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IN THE MATTER OF:

PROPOSED AMENDMENTS TO CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) FILL OPERATIONS: PROPOSED AMENDMENTS TO 35 Ill. Adm. Code 1100 R12-9 (Rulemaking – Land)

NOTICE OF FILING

TO: SEE ATTACHED PROOF OF SERVICE

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois Association of Aggregate Producers' Pre-Filed Testimony of John Hock, P.E. and Randi Wille on Illinois EPA's Proposed Amendments to Part 1100, copies of which are served upon you.

By:

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John Menriksen, Executive Director Illinois Association of Aggregate Producers 1115 South Second Street

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Date: October 6, 2011

217.241.1639

Springfield, IL 62704

RECEIVED CLERK'S OFFIC BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OCT 0 7 2011 STATE OF ILLINOIS IN THE MATTER OF:) Pollution Control Board) PROPOSED AMENDMENTS TO CLEAN) R12-9 CONSTRUCTION OR DEMOLITION (Rulemaking – Land) RIGINAL DEBRIS (CCDD) FILL OPERATIONS: PROPOSED AMENDMENTS TO 35 Ill. Adm. Code 1100 PRE-FILED TESTIMONY OF JOHN HOCK, P.E. ON ILLINOIS EPA'S PROPOSED

AMENDMENTS TO PART 1100

Introduction

My name is John E. Hock. I am a Vice President of Civil & Environmental Consultants, Inc. (CEC) where I also serve as the Office Lead of the Chicago Office. CEC provides consulting services in five areas: environmental science and engineering; civil and site development engineering; ecological sciences; waste management; and water resources.

I graduated from Ohio State University in 1987 with a B.S. in Chemical Engineering. Following graduation I spent over 11 years working for large and mid-size solid waste hauling and disposal companies as a site and regional engineer throughout the Midwest. My work allowed me to develop an expertise in directing complex environmental projects at solid waste disposal sites, including issues related to environmental monitoring, minor and major permit modifications, compliance systems, landfill development, landfill gas systems, leachate treatment plant development, wetland mitigation, and closure activities. I later served as a senior project manager in the environmental group of a major corporation where I managed multiple remedial projects under CERCLA, RCRA, NRC, and property transfer regulations. The projects involved Corrective Action Programs for two active manufacturing facilities, investigation of a low-level radioactive disposal site, and O&M of multiple CERCLA Sites.

For the last 11 years I have been employed by CEC in a variety of positions, including my current position as Vice President and Office Lead. While at CEC, I have directed a large number of environmental and waste management projects including several involving CCDD facilities. I am a registered as a Professional Engineer in the states of Illinois, Missouri and Ohio and have approximately 24 years of experience in the environmental engineering field. A brief summary of my education and work experience is included as Attachment 1.

Today I will be testifying in regards to the proposed amendments to the existing 35 Illinois Administrative Code (IAC) Part 1100 mandated by Public Act 96-1416.

Testimonial Statement

CEC has been assisting the Illinois Association of Aggregate Producers (IAAP) with their review of the Illinois Environmental Protection Agency's (IEPA's) formal proposal to the Illinois Pollution Control Board to amend 35 IAC Part 1100. CEC has primarily provided input regarding the Subpart F – Standards for Uncontaminated Soil Used as Fill Material at Fill Operations Regulated by this Part and Subpart G – Groundwater Monitoring.

We appreciate the IEPA's consideration of the Illinois Association of Aggregate Producers' (IAAPs') previous comments and the IEPA's modifications to the April 19 Draft Rules (Draft Rules) that are incorporated into the July 29 Proposed Rules (Proposed Rules). Modified items include:

- A facility can delay implementation of groundwater monitoring if the facility has a "cone of depression" (where drawdown due to pumping has altered groundwater flow such that representative groundwater conditions do not exist). A demonstration must be made and an annual notification must be submitted. The Draft Rules did not include this exception.
- The groundwater rules are not applicable if a site has certified closure within one year after the effective date. The Draft Rules based implementation on certification of post closure.
- The "presumption of guilt" language (in 1100.750) for the exceedance of a Class 1 standard has been eliminated.
- Background groundwater quality is expressly allowed to be used to demonstrate that concentrations measured in groundwater wells above the Class I standards are not due to the landfill. The Draft Rules did not consider background groundwater quality.
- The IEPA must publish the list of Maximum Allowable Concentrations (MACs). The Draft Rules did not include this provision.

I will be testifying regarding the following items:

- Applicability of groundwater monitoring;
- The parameter list for groundwater monitoring (if required); and
- The MACs for parameters with pH specific soil remediation objectives.

Each of these items is discussed below.

Applicability of Groundwater Monitoring

Testimony from IEPA indicates that, if all materials accepted at fill sites met the MACs, groundwater monitoring would not be needed. The IEPA indicated that groundwater monitoring is being required because a certain percentage of received material may not meet the standards, Clean Construction and Demolition Debris (CCDD) facilities may accept a relatively large volume of material and the accepted material may be placed in direct contact with groundwater. (See Nightingale pre-filed testimony page 24). The IEPA also indicated during verbal testimony that they do not possess and were not able to review any data regarding actual concentrations of contaminants in CCDD fill sites.

