City of Greensboro
North Carolina

Fac/Perm/Co ID #	Date	Doc ID#
41-03	10 / 26 / 10	11938 DIN

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August 11, 2010
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North Carolina Department of Environment
and Natural Resource
WSRO - Division of Air Quality
585 Waughtown Street
Winston-Salem, North Carolina 27017

Attention: Hugh Jernigan
Environmental Senior Specialist

Reference: Closure Plan: City of Greensboro-White Street Landfill

The City of Greensboro's Environmental Services Department appreciates your working with us to comply with the closure requirements established by 15A NCAC 13B .0543. It is our goal to comply with these requirements and the intent to ensure that formerly operating areas are closed appropriately and in a fashion to protect human health and the environment. Please accept this document as our response to your request to provide a closure schedule to your office by August 15, 2010.

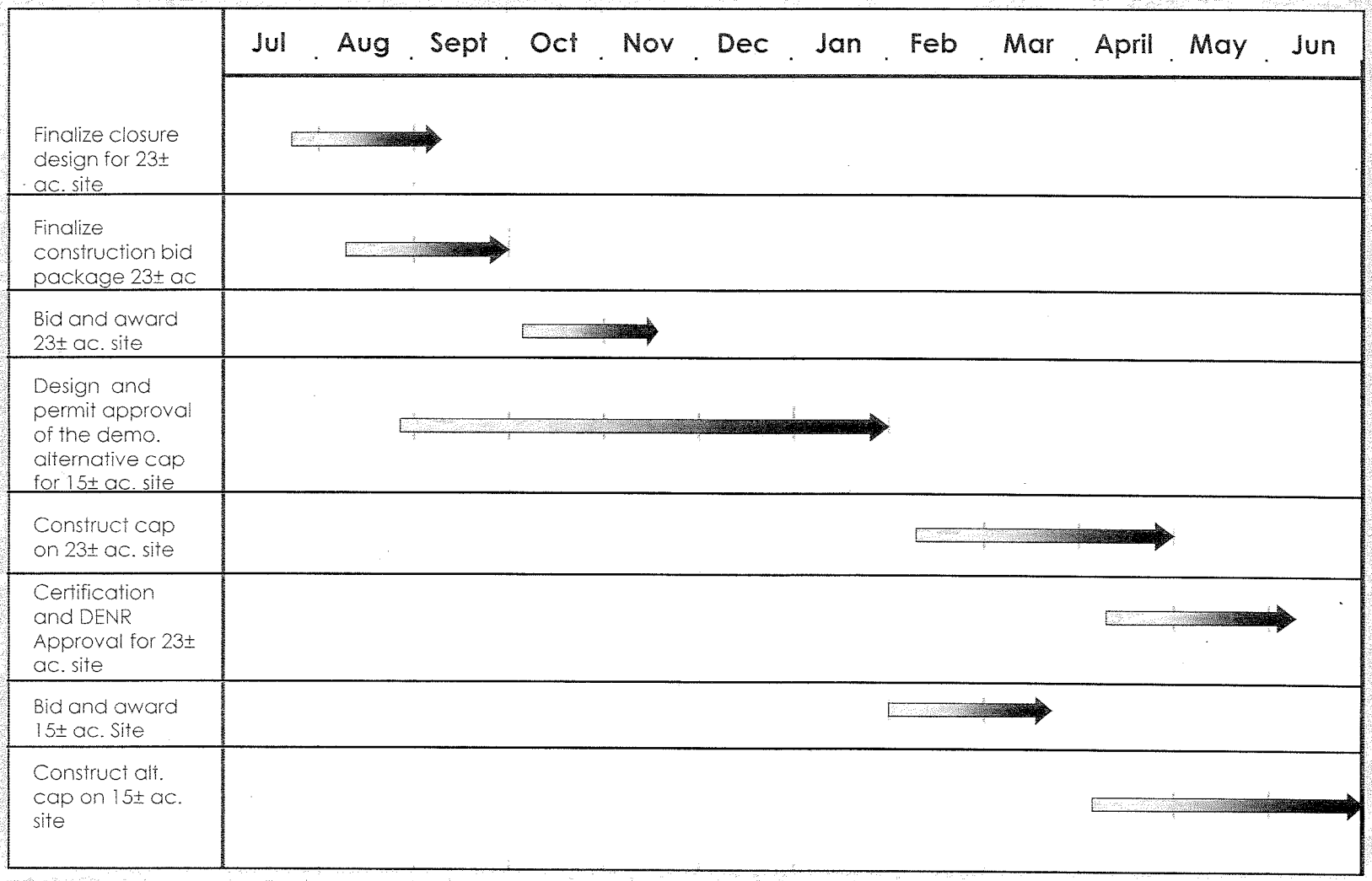
Currently, the Phase II landfill unit is operating without an approved construction and demolition permit. The City submitted a permit renewal application in June 2008 in accordance with applicable regulations. We currently understand that our operating permit renewal for this unit as well as the permit modification previously submitted for Phase III are contingent on our proposed actions. Hence, we understand the importance of compliance at this time.

