facilities.

Any land disturbance required during site operations will also fall under the approved Plan. The staff will assure that any temporary or permanent devices are in place prior to disturbing the ground surface.

4.2 Surface Water Management

A surface water management system has been developed for the Facility. The system is designed to collect and treat stormwater from the operational areas of the site. Contact water from within the operations areas, including tipping floor and truck loading bays, is collected separately and discharged to the sanitary sewer. Surface water runoff from non-operational areas, including vegetated areas adjacent to the railroad tracks and Crabtree Creek, is collected and treated to remove sediment during construction until proper stabilization is established.

Operations staff should visually inspect yard inlets, ditches and culverts in the operational areas on a monthly basis or after a major precipitation event. These structures should be kept clear of debris. Before any additional construction or pavement installation is started, the drainage and surface water control structures should be evaluated to assure that the runoff is conveyed to the proper treatment device.

Vegetated areas should not be disturbed or paved unless the impact on the Surface Water Management Plan is evaluated by a qualified engineer.

5.0 Vector Control

Vector control at the Facility includes air borne or water borne litter, noise, odor, flies, rodents or other vermin. Control measures for these items are provided in this section. Since the Facility does not include disposal of solid waste, vectors such as flies, rodents, etc. are not expected to be of concern if the tipping floor is cleared each day as required under this Plan. Proper operations and management of odor and litter will further mitigate these vectors.

5.1 Litter

Control of litter is a key task in the effective operation of the facility. Litter may be generated by uncovered or secured loads, from the trailer loading operations or from the tipping floor itself. Litter from refuse haulers can be minimized by requiring that all loads be covered and by reducing speeds of the vehicles between the scales and the tipping floor. Assuring that loads are discharged well within the building will reduce blowing litter on the tipping floor. Maintenance of the skirts around the pits and proper trailer staging will reduce litter generated during loading.

Litter fence will be installed to collect litter where needed. Operations staff will conduct litter cleanup on at least a daily basis.

5.2 Dust

At this site, dust may be generated from roadways. Paved roadways should be kept clean and mud and debris should be cleaned up promptly. Trailer staging areas may be surfaced with crushed stone aggregate, which may become dusty when dry. Wet down areas where heavily traffic exists with a water truck to reduce dust as needed.

Where excessive dust is observed within the tipping area, wash water may be used as a suppressant. Loads that generate excessive dust during discharge and loading may be prohibited from the facility at the discretion of the Director of Solid Waste Services or the SWMD.

5.3 Noise

Noise is associated with normal operations of a transfer station. Generally, the noise levels are greatest within the transfer station itself during discharge of refuse and loading into trailers. Facility staff that will work within the building will be supplied with hearing protection.

Noise outside the building itself may be generated from vehicles while driving, loading or unloading containers or backing (back up alarms). This noise is a normal part of facility operations and is acceptable only during facility operating hours. Vehicles or vehicle activities that are excessively noisy (for example vehicles with non-functioning mufflers) should be repaired prior to extended use on the site. Haulers with out of compliance vehicle exhaust systems will be directed to repair the vehicles.

5.4 Odor

Proper management of the refuse and wash waste will minimize odor at the Facility. The tipping floor will be cleared of refuse at the end of each day. Trailers will be covered while awaiting pickup and transport to the landfill. Filled trailers will not left on the Facility for more than 48 hours except under emergency conditions.

5.5 Rodents or Flies

Proper management of the refuse and wash waste will minimize the potential impact of rodents or flies at the Facility. The tipping floor will be cleared of refuse at the end of each day. Trailers will be covered while awaiting pickup and transport to the landfill. Filled trailers will not left on

HAZEN AND SAWYER
Environmental Engineers & Scientists
4011 Westchase Boulevard, Suite 500
Raleigh, NC 27607

(919) 833-7152 FAX (919) 833-1828

LETTER OF TRANSMITTAL

DATE: May 23, 2008	JOB NO. 30579
ATTENTION: A. Karim Pathan, P.E.	
RE: City of Raleigh Solid Waste Transfer Facility Permit to Operate Submittal	
Specification Section:	N/A
Submittal Number:	

TO *State of North Carolina DENR*
Div. Solid Waste Management
401 Oberlin Road Suite 150
1646 Mail Service Center
Raleigh, NC 27699-1646

RECEIVED MAY 23 SOLID WASTE SECTION

WE ARE SENDING YOU ■ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
3	5/23/2008		Operations Plan
3	5/23/2008		Record Certification
3	5/23/2008		Record Drawings (full Size)

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Furnish as submitted ☐ Resubmit _____ copies for approval

■ For your use ☐ Furnish as corrected ☐ Submit _____ copies for distribution

☐ As requested ☐ Revise and resubmit ☐ Return _____ corrected prints

☐ For review and comment ☐ For Execution

☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Karim,

Attached are three copies of the Operations Plan, Record Certification and Record Drawings for the construction of the City of Raleigh Solid Waste Transfer Facility in accordance with the Permit To Construct issued by the Section on October 24, 2003. As you are aware, the facility is scheduled to begin operation on May 29, 2008; the date when the North Wake Landfill will essentially be filled to capacity.

