## **BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF: )
PROPOSED AMENDMENTS TO CLEAN )
CONSTRUCTION OR DEMOLITION )
DEBRIS (CCDD) FILL OPERATIONS: )
PROPOSED AMENDMENTS TO 35 Ill. )
Adm. Code 1100 )

R 2012-009 (Rulemaking – Land)

### **NOTICE OF FILING**

## To: SEE ATTACHED SERVICE LIST

Please take notice that on the 7<sup>th</sup> day of October 2011, you were served with copies of the Pre-Filed Testimony of Ryan M. LaDieu on behalf of True North Consultants, Inc.

By:

Rýan M. LaDieu True North Consultants, Inc. 1240 Iroquois Avenue, Suite 210 Naperville, IL 60563

Date: October 7, 2011

# PRE-FILED TESTIMONY of Ryan M. LaDieu, P.E. on Illinois EPA's Proposed Amendments to Part 1100

## Qualifications

My name is Ryan M. LaDieu. I am the President of True North Consultants, Inc (True North). I have been involved with the evaluation and certification process of soils within the State of Illinois since Public Act 96-1416 was enacted.

I graduated from Purdue University in 1994 with a B.S. in Civil Engineering. I received my M.S. in Environmental Engineering from the Illinois Institute of Technology in 2000. Throughout my professional career, I have worked for environmental consulting firms in the positions of field technician, project manager, senior project manager, and senior engineer. My experience includes Phase I environmental site assessments, Phase II site assessment, risk-based closure evaluations under the IEPA's Leaking Underground Storage Tank Program and Site Remediation Program, remediation of contaminated properties, and RCRA Site Characterization and Closure. I am a registered Professional Engineer in the States of Illinois, Wisconsin, Indiana, Michigan, and Missouri. I have approximately 17 years of experience in the environmental field. Attachment 1 provides a brief summary of my experience and qualifications.

### **Testimonial Statement**

The proposed 35 Illinois Administrative Code (IAC) 1100 (1100) mandated by Public Act 96-1416 (Act) has provided Maximum Allowable Concentrations (MACs) that may be accepted at uncontaminated fill operations within Section 1100.605: <u>Maximum Allowable Concentrations</u> <u>for Chemical Constituents in Uncontaminated Soils</u>. As mandated under the Public Act, the MACs are limited to the most stringent risk-based concentration of the five evaluated pathways (i.e. residential ingestion and inhalation, construction worker ingestion and inhalation, and the Class I soil component of the groundwater ingestion exposure) presented in 35 IAC 742: <u>Tiered Approach to Corrective Action Objectives</u> (742). As noted these MACs are based on a 1 in 1,000,000 risk level for human exposure.

By using these values and calculations, the IEPA recognizes that the intent of these calculations is to determine risk based on human exposure (i.e. number of days exposed, population type, etc.) by consumption or inhalation. As noted in the Act, the intent of the Act and any promulgated regulation is the protection of the groundwater resources that may be affected by the placement of fill material. This intent speaks directly to the potential for contaminants to leach from soils inadvertently placed directly in a mine or quarry. In addition, there is an understanding that the construction worker operating equipment and other facility personnel within the uncontaminated soil or CCDD facility must be protected from contaminants exceeding the construction worker ingestion and inhalation standards.

With respect to the use of the most stringent residential ingestion and inhalation standards to determine risk, these concentrations well exceed the 1 in 1,000,000 risk level at any deep quarry or mine. Soils that are placed at a depth of over 20 feet below grade within a quarry or mine do not present a residential ingestion or inhalation pathway and theoretically can be excluded when performing a "true" risk assessment. Understanding that the final disposition of the quarry upon fill completion is unknown, the final fill area "cover" or "cap" will determine compliance with the residential ingestion and inhalation standards.

Therefore, I would suggest that the MACs be evaluated based on their "true" risk assessment value. This evaluation will ultimately identify compounds, specifically polynuclear aromatic hydrocarbons, that do not pose of 1 in 1,000,000 risk based on the depth level of placement in a mine or quarry. Understanding that groundwater protection is the main thrust of this Act, there needs to be consideration when evaluating "contamination" using a true risk-based system. In addition, the Act clearly states that "uncontaminated soil" means "soil that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment." The "threat" to human health and safety is defined by the exposure pathway and the population exposed. As described above, the "threat" is dictated by the depth level the material has been placed within the quarry or mine.

# Sincerely, TRUE NORTH CONSULTANTS

Myn /ali-

Ryan LaDieu, P.E. President

# RYAN M. LADIEU, P.E.

#### POSITION

Partner/Senior Project Engineer

### LICENSES/REGISTRATIONS

Licensed Professional Engineer— Illinois, Indiana, Michigan, and Wisconsin Licensed Asbestos Project Designer—Illinois and Indiana Licensed Asbestos Inspector—Illinois, Michigan, and Indiana Licensed Asbestos Project Manager—Illinois

Licensed Asbestos Air Sampling Professional-Illinois

### SUMMARY OF EXPERIENCE

Over 16 years of experience in the field of engineering.

Provides extensive experience in property assessment and remediation inclusive of Phase I ESAs, Phase II ESAs, and remediation of contaminated sites.

Offers extensive experience in Brownfield Redevelopment including grant preparation and management.

Provides experience in asbestos management and abatement inclusive of project design, inspection, and abatement oversight.

Able to supply support in environmental regulatory compliance issues, air permitting, storm water management and protection, spill control, and community right-to-know issues.

Additional experience includes wastewater/water treatment design, leaking underground storage tank management, and civil site development project management.

