

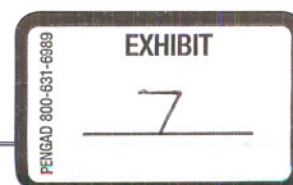
SCOPE OF ENGAGEMENT

I have been asked by NCL Waste LLC of Madison County Mississippi to perform a review of the proposed NCL Landfill located at 2858 North County Line road in Ridgeland, Mississippi relative to property line setback distances as presented in the Mississippi Department of Environmental Quality (MDEQ) Non-Hazardous Solid Waste (NHSW) Regulations. More specifically, I have reviewed the setback requirements detailed in Section II. T. 1. d. Property Line Setbacks (Buffer Zones) of the MSW Regulations and compared those to documents and maps provided to me from Eco-Systems Inc. (ES). The scope of my engagement includes my opinion regarding whether or not the NCL Landfill complies with the aforementioned property line setback distance.

BIOGRAPHICAL INFORMATION

I am a solid waste industry professional and I reside in the State of Tennessee. My resume is attached as Exhibit "A". I received a Bachelor of Science Degree in Geology from the University of Tennessee in 1974. I received a Masters in Civil Engineering from the University of Tennessee in December 1976. After graduation from college, I began work for the Tennessee Department of Transportation (TDOT) in January 1977. I began work in 1990 with the Tennessee Division of Solid Waste Management (TDSWM) as the technical chief of the Solid Waste Section. My responsibilities included securing approval from the Environmental Protection Agency of the Subtitle D Solid Waste Landfill Regulations promulgated by the State of Tennessee. In addition, I prepared various technical guidance documents to assist landfill owners and operators in Tennessee to interpret the regulations.

In 1995 I left the TDSWM and helped develop a solid waste consulting practice for Gresham, Smith and Partners in Nashville, Tennessee. Services



included consultation and landfill permitting with Municipal and County Solid Waste Departments as well as with private waste companies.

In 2000 I accepted a position with Civil & Environmental Consultants, Inc. (CEC) to manage and further develop the solid waste practice in the Nashville, Tennessee office. The practice included all aspects of landfill design, permitting, and regulatory compliance with solid waste issues for public and private entities.

In May 2010 I left CEC and formed House Engineering LLC to provide landfill design, solid waste permitting and consulting services to Municipal and County Solid Waste Departments and private waste companies.

I base my opinions in this report on my review of the documents below, my education and my 21 years of experience in the solid waste industry.

DOCUMENTS REVIEWED

For the purposes of formulating my opinions, I reviewed the following documents and case-specific material:

1. Aerial maps and photographs prepared by ES which depict the proposed landfill facility location and the proposed buffer zones surrounding the proposed waste footprint.
2. The Non-Hazardous Solid Waste Regulations for the State of Mississippi.
3. The proposed NCL Landfill layout as well as an engineering drawing illustrating the proposed NCL Landfill final contours.
4. A graphic illustration of the projected line of sight and visual screening provided from North County Line Road.
5. Google Earth Imagery dated May 2010.

OPINION

The proposed NCL Landfill located at 2858 North County Line road in Ridgeland, Mississippi has been designed to satisfy the MDEQ regulations relative to the property boundary setback. This opinion is based upon a review of the aforementioned referenced documents and the MDEQ regulations governing solid waste disposal in Mississippi. The MDEQ regulation specific to property line setbacks is presented verbatim as follows:

T. Property Line Setbacks (Buffer Zones)

1. All new solid waste management facilities shall be designed to comply with setback distances between the edge of the actual disposal, processing, composting, transfer or storage area and the property line as follows:

d. For landfills, the setback shall be at least 500 feet, except where adequate on-site screening, whether natural or artificial, will restrict the offsite view of the landfill, in which case the setback shall be no less than 250 feet.

An inspection of the Google Map covering the location of the proposed landfill revealed a significant buffer of natural vegetation surrounding the landfill property that would “*restrict the offsite view of the landfill*”. Google Earth was also used to check the availability of land for the required 250 foot buffer zone. The actual measurement in Google Earth confirmed the landfill waste footprint buffer setback depicted in the drawings prepared by ES. In summary, the NCL Landfill restricts the offsite view such that the 250 foot setback will satisfy Section II. T. 1. d. Property Line Setbacks (Buffer Zones) of the MDEQ solid waste regulations.

PRIOR TESTIMONY

I have testified in court before as a witness as a part of my employment.