Please call if you have any questions.

COPY TO Fred Battle, City of Raleigh
James Reynolds, Wake County
FILE

SIGNED: John A. Bove, P.E.

NCDENR

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Dexter R. Matthews, Director | Division of Waste Management | Michael F. Easley, Governor
William G. Ross Jr., Secretary

January 18, 2008

Frederick D. Battle
Director, Department of Solid Waste Services
City of Raleigh
400 W. Peace Street
Raleigh, North Carolina 27602

Re: Permit to Operate Submittal
City of Raleigh Transfer Station
Wake County, North Carolina
Permit No. # 92-33T
Doc ID No. Doc ID No.

Dear Mr. Battle:

As per Permit Condition 4 of your "PERMIT TO CONSTRUCT", the following requirements shall be met prior to receiving a "PERMIT TO OPERATE" from the Solid Waste Section.

a. Site inspection shall be made by a representative of the N.C. Solid Waste Section.

b. Site preparation shall be in accordance with the approved construction plan, unless revisions or modifications are presented to the N.C. Solid Waste Section for approval. Three sets of "As-built" drawings shall be submitted with the project engineers certification, indicating that the transfer station and related infrastructure was constructed in accordance with the plans.

c. A "final" operation plan shall be submitted for the transfer facility with the following items addressed:
   a. Finalized service area of the transfer station;
   b. Identify receiving landfill for the waste disposal and address the service area of the proposed receiving facility;
   c. Location of collection drains in the trailer loading area and location of said drains on the as-built drawings;

d. The permit number and words "No hazardous or liquid wastes accepted" shall be posted on an entrance sign with the facility name, permit number and emergency contact number. Site access control shall be installed and operational.

In the final operations plan, the following comments must be incorporated or clarified.

e. If the transfer station will be operated by ~~the~~ a third party, provide the name and contact information for the operator. (If a third party operator is used, should we ask for the financial assurance for the operator?)

f. Since the operations plan is planning to serve the region including several adjacent counties and towns, ensure the receiving landfill serve the same region.

g. It is stated in Section 4.3.4 that no vector control is needed since it is not a disposal site. The Rule 15 NCAC 13B .0302(5) does require vector control. Specify measures that will be taken in case of vector such as flies, rodents etc. are evident.

h. Update the Responsible Person List in Section 1.1 in Attachment 4-1. Change "Solid Waste Specialist – 919-733-0692" with "Bradley Bailey, Env Sr Specialist (919) 508-8523".

i. The operations plan call for Raleigh Fire Department to inspect the transfer station. Has there been ~~any~~ such agreement or arrangement made with the Raleigh Fire Department?

j. Section 2.2 of the operations plan requires random loads inspection more thoroughly. Specify the frequencies of these inspections. The standard industry requirement is 1 to 2 percent of the total loads.

k. To avoid discrepancies, delete some duplication of sections in Section 4 and Attachment 4-1.

Should you have any questions regarding this letter or wish to discuss the matter further, please contact me at (919) 508-8401.

Sincerely,

Karim Pathan
Environmental Engineer
Solid Waste Section

cc: Paul Crissman, DWM
Ed Mussler, DWM
Donna Wilson, DWM
John Bove, Hazen & Sawyer
Raleigh Central File – Wake County (92-33T)

NCDENR

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Dexter R. Matthews, Director | Division of Waste Management | Michael F. Easley, Governor
William G. Ross Jr., Secretary

January 18, 2008

~~Gerald Latta~~ Ask John

~~Mr. J. Russell Allen, City Manager~~
City of Raleigh
222 West Hargett Street
Raleigh, North Carolina 27602

Re: Permit to Operate Submittal
City of Raleigh Transfer Station
Wake County, North Carolina
Permit No. # 92-33T
Doc ID No. Doc ID No.

Dear Mr. Allen:

As you are preparing to request for the permit to operate for the reference facility, you must submit the following documents before the permit is issued.

1. A revised Operations Plan should be submitted, prepared by the operator. If there are design or engineering changes to the facility, the plan should be prepared and sealed by a professional engineer. The plan should contain a description of the following:
   a. Contact information for the owner and for the operator
   b. Waste types and quantities in tons per day
   c. Specific service area of the facility (list cities and/or counties)
   d. Final destination of wastes (the landfill must comply with the service area listed in its permit)
   e. General operation of facility
   f. Procedures for loading and unloading of transport vehicles
   g. Method of screening incoming loads for unacceptable waste
   h. Traffic flow, security and fencing, signs posted at the entrance, hours of operation
   i. Storage facilities for incoming waste
   j. Treatment and/or disposal methods for wastewater and leachate
   k. Any special waste handling and maintenance procedures
   l. Plan for maintaining facility in a sanitary condition and actions to be taken to minimize noise, vectors, litter, and odors
   m. Personnel requirements, qualifications, responsibilities
   n. Equipment used in the operation
   o. Site sketch
   p. Contingency plans for equipment breakdown, non-conforming waste delivered to facility, spills, fire, vectors, noise, odors, unusual traffic patterns, long-term power outages affecting the compactor and leachate pump station, etc.
   q. Recordkeeping — NA

r. Any other operational, design, or engineering changes not included in the original 2003 application.