CEC has performed or reviewed the data from investigations of multiple CCDD fill sites. The CCDD sampled at each of these sites was predominantly filled prior to the current rules, including the current pre-screening requirements. For each facility, the investigation included the following:

- Advancing borings at multiple locations through the fill depth (or until refusal);
- Sampling of each boring at pre-determined intervals;
- Visual screening of each sample from each boring for evidence of impacts (e.g., staining or sheens);
- Field screening of each sample from each boring for evidence of Volatile Organic Compound (VOC) contamination;
- Analysis of one sample from each borehole exhibiting the highest levels of contamination (based on the field screening) for the parameters listed in 35 IAC Part 742 – Tiered Approach to Corrective Action Objectives (TACO);

In summary, data from 44 samples collected from 44 borings were reviewed. The borings were advanced up to 43 feet in depth and averaged 15.7 feet in depth. The samples were analyzed by United States Environmental Protection Agency (USEPA) SW-846 Test Methods for Solid Waste as follows:

- VOCs USEPA Methods 5035/8260B;
- Semi-volatile Organic Compounds (SVOCs) USEPA Method 8270C;
- Polychlorinated Biphenyls (PCBs) USEPA Method 8082;
- Pesticides USEPA Method 8081A;
- Polynuclear Aromatics (PNAs) USEPA Method 8270C; and
- Target Analyte List (TAL) Metals USEPA Methods 6000/7000 series.

The data indicated the following:

- The pH of the samples ranged from 7.3 to 11.0 and averaged 8.1.
- No VOCs were detected at concentrations above the proposed MACs. Most borings had no detections of VOCs and the parameters predominantly detected were benzene, toluene, ethyl benzene, and xylenes (BTEX) or related compounds.
- No SVOCs were detected at concentrations above the proposed MACs. Most borings had no detections of SVOCs and the parameters detected were variable.
- No PCBs were detected at concentrations above the proposed MACs. Most borings had no detections of PCBs and the detected concentrations were all at least an order of magnitude below the MAC of 1 milligram per kilogram (mg/kg).
- No Pesticides were detected at concentrations above the proposed MACs. Most borings had no pesticides reported above the detection limit. The parameters predominantly detected were DDD and dichlorodipheneyldichloroethylene (DDE) and the detected concentrations were all over an order of magnitude below the MACs of 3 mg/kg and 2 mg/kg, respectively.
- PNAs were detected above their respective MACs in 7 of the 44 samples. Most borings had at least one detection of a PNA and the parameters detected were variable.
- TAL metals were detected above the proposed MACs in 36 of the 44 samples. The parameters predominantly detected above the MACs were arsenic, iron, lead, nickel, and mercury.
 - The proposed MAC for arsenic is 11.3 or 13 mg/kg based on background. All of the arsenic detections were below the neutral range pH specific soil remediation objective of 29 mg/kg. In addition, the arsenic concentrations above the proposed MAC were predominantly from one site and were demonstrated to be consistent with background concentrations.
 - The proposed MAC for iron is 15,000 or 15,900 mg/kg based on background. Nearly all of the iron detections were below 25,000 mg/kg.
 - The proposed MAC for lead is 20.9 or 36 mg/kg based on background. Nearly all of the lead detections were below the neutral range pH specific soil remediation objective of 107 mg/kg.
 - The proposed MAC for nickel is 20 mg/kg based on the low pH specific soil remediation objective. All of the nickel detections were below the neutral range pH specific soil remediation objective of 180 mg/kg.
 - The proposed MAC for mercury is 0.05 mg/kg based on the low pH specific soil remediation objective. All of the mercury detections were below the neutral range pH specific soil remediation objective of 3.3 mg/kg.

In summary, the results indicate that, other than PNAs and metals, CCDD facilities should not contain significant quantities of fill that contain concentrations greater than the proposed MACs. PNAs are present in reclaimed asphalt, which meets the definition of CCDD. The metal concentrations were nearly all below the respective neutral range pH specific soil remediation objective. Based on the above data and IEPA's testimony, CCDD facilities should not be subject to groundwater monitoring.

This approach of not monitoring groundwater at CCDD facilities is supported by the regulatory approach for other States. CEC surveyed the States adjacent to Illinois and additional Midwest States. None of the surveyed States require groundwater monitoring at CCDD or similar sites. As an example, Pennsylvania is believed to have relatively stringent regulations regarding CCDD type materials. Pennsylvania defines clean fill as "uncontaminated, non-water soluble, non-decomposable inert solid material used to level an area or bring it to grade. The term does not include materials placed in or on the waters of the Commonwealth. The term does include the following materials: soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such." Pennsylvania's Clean Fill Policy indicates that clean fill may be used in an unrestricted manner, except that clean fill may only be placed in waters of the Commonwealth if other environmental programs authorize such use.

In summary, CEC suggests that groundwater monitoring only be required for CCDD facilities which are known or demonstrated to have taken significant amounts of non-CCDD fill.

Parameter List for Groundwater Monitoring

Determining whether concentrations in groundwater are caused by a CCDD fill site is an involved process. In order for concentrations in groundwater to be attributed to a release from a facility, the following circumstances must all occur:

- The constituents detected in the groundwater must be present in the source facility in significantly higher concentrations than in the groundwater.
- Impacted groundwater must exhibit persistent concentrations of those components. A sporadic, short lived concentration of an individual constituent is not indicative of a contaminant release, but is indicative of some possible anomaly in groundwater quality or sampling error.
- The constituents detected must be mobile in groundwater. Individual constituents are affected differently by absorption, oxidation, and biodegradation in the subsurface, which affect their mobility through the subsurface.
- Impacted groundwater will normally consist of high concentrations of a suite of several constituents, including organic and inorganic compounds. Water quality parameters such as pH and specific conductance may also be significantly out of range of normal groundwater quality.
- The groundwater well must be down gradient from the source facility.