PUBLICATIONS

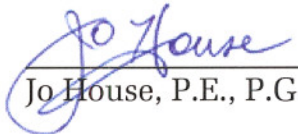
- “Trash Trouble in River City”, Waste Age Product News, June/July 1999
- “Leachate Treatment at the Dickson County Landfill using a Jet Pump System and Constructed Subsurface Wetlands”, SWANA first Annual Landfill Symposium

- “Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst, Conference Proceedings of the Fifth Multidisciplinary Conference on Sinkholes”
- “Construction Quality Assurance Guidance Policy for the Construction of Solid Waste Landfills in Tennessee”
- “Carbonate Rock Investigation Guidance Policy for Solid Waste Landfills in Tennessee”
- “Minimum Hydrogeologic Investigation Guidance Policy for Solid Waste Landfills in Tennessee”
- “Earthquake Evaluation Guidance Policy for Solid Waste Landfills in Tennessee”
- Overview of Statistical Methods for Evaluation of Groundwater Monitoring Results”

COMPENSATION

My hourly rate for work on this case is my standard fee of \$150.00.

Respectfully submitted,



Jo House, P.E., P.G.



December 1, 2011

Ms. Lynn Chambers
Mississippi Department of Environmental Quality
515 East Amite Street
Jackson, Mississippi 39201

Ms. Chambers:

This letter has been prepared in response to correspondence from the Mississippi Department of Environmental Quality's (MDEQ) General Council, Mr. Roy Furrh, dated November 10, 2011 regarding the NCL Waste, LLC proposed landfill. Specifically, the letter from the MDEQ asserts that "*MDEQ has not found that the proposed on-site screening will adequately restrict the offsite view of the proposed new NCL landfill.*", in paragraph 3 and again in paragraph 4 "*...and MDEQ has not found there is adequate proposed screening to reduce the setback of at least 500 feet...*".

As stated in your letter, Section III.T.1.d of the Mississippi Nonhazardous Solid Waste Management Regulations (SW-2) conditionally provides for a reduction in the setback distance to the property line from a required minimum of 500 feet to an allowable minimum of 250 feet. The condition that must be met, as described in SW-2, is "*...where adequate on-site screening, whether natural or artificial, will restrict the offsite view of the landfill...*". There does not appear to be a definition within SW-2 describing "adequate on-site screening" or a standard operating procedure for MDEQ staff attempting to make a determination of adequate on-site screening. Based upon the aforementioned sections of your letter, it appears that MDEQ staff have reached a determination on what constitutes "adequate on-site screening" and found that the view of the proposed NCL landfill would be unrestricted from off-site. Since there is no definition in SW-2 for adequate on-site screening, no known standard operating procedure for making the determination and no known scientific study having been conducted at the NCL property regarding offsite visibility, it appears that the MDEQ staff engineers have simply made a decision using sound engineering principals and experience after having conducted a thorough pre-permitting site inspection.

In an effort to evaluate the decision reached by the MDEQ staff regarding the alleged apparent lack of onsite visual screening at the proposed NCL landfill location, a site visit was conducted on two separate occasions. On November 22, 2011, Mr. Josh Brown, Environmental Scientist and Mr. Bruce Laird, P.E., Project Engineer, conducted a site visit and on November 28, 2011, Mr. Paul Lanning, RLA, conducted a site visit. In an attempt to characterize the offsite visibility of the NCL property on November 22nd it was decided that photographs would be taken with Mr. Brown standing at increasingly distant intervals (25 feet) from the camera's perspective (edge of North County Line Road) until Mr. Brown could no longer be detected by sight. At the time of the site visit, the weather conditions were overcast, late morning and much of the deciduous foliage had fallen, allowing for increased visibility into the property.



The location where this simple test was conducted is located along North County Line Road at the southern end of the property, east of several residences. The location appeared to be a fair representation of the type and density of vegetation that is consistent along North County Line Road on the NCL property (see Photo 5, attached). As can be determined from the attached photographs numbered 1-4, Mr. Brown is somewhat visible at 25 feet from the edge of North County Line Road, almost completely obscured at 50 feet and undetectable at 75 and 100 feet.

Mr. Lanning's findings from the November 28, 2011 site visit have been included as an attachment to this letter along with a line-of-site drawing created by Mr. Lanning to illustrate the restricted offsite view.

As a Professional Engineer practicing in the State of Mississippi, I am required to be completely objective and truthful in all professional reports, statements or testimony, per Rule 17.03 of the Mississippi Board of Licensure for Professional Engineers and Surveyors, Rules and Regulations of Procedure. Based upon the November 22, 2011 site visit visual screening characterization, it is my opinion that there appears to be more than adequate screening to "restrict", if not completely obscure, "the offsite view of the landfill" and it is furthermore my opinion that the NCL property should easily meet the "adequate onsite screening" requirement for a reduced setback distance. This opinion is based upon 10+ years of solid waste permitting, planning and design experience and personal knowledge of currently permitted, operating landfills in the State of Mississippi that have been granted the reduction in setback distance with little-to-no visual screening from offsite. Examples can be provided upon request.