The Phase II unit has approximately 38± acres at final grade and/or within 15 ft. of final grade. Operationally, this region has intermediate cover in-place to reduce water intrusion and erosion. Generally, the 38± area of the Phase II unit ceased receiving waste placement on or about 2000-2001. Subsequent settlement of the region allowed for minimal waste placement prior to the intermediate cover. The proposed closure plan for this area includes the installation of a traditional regulatory cap for approximately 23± acres and an alternative cap for the remaining 15± acres. Our proposal for the installation of an alternative cap system for the C&D unit is anticipated to demonstrate and evaluate the effectiveness and applicability to other landfill areas. We are currently evaluating the installation of an exposed membrane with possible renewal energy benefits. Hence, we are identifying potential partners to assist with the engineering, construction and maintenance aspects of the alternative cap, and the design and selection of appropriate materials, and potential financing with renewal energy grants.

The schedule to complete the closure activities is as follows:

P.O. Box 3136 • Greensboro, NC 27402-3136 • www.greensboro-nc.gov • (336) 373-CITY (2489) • TTY # 333-6930

C&D Landfill Closure Schedule



The City of Greensboro has contracted with HDR Engineering, Inc. of the Carolinas to design and prepare bidding documents for the partial closure (traditional closure cap) for the construction and demolition 23 ± acre site. This contract was originally authorized in March 2009 and reauthorized in December 2009. The majority of the design work has been completed and the final bidding and contract documents are being prepared. Per our engineering estimate, the time commitment to complete this task was estimated to consume 90 days. While this work has been initialized, completion and authorization from the municipal management structure is anticipated to be completed by October 4, 2010. A work session with the City Council to discuss the closure expenditures is scheduled for August 24, 2010.

Bid documents for construction will need to abide with the municipal requirements for contracting. As such, a defined advertisement and award process will be followed. The City anticipates that the closure project will be advertised and awarded by November 24, 2010. Subsequent to this selection, the City Council will authorize this expenditure. Again, it is anticipated that this formalize action will occur at the December 2010 City Council meeting. If not approved at that time, staff will seek approval at the January 2011 meeting. Due to the award schedule and possible inclement weather concerns, construction of the regulatory closure cap for the 23± acre site will initiate in February 2011 and should be completed by April 29, 2011.

Simultaneous to the development of the regulatory closure cap for the 23 ± acre site, the City will continue to develop the plans for an alternative closure cap for a demonstration project on approximately 15± acres. We are hopeful that will be able to obtain assistance and guidance from the Division on this project. While we have not finalized the direction of this alternative design, we have enclosed as an attachment of successful closure projects and material information from other landfill projects to present as a potential model. To date, we have not contacted our university and college leaders to partner with us; however, we anticipate networking with these associates as well as professional associations on this project. The City anticipates that our alternative closure demonstration project will receive regulatory approval by January 31, 2011. Subsequent to this approval, the City will abide by municipal contracting and award procedures similar to the traditional landfill closure procedures implemented with the previous 23± acre project. As proposed, the construction of the alternative closure will initiate in April 2011. Certification and approval of the demonstration project will be coordinated in conjunction with the Division of Waste Management.

The City of Greensboro respectfully requests your acceptance of this planning schedule. We are motivated to complete these tasks to continue the review, and permitting approval of each of our operating units. Likewise, we are interested in pursuing the evaluation of an alternative closure system at our site. We understand that if our proposed demonstration project is deemed unacceptable, we are prepared to contruct a traditional regulatory closure cap on the 15± acre site.

Upon your review of this information, please contact my office so that I may schedule a meeting with you to discuss this project with you.

Sincerely,

Jeryl W. Covington

Jeryl W. Covington, P.E.
Director

Enclosure: Alternative Closure Literature