Factors which also must be evaluated before a determination of whether constituents present in groundwater are due to a release from a facility include:

- Exceedances of pre-established values are statistically expected.
- Some common constituents in CCDD fill sites also commonly occur naturally in groundwater.
- Spatial variability in groundwater chemistry is common and sometime severe due to the variability in horizontal and vertical chemistry of the heterogeneous geologic material through which the groundwater flows.
- Temporal variability in groundwater chemistry is a common occurrence due to natural fluctuations in groundwater elevations caused by seasonal precipitation, and is typically more pronounced when gradients and flow directions also change due to construction dewatering or installation of subsurface flow barriers.

Proposed Section 1100.735 requires that monitoring be performed for all parameters which have a Class I groundwater standard in 35 IAC 620.410. The Class I list includes metals, radionuclides, other inorganic parameters, VOCs, SVOCs, pesticides/herbicides, and PCBs. Based on the above analytical data, most of these parameters are not expected to be found in CCDD fill, let alone in groundwater.

Based on a quote from First Environmental Laboratories, Inc. (First Environmental) located in Naperville, the estimated cost for analyzing for the entire Class I list is \$2,996 per sample (See Attachment 2). The cost for the four radionuclides (radium-226, radium-228, tritium and strontium-90) is \$820 per sample. These parameters are not expected to be in CCDD, and MACs are not proposed for these parameters.

In addition, certain other parameters also have a significant additional cost due to a separate analytical methodology needing to be performed. These include:

- Ethylene dibromide (EDB) and 2,6-di-tert-butyl-p-cresol (DBPC) \$100 per sample;
- Endothall \$200 per sample;
- Aldicarb and carbofuran \$150 per sample; and
- Alachlor, atrazine, simazine \$150 per sample.

The total cost for these eight parameters is approximately \$600, and based on the above referenced investigations, are not expected to be in CCDD. These parameters are not even required to be routinely analyzed at municipal solid waste (MSW) landfills (pursuant to Parts 811 through 814), which are expected to have a much wider range of potential contaminants.

Based on the above information, monitoring for the entire Class 1 parameter list, in lieu of an indicator list, is overly burdensome without providing any additional value. CEC suggests that monitoring should be performed, if required, for an "indicator list" of metals, PNAs, and any other site specific contaminants of concern.

MACs for Parameters with pH Specific Soil Remediation Objectives

Section 1100.605(a)(2) states the following:

For ionizing organic constituents, the lowest pH-dependent value for the soil component of the Class I groundwater ingestion exposure route in 35 ILL. Adm. Code 742.Appendix B, Table C must be substituted for the pH-neutral value provided for the soil component of the Class I groundwater ingestion exposure route in Appendix B, Table A before determining the lowest Tier 1 chemical-specific soil value pursuant to subsection (a)(1) of this Section.

Section 1100.605(a)(3) states the following:

For inorganic constituents, the remediation objectives for the soil component of the Class I groundwater ingestion exposure route in Appendix B, Tables A and B are based on the contaminant concentration resulting from an extraction test and are not directly comparable to the remediation objectives provided for the ingestion and inhalation exposure routes, which are based on total concentrations. The following values, based on total concentrations, must be substituted for the extraction test values in Table A before determining the lowest Tier 1 chemical-specific soil value pursuant to subsection (a)(1) of this Section:

A) The lowest chemical-specific, pH-dependent values in Appendix B, Table C; or

Both 1100.605(a)(2) and (a)(3)(A) require that, for both ionizing organic and inorganic constituents, the lowest pH-dependent values for the soil component of the Class I groundwater ingestion exposure route in 35 IAC 742. Appendix B, Table C must be substituted for the pH-neutral value provided for the soil component of the Class I groundwater ingestion exposure route value in Appendix B. Table A.

Basing MACs upon low pH specific soil remediation objectives is not appropriate. The pH data from the above referenced investigation shows that the pH of CCDD facilities will typically range be above 7.3.

First Environmental provided pH data from "solid" samples analyzed by their lab. The solid samples include soil and non-soil materials (e.g., wastes that are not even considered to be sent to a CCDD facility). First Environmental has analyzed approximately 8,500 solid samples from January 2006 to September 2011. Eight thousand three hundred of these samples (over 97.6 percent) had a pH of 6.25 or greater (See Attachment 3).

Based on the above data, CEC suggests establishing a MAC for pH of 6.25 or greater and basing MACs for applicable parameters on the lowest pH specific soil remediation objectives from pH 6.25 and above.



JOHN HOCK, P.E. Vice President

Mr. Hock is a Vice President in CEC's Chicago Office where he serves as the waste management practice lead. He has over 24 years of experience with environmental issues at solid waste, CERCLA, RCRA, and voluntary action sites from both the private industry and consulting perspectives.

Mr. Hock spent over 11 years of his career working for large and mid-size solid waste hauling and disposal companies as a site and region engineer throughout the Midwest. In this role, he developed an expertise in directing complex environmental projects at solid waste disposal sites, including issues related to environmental monitoring, minor and major permit modifications, compliance systems, landfill development, landfill gas systems, leachate treatment plant development, wetland mitigation, and closure activities.