2. Please confirm whether the engineering drawings submitted in 2003, as part of the original application for the transfer station, are still current. Have there been any changes to the facility, or facility lay-out? - Submit as-built drawings
3. Please clarify if the land deed for the property, recorded in Deed Book 256, Page 261, dated 1973, is the most current deed for the property. If there is a newer deed for the transfer station property, or recorded map/survey, please provide a copy.
4. How is oil disposed from the oil/water separator?
5. Please submit financial assurance in the form of a local government test or a capital reserve fund, in accordance with G.S. 130A-294(b2) and 130A-295.2. The financial assurance amount should be equal to the cost to hire a third party to remove and clean up a week's worth of waste from the facility, haul, and dispose of the waste, in the event of sudden site abandonment.

For City or Contr Operator

Should you have any questions regarding this letter or wish to discuss the matter further, please contact me at (919) 508-8401.

Sincerely,

Karim Pathan
Environmental Engineer
Solid Waste Section

cc: Paul Crissman, DWM
Ed Mussler, DWM ← Donna Wilson
John Bove, Hazen & Sawyer
Raleigh Central File – Wake County (92-33T)

Things need to be addressed:

1. Name of the contractor operating the facility.
2. Name of contractor hauling the waste.
3. ? Regional facility. Check SW Sites Database. Says No to Regional.
4. ? Sect 4.2 material will be unloaded on the tipping floor.
5. Section 4.3.3 compact each load. Actually there is no compactor.
6. Section 4.3.4 No vector control need since it is not a disposal site. Why no extensive control required since there are no residence in the area now?
7. The existing plan is prepared by the city. Should it prepared by the operator?
8. Sect 1.1 Update Responsible Person list. SW Specialist no. ?????
9. Sect 1.3 Do we need to see the actual sign? Copy. Standard, size, letter size etc.
10. Sect 1.4.1 Does Raleigh FD know they have to inspect this place?
11. Two options to dump hot load is con fusing. Perhaps some one can make that determination.
12. Section 2.2 Frequency of random inspection.
13. Section 3.1.2 Any training record required?
14.

Five yes.
6 there →

Env.
Brad Bales
508-8523

1-7-2008

City of Raleigh Transfer Station
Permit to Construct.

✓ • 92-33 T — ? Transfer
✓ • 2. - letter dated 23 ?
• Are we dealing with consultant ?
• Sect. 4 - Application -
• Contractor's name
• Discrepancy in SW Site Database
NOT Regional - Appl. 4.1 Regional
• 4.3.4 "Since the facility - - .
NOT INCLUDE disposal of Solid Waste
✓ • Siting dist - how far from residence
• Transfer Fac. Oper Plan
1.1 - phone # Solid Waste Specialist.
• Dwg 53 & 54 N arrow reversed

- Fee
- Compliance review
- Financial Assurance

Form Complice review
~~Perm~~ W:\Perm\Guidance
\new compl. review form

Circle one: Add New Facility Edit Existing Facility (only list permit # and info. that has changed) Add C&D Unit

SW SITES DATABASE

PERMIT NUM: (10) 92-33

SITE NAME: (40) CITY OF RALEIGH TRANSFER STATION

SITE ADDRESS: (30) 4130 NEW BERN AVE.

SITE CITY: (25) RALEIGH COUNTY: WAKE

FACILTY TYPE DATABASE

FACILITY TYPE (circle one): LF I T TP MRF C YW

WASTE TYPE :
(check only the main type of waste received)

- MSW ✓
- ~~IND~~
- CD
- LCID
- MED
- TIRE
- TIRE COLL
- OTHER (list)

FACILITY INFO DATABASE

STATUS: OPEN CLOSED INACTIVE

LINED: YES NO

PUB/PRIV: PUBLIC PRIVATE

REGIONAL: YES NO

IF REGIONAL, LIST COUNTIES

APPLICANT DATABASE

APPLICANT NAME: (25) J. RUSSELL ALLEN

APPLICANT TITLE: (30) CITY MANAGER

APPLICANT ROAD: (30) 222 WEST HARGETT ST.

APPLICANT CITY: (20) RALEIGH STATE:(2) NC ZIP: (10) 27602

APPLICANT PHONE: 919-890-3000 APPLICANT FAX: 890-3058

CONTACT NAME: (25) GERALD LATTA

CONTACT TITLE: (30) SOLID WASTE DIRECTOR

CONTACT ROAD: (30) SAME.

CONTACT CITY: (20) RALEIGH STATE:(2) NC ZIP: (10)

CONTACT PHONE: 919-831-6890 CONTACT FAX: 919-831-6632

OPERATOR NAME:(25) —

OPERATOR TITLE:(30) —

OPERATOR ROAD:(30) —

OPERATOR CITY: (20) — STATE:(2) _ ZIP: (10)

OPERATOR PHONE: —

Signature: Date Completed: 12/3/03

updated May 10, 1996