Furthermore, I am requesting the MDEQ staff to disclose the method used to find a lack of adequate onsite screening, the comparative standard to which NCL Waste, LLC was held, the date on which this study/method was conducted and associated documentation of the study/method memorializing the date(s) conducted and date(s) conclusions were formulated. I am further requesting that this letter and associated attachments be included as a part of the public record for NCL Waste, LLC's application for environmental permits from the MDEQ and made available for public review prior to (or at the time of) the scheduled public hearing on the matter.

Should someone have questions regarding the content of letter, please feel free to contact me at (601) 936-4440.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bruce A. Laird", is written over a horizontal line.

Bruce A. Laird, P.E.
Project Engineer

cc: Billy Warden
Jeff Allen
Jim McNaughton

South End of Property Facing East

Photo 1 – 25 feet



Photo 2 – 50 feet



South End of Property Facing East

Photo 3 – 75 feet



Photo 4 – 100 feet



South End of Property

Photo 5 – View facing north, NCL property on the right side of the road.



MEMORANDUM

TO: Mississippi Department of Environmental Quality

FROM: Paul Lanning, RLA MS #583



SUBJECT: Proposed North County Line Landfill Buffer Distance

DATE: November 28, 2011

On November 28, 2011 I conducted a visual site inspection from North County Line Road into the proposed North County Line Landfill site. The purpose of the visual inspection was to determine if there appears to be adequate vegetative screening on-site, specifically adjacent to North County Line Road; to qualify for a buffer zone variance of 250' as found under subsection D of subsection T - Property Line Setbacks of Section III - Siting Criteria found within the State of Mississippi's Nonhazardous Solid Waste Management Guidelines.

The area within the proposed 250' buffer consists of naturally occurring vegetation and undulating topography. The vegetation generally consists of densely grouped pine trees roughly 15-25 years old, various densely grouped hardwood species, various oaks and maples as well as understory plants consisting primarily of privet. Additionally, there are several areas within the proposed 250' buffer where the land naturally slopes 8-12 feet up from the road into the site which additionally enhances the level of screening from off-site views.

Based on my site visit and visual inspection it is my opinion, as a Registered Landscape Architect in the State of Mississippi, that there is adequate on-site natural vegetation based on plant type, plant size, plant density, and plant proximity to road, as well as the topography within the first 250 feet from North County Line Road into the site to provide a reliable and effective vegetative screen to restrict off-site views.



VIEW FROM NORTH COUNTY LINE ROAD

REV	DATE	DESCRIPTION OF REVISION	BY	CURRENT DATE
3		ISSUE FOR REVIEW	EA	1/20/09
2				
1				

NCL WASTE, LLC

SCALE	1"=40'
DRAWN	PML
CHECKED	DKA
REVIEWED	EA
PROJECT MANAGER	EA
DATE	12/22/09

Eco-Systems, Inc.
Consultants, Engineers and Scientists
 Jackson, MS • Meridian, MS • Mobile, AL
 Houston, TX • Nashville, TN • Atlanta, GA
 Hattiesburg, MS • Gulfport, MS

LINE OF SIGHT SECTION	
NCL WASTE, LLC MADISON COUNTY, MISSISSIPPI	

PROJECT No.	NCL10128092
DWG. FILE NAME	NCL10128092-6
DRAWING	6
REVISION	0

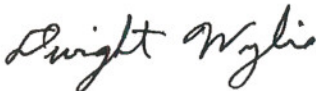
Eco-Systems
Internal Peer Review

Section 5.19 Property Line Setbacks (Buffer Zones)
Municipal Solid Waste Permit Application Report
North County Line Landfill
Madison County, Mississippi