Mr. Hock also served as a senior project manager in the environmental group of a major corporation. In this role, he managed multiple remedial projects under CERCLA, RCRA, NRC and property transfer regulations. The projects involved Corrective Action Programs for two active manufacturing facilities, investigation of a low-level radioactive disposal site, and O&M of multiple CERCLA Sites.

SELECT PROJECT EXPERIENCE

Development Projects

- Kendall County, Illinois Principal for engineering design and preparation
 of a local siting application for a green field solid waste disposal facility
 with a capacity of approximately 50 million cubic yards.
- Newark, New Jersey Managed the design/build of an approximately 1600 tpd truck to rail transfer facility including overall site grading, drainage, relocation of over 1-1/2 miles of live rail, truck and rail scales, and utilities.
- Midwest Performed due diligence on multiple solid waste landfills for start up solid waste companies.
- Chicago, Illinois Oversaw the preparation of the permit application and prepared an environmental impact report for a proposed construction and demolition waste recycling and transfer facility.
- Morris, Illinois Managed the redesign and permitting of a solid waste landfill.
- Northwest Ohio Managed the permitting of a solid waste landfill expansion including presenting the proposed project at the local zoning hearing and the public meeting.
- Northwest Ohio Managed the permitting of a new solid waste transfer station.

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Senior Leadership

Personal Rusiness Relationships

EDUCATION

REGISTRATIONS

Registered Professional Engineer in States of Illincis, Missouri and Ohio

B.S., Chemical Engineering, The Ohio State University,

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Personal Business Relationships

- Kentucky Managed the permitting of a landfill expansion that was located in a wetland, in a floodplain and within 10,000 feet of a major airport, including satisfying approximately 17 different regulatory agencies and testifying at the local zoning hearing.
- Illinois Prepared the permit application and testified at the local zoning hearing for a compost facility.
- Illinois Managed the redesign of several solid waste landfills to comply with the Subtitle D regulations.

Landfill Gas Collection and Control Systems

- Illinois Principal for landfill gas collection and control system (GCCS) repairs and upgrades at multiple landfills, including downhole camera investigations, piping replacement, sump installations and control modifications.
- Illinois Principal for monitoring and performing O&M of a GCCS and a soil-gas extraction system. The GCCS includes approximately 240 gas wells/ extraction points in two separate landfill units. The soil-gas extraction system includes a slurry wall, approximately 30 extraction wells and the evaluation of the system to mitigate gas migration.
- Illinois Project Manager and Principal for the mitigation of gas migration at a closed landfill, including monitoring the effectiveness of an interceptor trench and installation of vent wells.
- Illinois Principal for the evaluation of the landfill gas collection and control system for a closed landfill in support of constructing a golf course on the landfill.
- Illinois, Kentucky and Ohio Managed the design, construction and operation of landfill gas collection and control systems in closed and active portions of various solid waste landfills. The design included evaluating the overall effectiveness of the system and the construction included replacing/reconfiguring non-functional portions. The operations involved reviewing routine monitoring information from the system and recommending action items.
- Pennsylvania Supported determination of odor origin, developed and managed odor control measures at a various solid waste landfills which were receiving numerous odor complaints. Measures included improving operations of landfill gas collection and control system, installing additional landfill gas extraction wells and piping, applying geo-synthetic materials as intermediate cover material and using odor masking agents, tracking the effectiveness of odor control measures based on odor observations and complaints and meeting with local officials, residents and governmental agencies.

Construction

Illinois – Certifying engineer for approximately 15 acres of composite final

Civil & Environmental Consultants. Inc.

cover, surface water management system upgrades, and leachate system improvements

- Ohio Principal for the construction of approximately 16 acres of composite liner system, surface water management system upgrades, and leachate system improvements.
- Illinois Certifying engineer for the liner development of four solid waste landfill cells in Illinois with a groundwater underdrain and a composite liner system.
- Illinois, Kentucky, Ohio and Pennsylvania Managed the construction of over 100 acres of composite and/or double composite liner and leachate collection systems over a 10+ year period at various solid waste landfills.
- Illinois, Kentucky, Ohio and Pennsylvania Managed the construction of over 200 acres of soil and/or composite final cover systems over a 10+ year period at various solid waste landfills.
- Pennsylvania Managed the construction of 10M gallon per year leachate treatment plant including aerobic and anaerobic treatment capabilities and an on-site stream discharge
- Illinois Managed the RCRA Closure of an approximately 20 acre drum trench area and 60 acre co-disposal landfill, and clean closure of a decant facility, container storage area and waste storage ponds.
- Illinois- Managed the HSWA investigation of two landfill areas including the exhumation/relocation of waste material, installation of a slurry wall and retro-fitting of a leachate collection system.
- Pennsylvania Managed the exhumation and relocation of an approximately 20 acre unlined solid waste disposal area at a landfill.
- Kentucky Managed the creation or enhancement of 434 acres of wetlands in four separate areas to compensate for the ability to alter and fill 178 acres of jurisdictional wetlands.