### RELEVANT EXPERIENCE

PHASE I ENVIRONMENTAL SITE ASSESSMENTS - Various Projects – Mr. LaDieu has performed over 150 Phase I ESAs and transaction screens in Illinois, Indiana, Wisconsin, Missouri, Oklahoma, and Colorado. Property types have included residential, light and heavy industrial/manufacturing facilities, commercial buildings, and agricultural properties. Assessment activities include site reconnaissance, historical data collection and analysis, regulatory database review, and report preparation. Reporting has been prepared in accordance with ASTM 1527-00 and 1527-05, ASTM 1528, and Federal AAI standards as well as client-specific specifications.

PHASE II ENVIRONMENTAL SITE ASSESSMENTS - Various Projects—Mr. LaDieu has performed over 90 Phase II ESAs in Illinois, Wisconsin, and Indiana as a project engineer and project manager. Mr. LaDieu has played an integral role in the planning, performance, and reporting of subsurface investigations for vacant/idle land, light and heavy industrial/manufacturing, and commercial properties. Soil and groundwater have been assessed using direct push, rotary drill, and test pitting procedures for sampling according to applicable ASTM standards. Activities in the assessment process included utility clearance, preparation of health and safety plans, geophysical surveys, soil boring advancement, monitoring well installations, chemical screening of soil samples, soil and groundwater sample collection, and report preparation and submittal.

SOIL ASSESSMENT AND MANAGEMENT CONSULTING - Mr. LaDieu has performed over 50 limited soil assessments of commercial, industrial, residential, vacant properties and right-of-ways (ROWs) throughout the Chicago land area to determine compliance with Illinois Law governing soil management and disposal. Mr. LaDieu has completed assessments for municipal and private clients ranging in size from small soil excavations of less than 20 tons to large scale projects over 30,000 tons of excavated soil. Activities included in the assessment process include historical and regulatory records review, utility clearance, soil boring advancement, physical soil screening with PID, soil sample collection and logging, and report preparation and submittal.

BROWNFIELD REDEVELOPMENT PROJECTS - Various Projects—Mr. LaDieu has participated in several brownfield redevelopment projects as a project engineer and project manager. Mr. LaDieu has assisted communities in securing Municipal Brownfield Redevelopment Grant (MBRG) funds for environmentally impacted properties within the communities. Responsibilities include assistance in generating MBRG applications, project budgeting, regulatory program liaison, project reporting, and project coordination and management. Mr. LaDieu has been successful in utilizing the IEPA's Part 742 "Tiered Approach to Corrective Action Objectives" (TACO) to develop cost effective remediation strategies and securing both Focused and Comprehensive No Further Remediation (NFR) letters through the IEPA's Part 740 "Site Remediation Program" (SRP).

REMEDIATION/CONSTRUCTION MANAGEMENT - Mr. LaDieu has extensive remedial design and management experience of environmental impacted properties throughout the Chicago land area and Illinois. This experience includes the oversight and coordination of UST permitting, removal, and sampling and reporting services at former gas stations, dry cleaners and industrial/commercial properties. Mr. LaDieu has been involved in the planning and design of remedial efforts inclusive of soil and groundwater remediation throughout the State of Illinois. Remedial efforts have included the remediation of hazardous waste soil impacted with drycleaning solvents, lead impacted soils from waste oil USTs, and creation of soil management zones (SMZs) used to maintain contaminated soils and groundwater on-site. In addition, Mr. LaDieu was responsible for the design of the Soldier Field asbestos-in-soil remediation project performed during the stadium modernization project in 2001.

STORAGE TANK MANAGEMENT – Various Projects - Mr. LaDieu has been involved in several facets of underground storage tank management including consulting, tank removals, funding reimbursement, assessment, integrity testing, remediation, and reporting. Mr. LaDieu has been a project engineer and project manager on over 30 underground storage tank projects and played in an integral role in the assessment and closure of leaking underground storage tank incidents.

DEVELOPMENT SERVICES EXPERIENCE - Various Projects - Mr. LaDieu has served as the project manager for several commercial, mixed-use, and light industrial developments within Illinois. Project experience includes the coordination of all environmental, geotechnical, land surveying, and civil engineering services for site engineering and design. Projects have included the development of a mini-mart service station, a mixed-use five-story condominium development, and a light industrial rail spur expansion.

ASBESTOS EXPERIENCE - Various Projects - Mr. LaDieu has served as a project designer, project manager, building inspector, and air sampling professional for several asbestos projects throughout the Greater Chicagoland area and the Midwest. Projects include K-12 public and private schools, public and commercial buildings, and industrial/manufacturing facilities. As an asbestos project designer, Mr. LaDieu has been involved with several public and commercial facilities as well as schools designing asbestos abatement projects. As an asbestos building inspector, Mr. LaDieu has inspected a variety of buildings including elementary schools, high schools, industrial/manufacturing, commercial buildings, and military installations.

### EDUCATION

M.S. Environmental Engineering-Illinois Institute of Technology, Chicago, Illinois

B.S. Civil Engineering—Purdue University, West Lafayette, Indiana

#### CERTIFICATIONS

40 Hour Hazardous Water Operation & Emergency Response (HAZWOPER) Training National Institute of Occupational Safety & Health (NIOSH) 582 Course—"Asbestos Fiber Counting" Accredited National Institute of Occupational Safety & Health (NIOSH)—"Microscopical Identification of Asbestos" (1608A) Accredited

## **PROOF OF SERVICE**

I do hereby certify that a copy of the Pre-Filed Testimony of Ryan M. LaDieu on behalf of True North Consultants, Inc were submitted via email and FedEx overnight delivery on October 7, 2011, to the following:

John Therriault Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, IL 60601

1

By:

Ryan M. LaDieu True North Consultants, Inc. 1240 Iroquois Avenue, Suite 210 Naperville, IL 60563