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**Golder Associates Inc.**  
4900 Koger Boulevard, Suite 140  
Greensboro, NC 27407  
Telephone: (336) 852-4903  
Fax: (336) 852-4904



May 24, 2006

Project No. 063-6780

Republic Services of North Carolina, LLC  
1922 Republican Road  
Aulander, North Carolina 27805

Attn: Mr. William Cooksey  
General Manager

**RE: CAPACITY STUDY  
EAST CAROLINA LANDFILL**



Dear Bill:

As requested, Golder Associates, Inc. (Golder) has completed the annual capacity study for the East Carolina Regional Landfill as required by General Facility Condition 5 of the Permit to Operate. This report presents the volume of airspace consumed during the period between March 2, 2005, and March 18, 2006; the waste tonnage received during that period; the in-place waste density achieved during the period; and an estimate of the capacity remaining in Phase 4 of the facility.

### **Airspace Consumed**

Aerial surveys of the facility were performed by Kimball Associates, PA, on March 2, 2005, and March 18, 2006 (see Drawing No. 1). Using Autodesk Land Desktop 2006 software, the volume of airspace consumed during the period was estimated to be approximately 705,270 cubic yards. Based on scale house records, 525,770.87 tons of waste excluding metals/white goods and tires were received at the facility and placed on the working face of the landfill between March 2, 2005, and March 18, 2006.

The in-place density of the waste disposed of at the facility may then be calculated as follows:

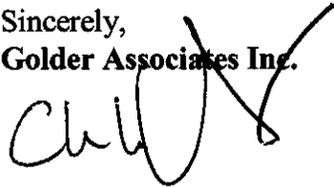
$$\begin{aligned} \text{In-Place Density} &= \text{Waste Tonnage Received}/\text{Airspace Consumed} \\ &= (525,770.87 \text{ tons})(2000\text{lbs/ton})/(705,270 \text{ cubic yards}) \\ \text{In Place Density} &= 1491 \text{ pounds/cubic yard} \end{aligned}$$

## Remaining Airspace

Republic is currently operating in Cells 3-10 of the existing landfill with the exception of previously closed portions of the facility. As of March 18, 2006 filling had not begun in the remaining portions of the permitted Phase 4 of the facility (Cells 11 and 12). The second half of Cell 11 was being constructed on the date of the aerial survey and construction of Cell 12 is planned for 2008. Based on the Phase 4 permitted base grades, the existing grades, and the final grades for Phases 1-4, approximately 4,396,000 cubic yards of airspace (2,700,000 in Cell 11 and 1,700,000 in Cell 12) remain available after providing 435,000 cubic yards for construction of the cap. Given an approximate consumption rate of 700,000 cubic yards of airspace per year, the currently permitted facility has approximately 6.3 years of capacity remaining as of March 2006.

If you have any questions, please do not hesitate to contact me.

Sincerely,  
**Golder Associates Inc.**



Charles Hiner, P.E.  
Senior Engineer

Attachment: Drawing No.1

cc: Mr. Ray Hoffman, P.E., Engineer, Republic Services of North Carolina, LLC,  
1220 Commerce Street, SW, Hickory, NC 28613, 828-464-2414 ext 307.

Ms. Toni Wyche, EI; NCDENR Division of Waste Management; 1646 Mail  
Service Center; Raleigh, NC 27699-1646