Environmental Compliance

- Illinois Managed CCDD permitting and compliance support for multiple CCDD facilities.
- Illinois, Ohio, Kentucky and Pennsylvania Managed the environmental monitoring at several landfills including groundwater, leachate, surface water, residential wells, gas migration, NSPS surface emissions and NSPS landfill gas extraction wells.
- Illinois, Kentucky, Ohio and Pennsylvania Managed environmental compliance issues at various hauling companies and transfer stations.
- Illinois Revised the SPCC plan, Storm water Pollution Prevention (SWPP) Plan and Chemical Safety Contingency Plan for an approximately 300,000 square foot custom chemical blending and packaging facility with approximately 800,000 gallons of tank storage.

Senior Leadership

Personal Business Relationships

- Illinois Prepared SPCC and SWPP Plans and for multiple solid waste landfills.
- Illinois Performed an environmental assessment of solid waste hauling divisions to evaluate current conditions with respect to applicable regulatory standards, including the revised SPCC regulations.
- Indiana Managed an investigation into the cause and potential environmental impact of an oil spill from a rail car that occurred at product blending/distribution center.
- Illinois Assessed the current environmental programs with regard to applicable federal, state, and local regulations (including the revised SPCC regulations) at an approximately 500,000 square foot custom printing, manufacturing, and distribution facility.
- Indiana Evaluated the existing storm water sewer system from a portion of a steel plant in order to develop options to cease the discharge of oily water.
- Illinois, Ohio, and Pennsylvania Developed and managed an environmental compliance system for non-hazardous solid waste landfills including state and local regulations, permit requirements (from air, water and land regulatory agencies) and company policies.
- Kentucky Managed an environmental compliance system at a nonhazardous solid waste landfill which involved landfill operations, environmental monitoring, and construction in a floodplain, a wetland mitigation program, wastewater pretreatment, a landfill gas extraction system, soil bioremediation and yard waste composting.
- Tennessee Served as the Respondent's designated Project Coordinator pursuant to an Administrative Order for a CERCLA site in Tennessee with a 300 gallon per minute groundwater extraction and treatment system.
- Multiple States Participated in the environmental audit of several solid waste and RCRA facilities.
- Illinois Prepared Individual NPDES permit applications for 10 facilities which included performing flow and/or time composite sampling of surface water.

Site Investigations

- Illinois Managed environmental subsurface investigations of multiple CCDD facilities.
- Illinois Managed the environmental due diligence process including a subsurface investigation for a CCDD facility.
- Michigan Performed an investigation and dose assessment pursuant to NRC regulations of a low-level radioactive disposal site.
- Michigan Oversaw and represented the client in regulatory negotiations and at public meetings regarding a multi-agency investigation and

Senior Leadership

Personal Business Relationships

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Integrated Services

remediation of a CERCLA site that was contaminated by former pesticide and PBB manufacturing operations.

- New Jersey Served as technical contact with the agencies, and coordinated the overall RI/FS activities under CERCLA, including preparation of the human health and ecological risk assessments, for a property that was previously used as a mercury processing facility.
- Tennessee Oversaw the RCRA Corrective Action Program of a chemical manufacturing facility including the investigation/remediation of DNAPL and chlorinated organic compounds in groundwater, construction of an engineered cap and exhumation of waste disposal areas.
- Tennessee Oversaw the RCRA Corrective Action Program of a former chemical manufacturing facility including the construction and operation of a groundwater and vapor phase extraction and treatment system, exhumation of a buried pond/buried tank car, and investigation of off-site groundwater and sediment.
- Tennessee Prepared a Phase I Remedial Investigation Report for a disposal site, including compiling information from various sources dating back 30 years (including information regarding two other highly contaminated adjacent properties) to help define the site conditions with regard to geology, hydrogeology, existing conditions, and potential exposure pathways.
- Illinois Performed a HSWA investigation of a former land farm area.

Other Solid Waste Projects

- Performed an evaluation of the surety industry's risk in issuing financial assurance bonds guaranteeing closure and post-closure obligations for municipal solid waste landfills, including describing current national solid waste industry trends, industry practices, regulatory requirements, risk factors, bankruptcy case studies and other catastrophic events
- Performed various planning and budgeting services for municipal solid waste landfills including coordinating airspace/ volume study, evaluating the results, performing budget calculations, preparing contract/construction documents

PROFESSIONAL AFFILIATIONS

American Institute of Chemical Engineers National Solid Wastes Management Association Solid Waste Association of North America

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Civil & Environmental Consultants Inc.



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

September 29, 2011

Grondwater Analysis per 620 Class 1 Standard

(The compound list would match current proposed Subpart F compound list except where noted / reporting limits would meet the Maximum Allowable Concentration except where noted.)

| Analyte | Method | Cost Per Sample |
|------------------------------|-------------------------------|-----------------|
| Volatiles | SW-846 8260B | \$180 |
| EDB/DBCP | SW-846 8011 | \$100 |
| Semivolatiles | SW-846 8270C | \$300 |
| Alachlor, Atrazine, Simazine | SW-846 8270C (pesticides) | \$150 |
| Pesticides/PCBs | SW-846 8081A/8082 | \$180 |
| Benzo(a)pyrene | SW-846 8270C low level PNA | \$150 |
| Herbicides | SW-846 8321 | \$280 |
| Endothall | EPA 548.1R1.0 | \$200 |
| Aldicarb/Carbofuran | EPA 531.1R3.1 | \$150 |
| Total metals (18) | SW-846 5010 / 7470 | \$306 |
| Chloride | SM 4500 Cl, E | \$ 18 |
| Cyanide | SM 4500 Cn,C,E | \$ 36 |
| Fluoride | SM 4500 F,C | \$ 24 |
| Nitrate | EPA 353.2R1.0 | \$ 24 |
| Phenol | EPA 420.4R1.0 | \$ 24 |
| Sulfate | EPA 375.2R2.0 | \$ 24 |
| TDS | SM 2540C | \$ 18 |
| pН | SM 4500 H+, B | \$ 12 |
| Radium 226 & 228 | Per subcontract lab | \$350 |
| Gross Beta | Per subcontract lab | \$100 |
| Tritium | Per subcontract lab | \$250 |
| Strontium 90 | Per subcontract lab | \$120 |
| Cost Per Sample: \$2996 | | |