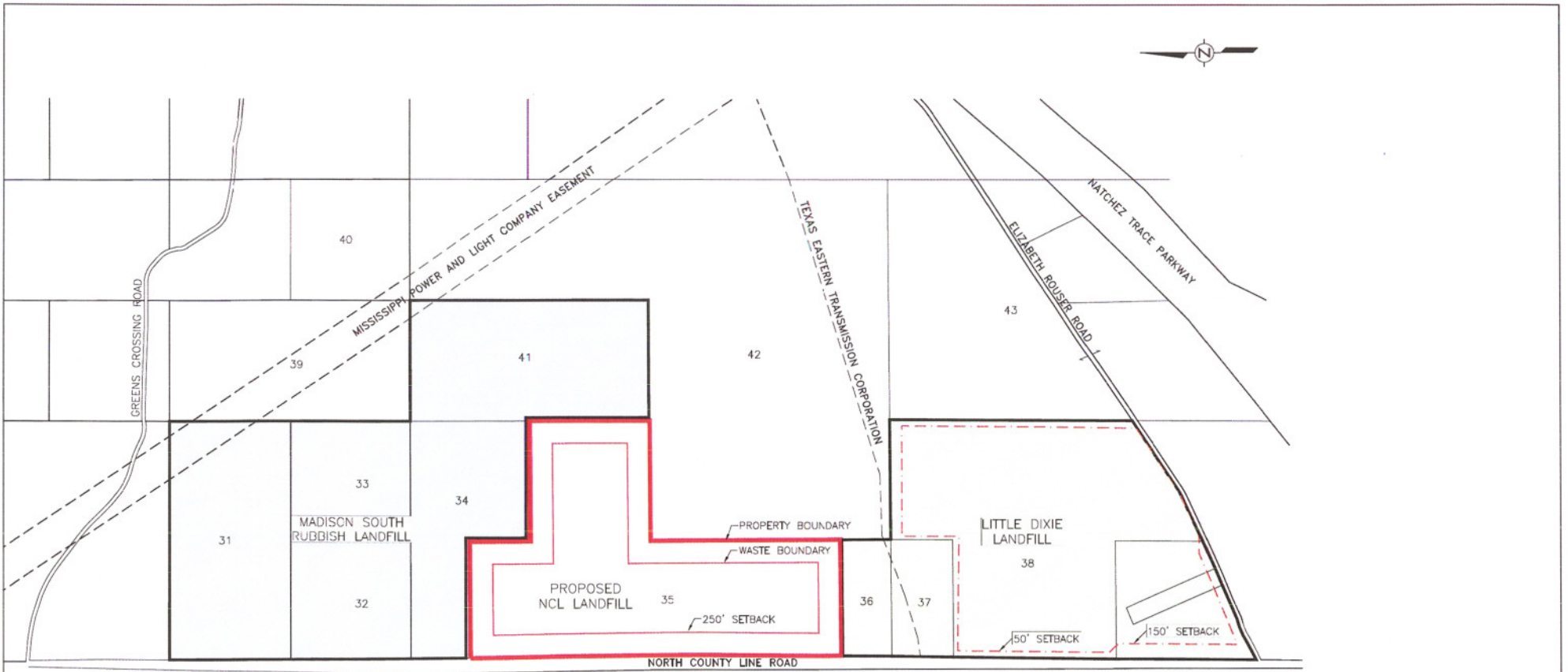
As a part of the NCL application for a landfill, a setback or buffer zone of 250 feet was requested (rather than the regulatory presumptive minimum of 500 feet) as allowed by Mississippi State Solid Waste Regulations Section III T. where adequate on-site screening exists. The issue is whether a setback of 500 feet is necessary, or whether a lesser setback of 250 feet adequately restricts the offsite view of the landfill and is justified in place of the 500 feet. The owner, Mr. Bilberry, has always stated according to the report that he intended to build the landfill with a 250 foot setback rather than the 500 feet. The numerous documents that have been filed before Madison County officials included the 250 foot buffer zone rather than 500 feet.

Eco-Systems provided evidence regarding buffer zone requirements in surrounding states as support for the position of Mr. Bilberry. The evidence clearly shows that Mississippi's presumptive minimum setback of 500 feet is one of the largest in the surrounding states. In fact, a 250 foot setback as requested by Mr. Bilberry is a larger than the required setback in most of the surrounding states. Further, the evidence presented by Eco-Systems makes a suitable argument that a 250 foot buffer as requested provides adequate visual screening of the NCL landfill and provides support for a setback of 250 feet.

Prepared By
Eco-Systems, Inc.



Dwight Wylie, P. E.
Senior Engineer



REV.	DESCRIPTION OF REVISION	BY	DATE
0	ISSUED FOR REVIEW	J.A.	1/30/09
1			
2			
3			

NCL WASTE, LLC

SCALE: 1"=500'
DRAWN: N. BESSON
CHECKED: DCA
REVIEWED: J.A.
PROJECT MANAGER: J. ALLEN
DATE: 10/27/09

Eco-Systems, Inc.
Consultants, Engineers and Scientists
 Jackson, MS • Meridian, MS • Mobile, AL
 Houston, TX • Nashville, TN • Atlanta, GA
 Hattiesburg, MS • Gulfport, MS

LAND USE MAP	
NCL WASTE, LLC MADISON COUNTY, MISSISSIPPI	

PROJECT No. NCL19128099	CAD FILE NAME NCL19128099-3
FIGURE 3	REVISION 0