Objectives for all compounds are listed in TACO Section 742, Table E except for radiologicals (Radium 226 & 228, Gross Beta, Tritium, and Strontium 90). The objectives in Table E match the values listed in Section 620.410. Section 620.410 does establish a standard for the radiologicals.

Turn around for radiologicals in normally in the range of 6 weeks.

Attachment #2



IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Date: 10/06/11

To: John Hock (CEC)

From: Lorrie Franklin (First Environmental)

RE: CCDD Proposed Regulation 07/29/11

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The following information was obtained from our database for pH analyses performed from January 2006 to September 2011. The matrix for the samples in this database includes solid samples and "other" (other = non soil solid samples).

The database consists of 8500 sample analyses for pH. 8345 of samples analyzed have pH greater than pH 5.75 8300 of samples analyzed have pH greater than pH 6.25

This translates into only 200 data points or 2.35% having a pH less than 6.25.

I believe that a significant portion of the data points showing pH below 6.25 may be associated with non soil solid samples or "other" matrices, i.e., (waste materials subject to RCRA analysis).

Lorrie Franklin Director of Data Quality

Attachment #3

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

R12-9 (Rulemaking – Land)

PRE-FILED TESTIMONY OF RANDI WILLE ON ILLINOIS EPA's PROPOSED AMENDMENTS TO PART 1100

My name is Randi Wille and I am the Manager of Environmental and Land Services for Meyer Material Company in Des Plaines, Illinois. I have been employed by Meyer Material for over 26 years, spending over 24 years in the Environmental Management and Compliance Field. Meyer Material operates a number of ready-mix concrete plants and aggregate mining operations in Northeast Illinois, including several concrete and asphalt recycling centers and two clean soil operations. Meyer Material has served the suburban Chicago market since the 1920's and is a leading supplier of construction materials and services. Meyer Material is also ISO 14001 certified for Environmental Management.

I hold a Bachelor's Degree in Industrial Technology from Illinois State University and a Master's Degree in Business Administration from Bradley University. My responsibilities include land use and operational permitting, mineral reserves management, estate tax and legal matters for over 8000 acres in four Midwest states. The majority of my career has been spent working in Illinois. I have a long history in the planning of aggregate mines, permitting their activities and overseeing land restoration for future land-use opportunities. Meyer Material was the recipient of the first Mined Land Reclamation Award issued by the State of Illinois back in 1987.

I am providing testimony before the Illinois Pollution Control Board in response to proposed rulemaking to further regulate Clean Construction and Demolition Debris (CCDD) and Clean Soil Fill (CSF) facilities. As an expert in the land reclamation field, I am strongly opposed to any added regulation that would erode our industry's ability to import CCDD/CFS in a cost-effective manner.

I served as chair of the Illinois Association of Aggregate Producers Environmental Committee from 2000-2006. In this capacity, I helped draft the Illinois Association of Aggregate Producers Best Management Practices for accepting clean construction and demolition debris. During this drafting process, the Environmental Committee worked closely with the IEPA to ensure that the final document complied with the Illinois Environmental Protection Act and its implementing regulations. As outlined in the July 13, 2004 letter from William C. Child, Chief of the IEPA Bureau of Land, the IAAP Best Management Practices went "beyond compliance" with regards to the acceptance of clean construction and demolition debris. A copy of Mr. Child's letter is attached as Attachment #1. Over the last ten plus years, I have watched our industry work with the Illinois EPA, providing voluntary site registration, "hosting" technical training sessions and providing valuable input to the Agency about our best management practices for the importation of off-site material. Unfortunately, this relationship has now turned around, forcing companies like Meyer Material to close its operations until the impact from the final rules are measured.

Our clean soil fill business was severely slowed in 2005 when the Part 1100 rules were created. At that time, we elected to close our McHenry CSF facility because the added regulatory burden made it cost-prohibitive to continue with the added staffing required. Two years ago, in the face of Public Act 96-1416, we elected to close our Algonquin CSF facility because the risk of continuing under our Interim Authorization was too steep, even though we never accepted CCDD materials.

We are a small gravel mining company with a good environmental record. We were forced to exit a business activity that would have resulted in a two restoration projects with significant public benefit. The two mining operations, BOTH along valuable State highway routes, are likely to terminate without any added features to their lands. I would expect others to exit if the cost to do business escalates as proposed by the Illinois EPA.

We (the mining industry) are superior stewards of our lands – please look at our history. More can be gained through industry self-policing/due diligence measures than will be gained by expensive regulatory controls. The screening process currently in place is a very effective way of managing clean soil fill. The original intention of the CCDD rules was to reduce disposal costs, reduce the risk of fly dumping and increase landfill capacity. It appears we are no longer evaluating that intent.



Illinois Environmental Protection Agency

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, Springfield, Illinois 62794-9276 James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/785-9407 TDD #217/782-9143

July 13, 2004

Mr. John Henriksen, Executive Director Illinois Association of Aggregate Producers 1115 S. 2nd Street Springfield, Illinois 62704

Re: Clean Construction and Demolition Debris

Dear Mr. Henriksen:

The final draft of the IAAP's Best Management Practices for accepting clean construction and demolition debris has been reviewed. No further comments or changes are recommended.

I want to thank the IAAP for going "beyond compliance" with regards to the acceptance and management of clean construction and demolition debris and for involving Bureau of Land staff in the development of this procedure.

Respectfully,

William C. Child

William C. Child, Chief Bureau of Land

WCC:rdVohnHenriksen

Attachment #1

Rockford - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • Des Plaines - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000 ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University SL, Peoria, IL 61614 - (309) 693-5463 BUREAU OF LAND - PEORIA - 7620 N. University SL, Peoria, IL 61614 - (309) 693-5462 • CHAMPAICN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800 SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 6206 - (217) 786-6892 • Collinsville - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120 MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

Illinois Association of Aggregate Producers

John Henriksen, Executive Director Glenda Schoening, Office Manager



1115 S. 2nd Street Springfield, IL 62704 (217) 241-1639 Fax (217) 241-1641 Email: iaap@hansoninfosys.com

June 22, 2004

Bill Child, Chief IEPA, Bureau of Land 1021 North Grande Ave East, PO Box 19276 Springfield, IL 62794-9276

Re: Clean Construction and Demolition Debris

Dear Mr. Child:

Please find enclosed the final draft of the IAAP's Best Management Practices ("BMPs") for Accepting Clean Construction and Demolition Debris as well as a form manifest.

The enclosed BMPs were developed as a guidance document for crushed stone, sand and gravel producers who accept clean construction and demolition debris for use as fill materials. The BMPs also include a form for notifying the IEPA when an aggregate producer intends to begin accepting clean construction and demolition debris. Finally, please find enclosed a form manifest for use by entities that generate and transport clean construction and demolition debris and/or clean soil.

Mike Nechvatel and Paul Purseglove both reviewed these documents as they were being developed. The enclosed BMPs embody their comments and suggestions. Although we are ready to begin distributing these documents to IAAP members, I would appreciate you taking a look at our BMPs and letting me know if you have any questions or concerns.

I appreciate working with your agency on this important issue.

Cordially

John Henriksen IAAP Executive Director JCH: gls (Enclosures) cc: John Cross, IEPA Mike Nechvatel, IEPA Gary OToole, Material Service Corporation Paul Purseglove, IEPA Randi Wille, Meyer Material Company

Buy The Goods And Services Of Our Associate Members

Best Management Practices for Accepting Clean Construction and Demolition Debris

1. Agency Notification

- Name, address and telephone number of both the facility owner and operator.
- The street address and location of the facility.
- A brief description of the material acceptance and placement activities to be performed on site.
- Notification should include the Illinois EPA-BOL site ID # (if one has been assigned to your facility).
- Refer to attached notification form

Notifications should be sent to:

Illinois EPA Manager, BOL Field Operations 1021 North Grand Avenue East Springfield, IL 62794-9276

2. Operational Procedures

Aggregate facilities accepting clean construction or demolition debris should develop written, site-specific operational procedures outlining:

- risk management
- source assessment
- material manifesting
- material assessment (screening)
- material deposition
- contamination response
- site security
- control of fugitive dust sources
- employee training

These procedures should be documented and executed in accordance with prudent business practices and sound scientific standards.

3. Regulatory Compliance

- Material will not be accepted as clean construction or demolition debris that is classified as "waste" under federal or state law.
- All facilities operating a material receipt program will document operational procedures, including material assessment (screening) and manifesting to conform to the Illinois clean construction debris requirements

4. Material Assessment (Screening)

Each truckload of material should be screened for adherence to clean construction or demolition debris requirements. On occasion, loads may arrive that appear upon visual and olfactory inspection, to meet clean construction or demolition debris requirements. Once the load is dumped however, it may be found to contain unacceptable wastes. Provisions should be made at each fill site to segregate this waste and contain it for subsequent off-site disposal, or to reload the vehicle and return the materials to the generator.

5. Record Retention

The following information must be retained for a minimum of three years:

- The name of the hauler, the name of the generator and place of origin of the debris or soil
- The approximate weight or volume of the debris or soil
- The date and time the debris or soil was received
- The approximate placement of the debris or soil within the facility
- The location of the facility where the debris or soil was disposed or recycled
- Owner or operator of the facility where the debris or soil was disposed or recycled

6. Material Manifesting

- For generators, transporters and/or recyclers
- Documentation must be completed for each load
- Information must be retained for a minimum of 3 years

(See attached form)

Illinois Association of Aggregate Producers (IAAP) Agency Notification for the Acceptance of Clean Construction and Demolition Debris

· 🔲 New Site

Change of Information

OWNER/OPERATOR INFORMATION

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| NAME: | LAST | FIRST | MEDLE INITIAL (OR | COMPANYN | AME) | | |
|---------------------|------|-------|-------------------|------------------|------|----------|--|
| MAILING ADDRESS: | | | | | | | |
| CITY: | | | | STATE: | | ZIP : | |
| | | | | TELEPH NUMBER | | | |

FACILITY/SITE INFORMATION

| FACILITY NAME: | CONT | | | | |
|-----------------------|------|----------------------|------|--|--|
| FACILITY LOCATION: | | TELEPHONE NUMBER: | | | |
| CITY: | ST: | L. | ZIP: | | |

Facility IEPA-BOL Identification Number (if applicable):

Describe how the fill material is evaluated for acceptance and where it will be placed on site:

Name (print/type): ______ Telephone: _____

Preparer's Signature: _____ Date: _____

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Mail Original to: Illinois EPA Manager, BOL Field Operations 1021 North Grand Ave. East Springfield, IL 62794-9276

Generation, Shipment, and Recycling Documentation Clean Construction Debris (CCD) and/or Clean Soil Illinois Environmental Protection Act, Section 21(w)

| Generator Information | Date of Ship | ments: |
|---|----------------------|---|
| | | |
| | | |
| | | |
| Generator Name, Address, and Phone Number: | Contact Person(s): | wallah da kacimata manana manana mananana |
| Site, Property or Facility of Origi | n Information | 1 |
| | | |
| | | |
| | Contact Person(s): | |
| Site, Property, Facility Address/Location (if different): | Contact Forson(S). | |
| Hauler Information | | |
| | | |
| | Contact Person(s): | |
| | | |
| | Tons or Yards in Loa | d: |
| | | |
| Hauler Name, Address, and Phone Number: | Truck and/or Trailer | |
| Location, Owner/Operator Accept | ting CO and | d/or Soils |
| | | Facility IEPA/BOL |
| | | Identification Number |
| | | (if applicable): |
| Site Name, Address, and Phone Number: | Contact Person(s): | |
| | | |
| | | |
| | | |
| Owner/Operator Name, Address, and Phone Number (if different): | Contact Person(s): | |

For Transportation/Recordkeeping Only. Retain Document for 3 Years. PROOF OF SERVICE



I, John Henriksen, certify that I have served the attached Illinois-Association of Aggregate Producers' Pre-Filed Testimony of John Hock, P.E. and Randi Wille and Notice of Filing by FedEx, overnight delivery, on October 6, 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;

OCT 0 7 2011 STATE OF ILLINOIS Pollution Control Board

and by first class mail, postage prepaid, on October 6, 2011, to the following:

| Marie Tipsord, Hearing Officer | Matthew J. Dunn, Chief |
|---|--|
| Illinois Pollution Control Board | Environmental Enforcement |
| James R. Thompson Center | Office of the Attorney General |
| 100 W. Randolph St., Suite 11-500 | 69 West Washington Street, Suite |
| Chicago, IL 60601 | 1800 Chicago, IL 60602 |
| Stephen Sylvester, Asst. Attorney General | Claire A. Manning |
| Environmental Enforcement | Brown, Hay & Stephens LLP |
| Office of the Attorney General | 700 First Mercantile Bank Building |
| 69 West Washington Street, Suite 1800 | 205 South Fifth St., P.O. Box 2459 |
| Chicago, IL 60602 | Springfield, IL 62705-2459 |
| Kimberly A. Geving, Assistant Counsel | Mark Wight, Assistant Counsel |
| Illinois Environmental Protection Agency | Illinois Environmental Protection Agency |
| 1021 North Grand Avenue East | 1021 North Grand Avenue East |
| P.O. Box 19276 | P.O. Box 19276 |
| Springfield, IL 62794-9276 | Springfield, IL 62794-9276 |
| Stephanie Flowers, Assistant Counsel | Dennis Wilt |
| Illinois Environmental Protection Agency | Waste Management |
| 1021 North Grand Avenue East | 720 East Butterfield Road |
| P.O. Box 19276 | Lombard, IL 60148 |
| Springfield, IL 62794-9276 | |
| Michele Gale | Mitchell Cohen, General Counsel |
| Waste Management | Illinois Department of Natural Resources |
| 720 East Butterfield Road | One Natural Resources Way |
| Lombard, IL 60148 | Springfield, IL 62702-1271 |
| Steven Gobelman, Geologic/Waste | Tiffany Chappell |
| Assessment Specialist | City of Chicago, Mayor's Office of |
| Illinois Department of Transportation | Intergovernmental Affairs |
| 2300 S Dirksen Parkway | 121 N. LaSalle Street City Hall - |
| Springfield, IL 62764 | Room 406 Chicago, IL 60602 |
| | , |

| James Huff - Vice President | Greg Wilcox - Executive Director |
|--|---|
| Huff & Huff, Inc. | Land Reclamation & Recycling Association |
| 915 Harger Road, Suite 330 | 2250 Southwind Blvd. |
| Oak Brook, IL 60523 | Bartlett, IL 60103 |
| Greg Lansu, Attorney Land Reclamation & Recycling Association 2250 Southwind Blvd. Bartlett, IL 60103 | James M. Morphew, Attorney Sorling, Northrup, Hanna, Cullen & Cochran, Ltd. Suite 800 Illinois Bldg, 607 E. Adams P.O. Box 5131 Springfield, IL 62705 |
| Dennis G. Walsh | Gregory T. Smith |
| Klein, Thorpe and Jenkins, Ltd. | Klein, Thorpe and Jenkins, Ltd. |
| 20 North Wacker Drive | 20 North Wacker Drive |
| Suite 1660 Chicago | Suite 1660 Chicago |
| IL 60606-2903 | IL 60606-2903 |

John Henriksen

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